

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 24 NOV 1935

Date of writing Report 19 When handed in at Local Office 2 NOV 1935 Port of Sunderland

No. in Survey held at Sunderland Date, First Survey 15 July Last Survey 30 Oct 1935
Reg. Book. on the S/S "CORBRAE" Number of Visits 25

Built at Burntisland By whom built Burntisland S.B. Co. Ld. Yard No. 191. When built 1935

Engines made at Sunderland By whom made North East Marine Eng. Co. Ld. Engine No. 2824 When made 1935

Boilers made at Sunderland By whom made North East Marine Eng. Co. Ld. Boiler No. 2824 When made 1935

Registered Horse Power Owners Long Colliers Ld. Port belonging to London.

Nom. Horse Power as per Rule 171 Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted Yes.

Trade for which Vessel is intended Coasting.

ENGINES, &c.—Description of Engines Triple Expansion (Popple-Valves on H.P. & M.P.) Revs. per minute
Dia. of Cylinders 16 1/2" - 26" - 44" Length of Stroke 33 No. of Cylinders 3 16 3/4" No. of Cranks 3
Crank shaft, dia. of journals as per Rule 9.48 Crank pin dia. 10 1/4" Crank webs Mid. length breadth 6" Thickness parallel to axis 6"
as fitted 9 3/4" Mid. length thickness 6" shrunk Thickness around eye-hole 5 1/8"

Intermediate Shafts, diameter as per Rule 9.036 Thrust shaft, diameter at collars as per Rule 9.48 as fitted none as fitted 9 3/4"

Tube Shafts, diameter as per Rule 10.16 Screw Shaft, diameter as per Rule 10 3/8" Is the screw shaft fitted with a continuous liner? Yes.

Bronze Liners, thickness in way of bushes as per Rule 6.066 Thickness between bushes as per Rule 4.54 as fitted 5/8" as fitted 9/16" Is the after end of the liner made watertight in the 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 one length fit.

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 shaft? No.

Length of Bearing in Stern Bush next to and supporting propeller 3'-5 1/2" Total Developed Surface 64.5 sq. feet

Propeller, dia. 13'-6" Pitch 14'-6" No. of Blades 4 Material C.I. whether Movable no. Can one be overhauled while the other is at work? Yes.

Feed Pumps worked from the Main Engines, No. 2 Diameter 23/4" Stroke 16 1/2" Can one be overhauled while the other is at work? Yes.

Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 16 1/2" Can one be overhauled while the other is at work? Yes.

Feed Pumps No. and size 2 / 8 1/2" x 6" x 15" How driven Steam Pumps connected to the Main Bilge Line No. and size one 9" x 10" x 10" Duplex. How driven Steam

Ballast Pumps, No. and size 1 9" x 10" x 10", 1 9 1/2" x 11" x 18" Lubricating Oil Pumps, including Spare Pump, No. and size 2

Are 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 In Pump Room In Holds, &c.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 4" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 4"

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? Yes.

Are they fixed sufficiently high on the ship's side to be seen without lifting the stakehold 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? Yes. How are they protected? Yes.

What pipes pass through the deep tanks? Yes. 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? none Is it fitted with a watertight door? Yes. worked from? Yes.

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 2854 sq. ft. Working Pressure 220.

Is Forced Draft fitted? no. No. and Description of Boilers 2 S.B. IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes.

IS A DONKEY BOILER FITTED? no. If so, is a report now forwarded? Yes.

Is the donkey boiler intended to be used for domestic purposes only? Yes.

PLANS. Are approved plans forwarded herewith for Shafting Main Boilers Ship Auxiliary Boilers Donkey Boilers Superheaters No. General Pumping Arrangements Yes. Oil fuel Burning Piping Arrangements Yes.

SPARE GEAR. Has the spare gear required by the Rules been supplied? Yes.

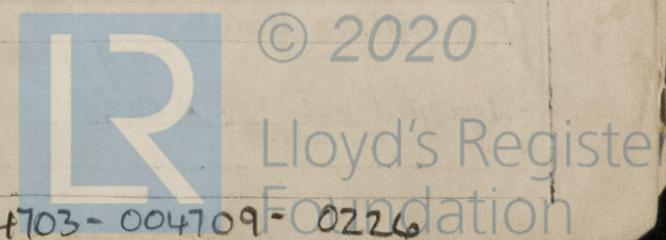
State the principal additional spare gear supplied One C.I. propeller, 2 feed pump valves, 1 set circulating pump valves, 2 bilge pump valves & 1 seat, 3 junk ring bolts & nuts, 6 plain boiler tubes, 2 assorted brass studs & nuts, 3 condenser tubes, 1 set air pump valves, 2 ballast pump valves, 2 Safety valve Springs.

Superheater Spares: 20% total number element jointing rings. 10% total number Steel plug. 5% total number of studs & nuts. 2% total number clamps.

The foregoing is a correct description, FOR THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

Acheson Berry MANAGER

Manufacturer.



004703-004709-0226

1935 July 15, 22, 26 Aug. 16, 19, 20, 22, 26 Sep. 4, 9, 11, 20, 23, 25, 27, 30 Oct. 2, 3, 7, 11

Purging progress of work in shops - - 16, 23, 25, 28, 30 = 25

Dates of Survey while building } During erection on board vessel - - -
 Total No. of visits

Dates of Examination of principal parts—Cylinders 23/9/35 30/9/35 Slides 16/10/35 Covers 25/9/35
 Pistons 25/9/35 Piston Rods 25/9/35 Connecting rods 11/10/35
 Crank shaft 16/9/35 23/9/35 30/9/35 Thrust shaft 30/9/35 Intermediate shafts ✓
 Tube shaft ✓ Screw shaft 20/9/35 2/10/35 Propeller 2/10/35
 Stern tube 2/10/35 Engine and boiler seatings Engines holding down bolts

Completion of fitting sea connections
 Completion of pumping arrangements Boilers fixed Engines tried under steam

Main boiler safety valves adjusted Thickness of adjusting washers
 Crank shaft material Ingot Steel Identification Mark LLOYDS N° 8116 WHF 30.9.35 Thrust shaft material Ingot Steel Identification Mark LLOYDS N° 8180 WHF 30.9.35
 Intermediate shafts, material ✓ Identification Marks LLOYDS N° 8120 WHF 2.10.35 Tube shaft, material ✓ Identification Mark
 Screw shaft, material Ingot Steel Identification Mark LLOYDS N° 8120 WHF 2.10.35 Steam Pipes, material Test pressure Date of Test

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? no. If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)
 This machinery has been built under Special Survey in accordance with the Rules of the Society.
 The materials & workmanship are good.

This machinery has been despatched to Burnt Island & when securely fitted on board & satisfactorily tried under steam will be eligible, in my opinion, to have notation T.S.C. with date, T.S (CL), in the Register Books.

The amount of Entry Fee ... £ 3 : - : When applied for.
 4/5 Special Sla. a/c £ 34 : 4 : 2 NOV. 1935
 1/5 " Sla. a/c £ 8 : 11 :
 Donkey Boiler Fee ... £ : : When received.
 Travelling Expenses (if any) £ : : 7/17/1935.

John Fraser
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned
 See Sld. 26. 18977
 FRI. 3 JAN 1936



The Surveyors are requested not to write on or below the space for Committee's Minute.
 Certificates to be sent to LLOYD'S REGISTER OF SHIPPING