

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

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Date of writing Report _____ 19 _____ When handed in at Local Office _____ 19 _____ Port of **LIVERPOOL**
 Date in Survey held at **Glasgow Dock (Law)** Date, First Survey **2/4/46** Last Survey **3/9/1946**
 Reg. Book No. **6503** on the **Steam Trawler "ST. PHILIP" (EX KUNISHI)** Tons { Gross **301.42**
 { Net **113.33**
 Built at **Middlesbrough** By whom built **Smiths Dock & Co Ltd.** Yard No. **829** When built **1927**
 Engines made at **- do -** By whom made **- do -** Engine No. **297** When made **1927**
 Boilers made at **Sunderland** By whom made **George Blad & Co** Boiler No. **247** When made **1927**
 Registered Horse Power **99** Owners **Boston Dock & Tug Co Ltd.** Port belonging to _____
 Nominal Horse Power as per Rule **105** Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**
 Trade for which vessel is intended **Fishing**

GINES, &c.—Description of Engines **Triple expansion single screw** Revs per minute _____
 Dia. of Cylinders **13 1/4, 23, 37** Length of Stroke **27** No. of Cylinders **3** No. of Cranks **3**
 Crank shaft, dia. of journals **as per Rule 7.152** Crank pin dia. **7 3/8** Mid. length breadth **11** Thickness parallel to axis **4 7/8**
as fitted 7 3/8 Crank webs **shrunk** Thickness around eye-hole **3 9/16**
 Intermediate Shafts, diameter **as per Rule 6.811** Thrust shaft, diameter at collars **as per Rule 7.152**
as fitted **as fitted 7 3/8**

Tube Shafts, diameter **as per Rule** Screw Shaft, diameter **as per Rule 7.644** Is the { tube } shaft fitted with a continuous liner { **Yes** }
as fitted **as fitted 8**
 Bronze Liners, thickness in way of bushes **as per Rule .53** Thickness between bushes **as per Rule 1 1/32** Is the after end of the liner made watertight in the
as fitted 9/16 **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 **Yes**
 Diameter of Propeller **10** Pitch **11-6** No. of Blades **4** Material **Cl.** whether Moveable **No** Total Developed Surface _____ sq. feet
 Length of Bearing in Stern Bush next to and supporting propeller **3ft.**

Bilge Pumps worked from the Main Engines, No. **Two** Diameter **2 1/16** Stroke **13** Can one be overhauled while the other is at work **Yes**
 Large Pumps worked from the Main Engines, No. **Two** Diameter **2 5/8** Stroke **13** Can one be overhauled while the other is at work **Yes**
 Feed Pumps { No. and size **One - 6x4x7" Duplex** Pumps connected to the Main Bilge Line { No. and size **One - 6x4x7" Duplex + 2" ejector** }
 { How driven **steam** } { How driven **steam** }

Lubricating Oil Pumps, including Spare Pump, No. and size **Yes**
 Are there 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 **1-2" aft of ER, 1-2" ejector, aft of ER, 1-2" dia in BR, 1-2" dia in BR**
 In Pump Room _____ In Holds, &c. **1-2" dia in Fishroom structure, 1-2" dia ejector**
in Fishroom structure, 1-2" dia in Fore Hold.

Main Water Circulating Pump Direct Bilge Suctions, No. and size **One 1 1/2" dia.** Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size **1-2" dia ejector** 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 **Fore and Aft bilge suction** How are they protected **wood casings**
 What pipes pass through the deep tanks **None** 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 **No** Is it fitted with a watertight door **No** worked from _____

IN BOILERS, &c.—(Letter for record **SB.**) Total Heating Surface of Boilers **1980**
 Which Boilers are fitted with Forced Draft **None** Which Boilers are fitted with Superheaters **None**
 No. and Description of Boilers **One, single ended, scotch type** Working Pressure **180 lb/sq. in.**

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 **No** Main Boilers **No** Auxiliary Boilers **No** Donkey Boilers **No**
 (If not state date of approval) **Plans forwarded with safe design report, Liverpool Feb. 12 1946 (S/T CONINGSBY)**
 Superheaters **Yes** General Pumping Arrangements **Yes** Oil fuel Burning Piping Arrangements _____

SPARE GEAR.

Is the spare gear required by the Rules been supplied **Yes**
 What is the principal additional spare gear supplied **Set of piston rings for donkey pumps, 2" safety valve springs.**

The foregoing is a correct description.

Manufacturer.



During progress of work in shops - - -
 Dates of Survey while building
 During erection on board vessel - - -
 Total No. of visits

Dates of Examination of principal parts—Cylinders 2-4-46 Slides 2-4-46 Covers 2-4-46
 Pistons 2-4-46 Piston Rods 2-4-46 Connecting rods 2-4-46
 Crank shaft 2-4-46 Thrust shaft 2-4-46 Intermediate shafts ✓
 Tube shaft ✓ Screw shaft 11-4-46 Propeller 11-4-46
 Stern tube 27-5-46 Engine and boiler seatings 27-5-46 Engines holding down bolts 27-5-46

Completion of fitting sea connections 11-2-46
 Completion of pumping arrangements 3-9-46 Boilers fixed ✓ Engines tried under steam 3-9-46

Main boiler safety valves adjusted 21-8-46 Thickness of adjusting washers PV 3/8" SV 7/16"
 Crank shaft material *Steel* Identification Mark *BC10461 RS. 26-10-26* Thrust shaft material *Steel* Identification Mark *BC10461 RS. 26-10-26*

Intermediate shafts, material ✓ Identification Marks ✓ Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material *Steel* Identification Mark *BC10461 RS. 26-10-26* Steam Pipes, material *Cotton* Test pressure 360 lb/sq in Date of Test 27-5-46

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 *ST. CONINGSBY (See Report No 124316)*

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

The machinery + boiler of this vessel were built under British Corporation survey.
The machinery + boiler have now been opened out + examined. The safety valves have been adjusted under steam and the machinery tried under working conditions with satisfactory results.
The pumping arrangements are as shown on the builders plan and are otherwise in accordance with the requirements of the Rules.
The scantlings of the boiler are also in accordance with the Builders plan
The workmanship + materials appear to be of good quality
The machinery is in my opinion eligible for classification with the Society with record of LMC 9-46 + TS(CL).

The amount of Entry Fee ... £	When applied for,
Special <i>See Machinery Report 9.</i>	19
Donkey Boiler Fee ... £	When received,
Travelling Expenses (if any) £	19

J.A. Findley
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **LIVERPOOL 15 OCT 1946**
 Assigned *See Minute on Liverpool Report 9 No 124585*

ML-10

