

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 8 MAR 1928

Date of writing Report **7 MAR 1928** when handed in at Local Office **7 MAR 1928** Port of **HULL.**
 No. in Survey held at **GOOLE.** Date, First Survey **14 Nov 27** Last Survey **2 March 1928.**
 Reg. Book. **12319.** on the **STEEL TWIN SCREW SCHOONER, "PUKEKO."** (Number of Visits **13.**)
 Built at **GOOLE** By whom built **THE GOOLE SHIPBUILDING & REPAIRING CO. LTD** Yard No. **278** Tons { Gross **735.78** Net **322.48**
 Engines made at **NEWBURY** By whom made **PLENTY & SONS LTD** Engine No. **2575** when made **1927.**
 Boilers made at **JARROW - ON - TYNE.** By whom made **PLAMERS SHIP & IRON CO LTD** Boiler No. **1083** when made **1927.**
 Indicated Horse Power **550** Owners **RICHARDSON & CO LTD** Port belonging to **NAPIER.**
 Nom. Horse Power as per Rule **98.** Is Refrigerating Machinery fitted for cargo purposes **NO** Is Electric Light fitted **YES.**
 Trade for which Vessel is intended _____

ENGINES, &c.—Description of Engines **Twin Triple expansion Surface Condensing** Revs. per minute **125**
 Dia. of Cylinders **9" x 15" x 25"** Length of Stroke **23"** No. of Cylinders **six** No. of Cranks **six.**
 Crank shaft, dia. of journals as per Rule _____ as fitted _____ Crank pin dia. _____ Crank webs _____ Mid. length thickness _____ Thickness parallel to axis _____ Thickness around eye-hole _____
 Intermediate Shafts, diameter as per Rule _____ as fitted _____ Thrust shaft, diameter at collars as per Rule _____ as fitted _____
 Tube Shafts, diameter as per Rule _____ as fitted _____ Screw Shaft, diameter as per Rule _____ as fitted _____ Is the { tube } shaft fitted with _____ { screw } _____ attached _____
 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 _____
 Length of Bearing in Stern Bush next to and supporting propeller _____
 Propeller, dia. _____ Pitch _____ No. of Blades _____ Material _____ whether Moveable _____ 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 { No. and size _____ How driven _____ } Main Bilge Line _____
 Ballast Pumps, No. and size _____ 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 **Three at 2 1/2"**
 In Holds, &c. **aft:— Three at 2" fore:— Two at 2 3/4" Tunnel well:— one at 2"**

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 **Two at 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 **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 **yes** Is it fitted with a watertight door **yes** worked from **deck**

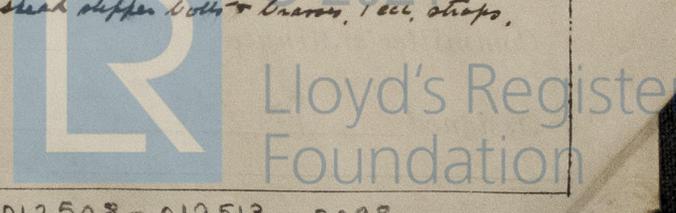
MAIN BOILERS, &c.—(Letter for record **(5)**) Total Heating Surface of Boilers **1890 sq. ft.**
 Is Forced Draft fitted **no** No. and Description of Boilers **one S.B.** Working Pressure **200 lbs sq"**

IS A REPORT ON MAIN BOILERS NOW FORWARDED? **yes**
 IS A DONKEY BOILER FITTED? **no** If so, is a report now forwarded? _____

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

SPARE GEAR. State the articles supplied:— **2 No pairs of crosshead brasses; 2 pairs of crankpin brasses; 1 air pump rod & bucket; 2 sets of air pump valves; 4 No main bearing bolts; 4 No connecting rod & 4 No crosshead bolts & nuts; 6 sets of holding down bolts & nuts; 2 sets of coupling bolts for shafting; 1 set of piston rings for each cylinder; 4 No sets of feed pump valves & seats; 1 eccentric sheave & strap; 2 pairs of pump link brasses back & front; 2 No valve spindles; 1 piston rod & nut; 12 pump ring studs & nuts; 2 sets of piston valve rings; 50 condenser tubes 100 ferrules & packing; 150 assorted bolts, nuts & washers, turned bolts; 1 spring for each size of escape valve; 2 springs for safety valve; 2 Rams for feed & 2 for bilge pumps; 4 spare blades for Prod & 4 for stand; propeller; 12 boiler tubes 6 stay tubes; one full set of fire bars & flame plates for boiler; 6 patent & 6 permanent valve stoppers complete; 6 water space stays with nuts die nut & cap for each size of combustion chamber stay; 1 spare valve for each boiler mounting; 4 sets of bilge pump valves & seats; 100 CP Electric lamps; 1 set of piston rings; 1 full set of valves & springs & 1 bucket for each air pump; 1 air pump end; 1 set of piston rings; 1 connecting rod complete with brasses; 1 piston rod with crosshead slipper bolts & brasses; 1 set of straps; 1 valve spindle with nuts; 1 propeller & sheave.**
 The foregoing is a correct description,

Manufacturer.



Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

Total No. of visits 23

1927 Nov 14, 22, 24, 25. Dec 6, 8, 23, 28. 1928 Jan 2, 5, 5, 13, 16, 23, 27, 28 Feb 2, 6, 10, 14, 14, Mar 2.

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 22 Nov, 1927. Engine and boiler seatings 25 Nov, 1927. Engines holding down bolts 28 Dec, 1927.

Completion of fitting sea connections 22 Nov, 1927.

Completion of pumping arrangements 23 Jan 1928 Boilers fixed 5 Jan 1928 Engines tried under steam 14 Feb, 1928.

Main boiler safety valves adjusted 10 Feb 1928 Thickness of adjusting washers P. $\frac{5}{16}$ " S $\frac{3}{8}$ "

Crank shaft material Identification Mark Thrust shaft material Identification Mark

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark

Screw shaft, material Identification Mark Steam Pipes, material Copper Test pressure 400 Date of Test 16 Jan 2.

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 ✓ If so, have the requirements of the Rules been complied with. ✓

Is this machinery duplicate of a previous case ✓ If so, state name of vessel. ✓

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

For engines. Please see London report 92122 sent herewith.

" boiler " " Newcastle " 81892 " "

The engines & boiler of this vessel have been satisfactorily installed under special survey tried under working conditions & found in order.

The safety valves have been adjusted as above and the pumping arrangement found in good order.

The machinery is eligible in our opinion to have record in the Register Book of L.M.C. 3-28. C.L.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 3-28 C.L.

R.A. Guier
8/3/28.

Certificate to be sent to

The amount of Entry Fee ... £ Sec Reports : When applied for, 7 March 1928.

Special ... £ Lon 92122 (Exp) : : : : :
Nov 81892 (Bo)

Donkey Boiler Fee ... £ : : : : : When received, 16.3.28

Travelling Expenses (if any) £ 2 : 2 : : : : : 1928

R.A. Guier. *John Shacklady*
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned + L.M.C. 3:28 C.L.

CERTIFICATE WRITTEN.

