

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office MAY 18 1937

Date of writing Report 19 When handed in at Local Office 13-5-1937 Port of MIDDLESBROUGH.

No. in Survey held at SOUTH BANK. Date, First Survey 1 Febry Last Survey 29. 4. 1937.
Reg. Book. on the steam trawler 'LOCH OSKAIG' (Number of Visits 25)

Built at South Bank. By whom built Smith Dock Co. Ld. Yard No. 1026. Tons { Gross 534.
Engines made at do. By whom made do. Engine No. 491. when made 1937.
Boilers made at West Hartlepool By whom made Richardson, West Hartlepool. Boiler No. D. 491 when made 1937.
Registered Horse Power Owners The Caledonian Fishing Co. Ltd. Port belonging to Hull
Nom. Horse Power as per Rule 146. 141 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Ye.
Trade for which Vessel is intended Fishing

ENGINES, &c.—Description of Engines Triple expansion. Revs. per minute 130 ✓

Dia. of Cylinders 14½. 24. 41½ Length of Stroke 27. No. of Cylinders 3. No. of Cranks 3. Thickness parallel to axis 5½.
Crank shaft, dia. of journals as per Rule 8.21. Crank pin dia. 8½. Crank webs Mid. length breadth 11½. Mid. length thickness 5¾. Thickness around eye-hole 3½.
Intermediate Shafts, diameter as per Rule 7.82. Thrust shaft, diameter at collars as per Rule 8.21.
Tube Shafts, diameter as per Rule 8.72. Is the shaft fitted with a continuous liner? Ye.
Screw Shaft, diameter as per Rule 8.72. Is the after end of the liner made watertight in the propeller boss? Ye.
Bronze Liners, thickness in way of bushes as per Rule 19. Thickness between bushes as per Rule 19. Is the after end of the liner made watertight in the propeller boss? Ye.
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? Ye.
If two liners are fitted, is the shaft lapped or protected between the liners? Ye. Is an approved Oil Gland or other appliance fitted at the after end of the tube? Ye.
Propeller, dia. 10.6. Pitch 10.6. No. of Blades 4. Material C.I. whether Moveable No. Total Developed Surface 461 sq. feet.
Feed Pumps worked from the Main Engines, No. 1 Diameter 3½. Stroke 14½. Can one be overhauled while the other is at work? Ye.
Bilge Pumps worked from the Main Engines, No. 1 Diameter 3½. Stroke 14½. Can one be overhauled while the other is at work? Ye.
Feed Pumps { No. and size 1-6 x 4½ x 6 Duplex. Pumps connected to the { No. and size 1-6 x 4½ x 6 Duplex & EJECTOR.
How driven STEAM Main Bilge Line How driven
Ballast Pumps, No. and size 2-6 x 4½ x 6 Duplex. Lubricating Oil Pumps, including Spare Pump, No. and size ✓
Are two independent means arranged for circulating water through the Oil Cooler? Ye. Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 2-2.
In Holds, &c. 2-2½ SLUSH WELLS; 1-2 FISH ROOM; 1-2 FOR STORE.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-4½. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-2½ EJECTOR.
Are all the Bilge Suction Pipes in holds and lower hold fitted with strum-boxes? Ye.
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? Ye.
Are all Sea Connections fitted direct on the skin of the ship? Ye. 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? Ye. 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? Ye. Are the Blow Off Cocks fitted with a spigot and brass covering plate? Ye.
What Pipes pass through the bunker? Steam to wind & work doors. How are they protected? Steel casing & lugs.
What pipes pass through the deep tanks? Ye. Have they been tested as per Rule? Ye.
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times? Ye.
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? Ye. Is the Shaft Tunnel watertight? No. Is it fitted with a watertight door? worked from Ye.

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 2688 ft.
Is Forced Draft fitted No. No. and Description of Boilers 1 S.B. Working Pressure 225 lbs. ✓
IS A REPORT ON MAIN BOILERS NOW FORWARDED? Ye.
IS A DONKEY BOILER FITTED? No. If so, is a report now forwarded? Ye.

PLANS. Are approved plans forwarded herewith for Shafting 27. 11. 36. Main Boilers. Auxiliary Boilers. Donkey Boilers.
(If not state date of approval)
Superheaters 6. 10. 33. General Pumping Arrangements 9. 1. 37 Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—As per Rule + 1 C.I. propeller, 1 oct. air pump valves & seats, 1 main check valve, 1 auxiliary check valve, 1 suction & 1 discharge valve for each auxiliary pump, 1 feed pump plungers with wear & plane bush, 1 centrifugal pump impeller shaft, 6 junk ring studs, 2 bottom end and 2 top end bolts & nuts for centrifugal pump, 3 Condenser tubes & 20 ferrules 6 piston bolts & nuts 3 boiler tubes.

Rpt. 5
Date of survey
No. in Reg. Book
Master
Engines
Boilers
Nominal
MUL
Manufa
Total H
No. and
Tested
Area of
Area of
In case
Smalles
Smalles
Largest
Thickne
long, se
Percent
Percent
Thickne
Materio
Length
Dimens
End pl
How a
Tube p
Mean p
Girder
at cent
in each
Tensile
Pitch o
Workin
Thickn
Pitch o
Workin
Diamet
Workin
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Dates of Survey while building
During progress of work in shops -- 1937 Feb. 1. 5. 8. 10. 15. 17. 18. 24 Mar 3. 10. 15
During erection on board vessel --- 17. 18. 19. 22. 25 Apr 2. 6. 19. 21. 22. 23. 24. 28. 29.
Total No. of visits 25

Dates of Examination of principal parts—Cylinders 15.3.37. Slides 15.3.37. Covers 15.3.37.
Pistons 15.3.37. Piston Rods 24.2.37. Connecting rods 10.3.37.
Crank shaft 10.2.37. Thrust shaft 5.2.37. Intermediate shafts 5.2.37.
Tube shaft 10.3.37. Screw shaft 5.2.37. Propeller 15.3.37.
Stern tube 10.3.37. Engine and boiler seatings 10.3.37. Engines holding down bolts 2.4.37.
Completion of fitting sea connections 15.3.37. Boilers fixed 19.4.37. Engines tried under steam 29.4.37.
Completion of pumping arrangements 26.4.37. Thickness of adjusting washers port 3/8" star. 13" super. 1 1/2".
Main boiler safety valves adjusted 26.4.37. Thrust shaft material S.M. Steel Identification Mark 112.3.37.
Crank shaft material S.M. Steel Identification Mark 112.3.37. Tube shaft, material / Identification Mark /
Intermediate shafts, material S.M. Steel Identification Marks 112.3.37. Steam Pipes, material steel Test pressure 675 lb. Date of Test 22.4.37.
Screw shaft, material S.M. Steel Identification Mark 112.3.37. Is the flash point of the oil to be used over 150°F. /
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 No. If so, have the requirements of the Rules 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 materials and workmanship are good.
This machinery has been built under special survey in accordance with the Rules and Approved Plans. It has been securely fitted aboard and tested under working conditions with satisfactory results and is, in our opinion, eligible for classification with record + L.M.C. 4.37.

The amount of Entry Fee ... £ 30.0.0 When applied for, 14.5.1937
Special ... £ 18.12.0 When received, 1.7.37
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
FRI 28 MAY 1937

M. J. M. A. & B. Colloff
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
Assigned + L.M.C. 4.37 Spt