

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

FEB -8 1940

Date of writing Report 19 When handed in at Local Office 18 Jan 1940 Port of Sunduland.

No. in Survey held at Sunduland Date, First Survey Sep. 18 Last Survey Jan 12 1940  
 Reg. Book. on the Screw Steamer "DAY DAWN" (Number of Visits 28)

Built at Sunduland By whom built Wm. Pickersgill & Sons Ltd Yard No. 241 Tons { Gross 4768  
 Engines made at Hartlepool By whom made Richardsons & Sons Ltd Engine No. H 2694 When built 1939 1940  
 Boilers made at Sunduland By whom made G. Clark (1938) Ltd Boiler No. 2694 When made 1939 1940  
 Registered Horse Power Owners Claymore Shipping Co Ltd Port belonging to Leam diff.  
 Nom. Horse Power as per Rule 423 Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted Yes  
 Trade for which Vessel is intended

## ENGINES, &amp;c.—Description of Engines

Dia. of Cylinders Length of Stroke No. of Cylinders Revs. per minute  
 Crank shaft, dia. of journals as per Rule Length of Stroke No. of Crank webs Mid. length breadth No. of Crank webs Mid. length thickness Thickness parallel to axis  
 Intermediate Shafts, diameter as per Rule as fitted Thrust shaft, diameter at as per Rule as fitted Thickness around eye-hole  
 Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Shaft fitted with a continuous liner  
 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 joints 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 If so, state type Length of Bearing in Stern Bush next to and supporting propeller  
 Propeller, dia. Pitch No. of Blades Material whether Movable Total Developed Surface sq. feet  
 Feed Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work  
 Bilge Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work  
 Feed Pumps No. and size How driven Pumps connected to the Main Bilge Line No. and size How driven  
 Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pumps, No. and size  
 Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Bilge Pumps;—In Engine and Boiler Room 3 @ 3" in E.R. 1 @ 2 1/2" Tunnel back. No. 1 Hold 3" p.r.s. No. 2 Hold 3 1/2" p.r.s. No. 3 (A) Hold 2 1/2" p.r.s.  
 In Pump Room No. 3 Hold 3" p.r.s. No. 4 Hold 3" p.r.s.  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 5" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes  
 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 Are they fitted with Valves or Cocks  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water line  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate  
 What Pipes pass through the bunkers Fore Bilge Suctions 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  
 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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from E.R. top hatch  
 Main 4650 ft. Aux. 1555 ft. = 6205

## MAIN BOILERS, &amp;c.—(Letter for record S.)

Which Boilers are fitted with Forced Draft Both main & aux. Which Boilers are fitted with Superheaters Both main boilers  
 No. and Description of Boilers 2 S.B. (Spt.) 1 Aux. Working Pressure 220 lbs/sq. in.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes.  
 IS A DONKEY BOILER FITTED? Yes. If so, is a report now forwarded? Yes.  
 Can the donkey boiler be used for domestic purposes only

## PLANS.

Are approved plans forwarded herewith for Shafting Main Boilers Yes. Auxiliary Boilers Yes. Donkey Boilers Yes.  
 (If not state date of approval)  
 Superheaters Yes. General Pumping Arrangements Yes. Oil fuel Burning Piping Arrangements Yes.

## SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes.

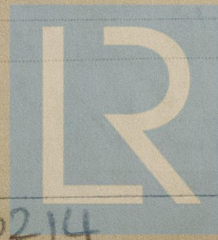
State the principal additional spare gear supplied

A.P. valve gear: 2 Roller pins, 2 Cam rollers, 4 operating rollers, 2 plunger return  
 spindles, 2 poppet valve spindles, 2 spindle bushes, 2 poppet valves, 2 valve spindles  
 Impeller & shaft for main circulating pump.

The foregoing is a correct description.

A. J. Berry

Manufacturer.



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Lloyd's Register  
Foundation

W382-0214



Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

1939. Sep. 18, 22. Oct. 5, 10, 20, 24, 31. Nov. 1, 3, 9, 14, 17, 21, 24, 27. Dec. 4, 12, 15, 18, 20, 22, 29.

1940. Jan. 2, 3, 8, 10, 12.

Total No. of visits. 28

Dates of Examination of principal parts—Cylinders

Slides

Covers

Pistons

Piston Rods

Connecting rods

Crank shaft

Thrust shaft

Intermediate shafts

Tube shaft

Screw shaft

Propeller

Stern tube

Engine and boiler seatings

Engines holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements

Main boiler safety valves adjusted

Crank shaft material

Intermediate shafts, material

Screw shaft, material

Is an installation fitted for burning oil fuel

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

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

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

These Engines & boilers have been recently fitted on board the vessel & tried under working conditions alongside quay with satisfactory results.

The machinery of the vessel is eligible in my opinion to have notation S.H. MC. 1.40 T.S. (CL), 2 SB (Sp.), 1 Aux., 220 H.P. F.D.

Note: Poppet Valve gear is fitted on H.P. engine.

The amount of Entry Fee ... £

3/5 Special ... £ 53 2

Donkey Boiler Fee ... £

Travelling Expenses (if any) £

When applied for,

2 3 JAN 1940

When received,

1 FEB 1940

Committee's Minute

Assigned

TUE. 20 FEB 1940  
+ Amk 1.40  
2 SB (Sp.) } 22, 220  
1 Aux. SB }

J. H. Fraser.

Engineer Surveyor to Lloyd's Register of Shipping.



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