

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 24 OCT 1929

Date of writing Report 19 When handed in at Local Office 2 OCT. 1929 Port of Funderland.
 No. in Survey held at Funderland Date, First Survey July 26 Last Survey Oct 21 1929
 Reg. Book. S.S. "SUNTRAP" (Number of Visits 26)
 Built at Newcastle By whom built Newtown Letchford Ltd. Yard No. 562 When built 1929
 Engines made at Funderland By whom made George Black Ltd Engine No. 1177 when made 1929
 Boilers made at Do By whom made Do Boiler No. 1177 when made 1929
 Registered Horse Power _____ Owners Gas Light & Coke Co. Ltd. Port belonging to London
 Nom. Horse Power as per Rule 115 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No
 Trade for which Vessel is intended Coal Trade

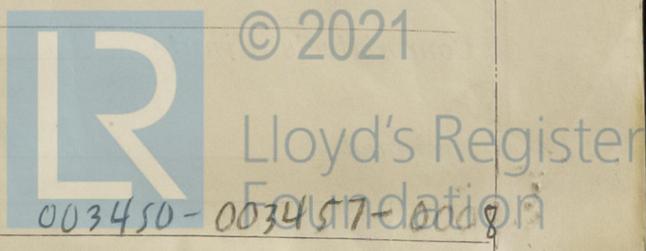
ENGINES, &c.—Description of Engines Triple expansion Revs. per minute 82
 Dia. of Cylinders 16"-27"-44" Length of Stroke 30" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 8.379" Crank pin dia. 8 1/2" Crank webs Mid. length breadth 14" Thickness parallel to axis 5 5/8"
 as fitted 8 1/2" Mid. length thickness 5 5/8" shrunk Thickness around eye-hole 3 3/4"
 Intermediate Shafts, diameter as per Rule 7.98" Thrust shaft, diameter at collars as per Rule 8.379"
 as fitted 7.98" as fitted 8 5/8"
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 8.98" Is the tube shaft fitted with a continuous liner Yes
 as fitted _____ as fitted 9 1/8" Is the screw shaft fitted with a continuous liner _____
 Bronze Liners, thickness in way of bushes as per Rule 32" Thickness between bushes as per Rule 32" Is the after end of the liner made watertight in the
 as fitted 32" as fitted 32" 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 _____
 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 No Length of Bearing in Stern Bush next to and supporting propeller 3'-1"
 Propeller, dia. 12'-0" Pitch 12'-6" No. of Blades 4 Material 8 1/2% Ni whether Moveable No Total Developed Surface 4.5 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 16" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 16" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size One 5 1/2" x 3 1/2" x 5" Pumps connected to the { No. and size One 9" x 10" x 10"
 How driven Steam Main Bilge Line { How driven Steam
 Ballast Pumps, No. and size One 9" x 10" x 10" Lubricating Oil Pumps, including Spare Pump, 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 Two @ 2 1/2"
 In Holds, &c. 2 @ 2 1/2" Fore Hold 2 @ 2 1/2" After Hold

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 4" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 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
 Are all Sea Connections fitted direct on the skin of the ship Yes 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 For motion How are they protected Steel covering plates
 What pipes pass through the deep tanks For motion 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 _____ worked from _____

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 1786 sq ft
 Is Forced Draft fitted No No. and Description of Boilers One Sgl. Drum S.E. Working Pressure 180 lbs.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? To be fitted at Newcastle so, is a report now forwarded? No.
 PLANS. Are approved plans forwarded herewith for Shafting Yes Main Boilers Yes Auxiliary Boilers _____ Donkey Boilers no, to be fitted at Newcastle.
 (If not state date of approval)
 Superheaters _____ General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements _____

SPARE GEAR. State the articles supplied:—Two connecting rod top end & two connecting rod
 bottom end bolts & nuts 2 main bearing bolts, 1 set coupling bolts
 1 set of feed & bilge pump valves & quantities of assorted bolts &
 nuts & washers of various sizes. 1 C.P. Propeller 3 condenser tubes 6 boiler tubes
 1 safety valve spring 2 valves for feed pump 2 valves for ballast pump
 1 set air pump valves, piston ring for HP & MP pistons & set feed &
 aux check valves.

The foregoing is a correct description,
 FOR GEORGE CLARK LIMITED
Howdall
 Manufacturer.



If not, state whether, and when, one will be sent. Is a Report also sent on the Hull of the Ship? Is a Report also sent on the Hull of the Ship? The words which do not apply should be deleted.

During progress of work in shops -- 1929 July 26, 31 Aug 9, 27, 29, 30 Sep 3, 5, 9, 13, 16, 17, 19, 20, 23, 26, 27 Oct 1, 2, 4, 9, 14, 16, 17, 18

Dates of Survey while building

During erection on board vessel ---

Total No. of visits 26

Dates of Examination of principal parts—Cylinders 16/9/29 Slides 30/8/29 Covers 27/8/29
 Pistons 31/7/29 Piston Rods 3/9/29 Connecting rods 5/9/29
 Crank shaft 9/9/29 Thrust shaft 9/9/29 Intermediate shafts
 Tube shaft Screw shaft 2/10/29 Propeller 17/9/29
 Stern tube 23/9/29 Engine and boiler seatings 16/10/29 Engines holding down bolts 18/10/29
 Completion of fitting sea connections Newcastle surveyors 2/10/29
 Completion of pumping arrangements 21/10/29 Boilers fixed 17/10/29 Engines tried under steam 21/10/29
 Main boiler safety valves adjusted 21/10/29 Thickness of adjusting washers 2 1/16 3 1/16
 Crank shaft material I-STEEL Identification Mark 2332 Thrust shaft material I-STEEL Identification Mark 1061
 Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark
 Screw shaft, material I-STEEL Identification Mark 1060 Steam Pipes, material LW-STEEL Test pressure 540 Date of Test 27/9/29
 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 engines & boilers of this vessel have been built under special survey & the materials & workmanship are good. On completion the machinery was tried under a full head of steam with satisfactory results. The machinery is now in a good & efficient condition & eligible in my opinion to have the notation LMC-10-29 of G.S.C.L. marked in the Society's Register Book subject to the donkey boiler being secured in the vessel & its safety valves adjusted under steam. It is stated that this will be done on the part of the Newcastle surveyors have been advised.

It is submitted that this vessel is eligible for LMC 10-29 Cl.
 J. J. [Signature] 24/10/29.

[Signature] Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 28-15-0
 Special ... £ 3-0-0
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 23 OCT. 1929
 When received, 2. 11. 29

Committee's Minute TUE. 5 NOV 1929

Assigned [Signature] LMC 10-29 Cl.

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

