

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 59180

Received at London Office

FEB -2 1938

Date of writing Report 29/1/38 When handed in at Local Office

29/1/38 Port of GLASGOW

No. in Survey held at ARDROSSAN

Date, First Survey 2nd Aug 1937 Last Survey 26th Jan. 1938

Reg. Book.

Number of Visits 10

40718 on the ^{Single}~~Twin~~
^{Triple}~~Quadruple~~ Screw vessel

"WELSH COAST"

Tons } Gross 646
Net 244

Built at ARDROSSAN

By whom built ARDROSSAN DYK^o CO. LD.

Yard No. 368 When built 1937

Engines made at GREENOCK

By whom made J. G. KINCAID & CO. LD.

Engine No. KIII When made 1937

Donkey Boilers made at

By whom made

Boiler No. — When made —

Brake Horse Power 1000

Owners COAST LINES LTD.

Port belonging to LIVERPOOL

Nom. Horse Power as per Rule 224 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

Trade for which vessel is intended COASTING

OIL ENGINES, &c.—Type of Engines 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders

Diameter of cylinders

Length of stroke

No. of cylinders

No. of cranks

Mean Indicated Pressure

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

Is there a bearing between each crank

Revolutions per minute

Flywheel dia.

Weight

Means of ignition

Kind of fuel used

Crank Shaft, dia. of journals
as per Rule
as fitted

Crank pin dia.

Crank Webs

Mid. length breadth

Thickness parallel to axis

Mid. length thickness

shrunk

Thickness around eyehole

Flywheel Shaft, diameter
as per Rule
as fittedIntermediate Shafts, diameter
as per Rule
as fittedThrust Shaft, diameter at collars
as per Rule
as fittedTube Shaft, diameter
as per Rule
as fittedScrew Shaft, diameter
as per Rule
as fittedIs the { tube } shaft fitted with a continuous liner {
screw }Bronze Liners, thickness in way of bushes
as per Rule
as fittedThickness 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 If so, state type

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

Method of reversing Engines

Is a governor or other arrangement fitted to prevent racing of the engine when declutched

Means of lubrication

Thickness of cylinder liners

Are the cylinders fitted with safety valves

Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Cooling Water Pumps, No.

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No.

Diameter

Stroke

Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line { No. and Size
How driven

Is the cooling water led to the bilges

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

arrangements

Ballast Pumps, No. and size

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size

Are two independent means arranged for circulating water through the Oil Cooler YES

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size:—In Machinery Spaces 2 1/4" 2 1/4" FORWARD 1 1/2" 3" AFT 1 1/2" 2 1/4" 1 1/2" 3" In Pump Room —

In Holds, &c. 2-2" BILGE WELL 1 1/2" 3" ✓

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 1/2" 3" ✓

Are all the Bilge Suction pipes in Holds and Tunnels fitted with strum-boxes YES

Are the Bilge Suctions in the Machinery Spaces

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 platform 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. ✓

What pipes pass through the bunkers

How are they protected

What pipes pass through the deep tanks

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 ✓ Is it fitted with a watertight door ✓ worked from ✓

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Main Air Compressors, No. —

No. of stages —

Diameters —

Stroke —

Driven by —

Auxiliary Air Compressors, No. —

No. of stages —

Diameters —

Stroke —

Driven by —

Small Auxiliary Air Compressors, No. 2

No. of stages 2

Diameters 2 1/4" - 5"

Stroke 3 1/2"

Driven by ELECT. MOTORS

Scavenging Air Pumps, No. —

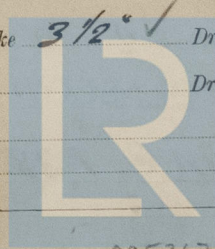
Diameter —

Stroke —

Driven by —

Auxiliary Engines crank shafts, diameter
as per Rule
as fitted SEE IPSWICH REGD 105215

Position

Lloyd's Register
Foundation

005367-005376-0120

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule *SEE GREENOCK CERT NO C. 1046*

Can the internal surfaces of the receivers be examined and cleaned ☒ Is a drain fitted at the lowest part of each receiver ☒

High Pressure Air Receivers, No. ☒ Cubic capacity of each ☒ Internal diameter ☒ thickness ☒

Seamless, lap welded or riveted longitudinal joint ☒ Material ☒ Range of tensile strength ☒ Working pressure ☒ by Rules ☒ Actual ☒

Starting Air Receivers, No. ☒ Total cubic capacity ☒ Internal diameter ☒ thickness ☒

Seamless, lap welded or riveted longitudinal joint ☒ Material ☒ Range of tensile strength ☒ Working pressure ☒ by Rules ☒ Actual ☒

IS A DONKEY BOILER FITTED? *NO* ☒ If so, is a report now forwarded? ☒

Is the donkey boiler intended to be used for domestic purposes only ☒

PLANS. Are approved plans forwarded herewith for Shafting ☒ Receivers ☒ Separate Fuel Tanks ☒
(If not, state date of approval)

Donkey Boilers ☒ General Pumping Arrangements *10/2/36* ☒ Pumping Arrangements in Machinery Space *YES* ☒

Oil Fuel Burning Arrangements ☒

SPARE GEAR.

Has the spare gear required by the Rules been supplied *YES* ☒

State the principal additional spare gear supplied *LIST ATTACHED* ☒

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops-- }
During erection on board vessel-- } *1937 Aug: 2-24 Nov: 18-24 Dec: 20-30 Jan: 6-17-18-26*
Total No. of visits *10*

Dates of Examination of principal parts—Cylinders ☒ Covers ☒ Pistons ☒ Rods ☒ Connecting rods ☒

Crank shaft ☒ Flywheel shaft ☒ Thrust shaft ☒ Intermediate shafts ☒ Tube shaft ☒

Screw shaft ☒ Propeller ☒ Stern tube ☒ Engine seatings *24/11/37* Engines holding down bolts *18/1/38*

Completion of fitting sea connections *18/11/37* Completion of pumping arrangements *26/1/38* Engines tried under working conditions *26/1/38*

Crank shaft, Material ☒ Identification Mark ☒ Flywheel shaft, Material ☒ Identification Mark ☒

Thrust shaft, Material ☒ Identification Mark ☒ Intermediate shafts, Material ☒ Identification Marks ☒

Tube shaft, Material ☒ Identification Mark ☒ Screw shaft, Material ☒ Identification Mark ☒

Is the flash point of the oil to be used over 150° F. *YES* ☒

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with *YES* ☒

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 *"NORFOLK COAST"* ☒

General Remarks (State quality of workmanship, opinions as to class, &c. *This machinery, main and*

auxiliary, has been properly fitted on board, tested under full load conditions and found satisfactory and, in my opinion, is eligible for record + LMC 1,38 and OG 1,38.

29/1/38

GLASGOW

Certificate (if required) to be sent to

The amount of Entry Fee .. £ : : *1 FEB 1938*

Special £ : : *When received,*

Donkey Boiler Fee £ : : *3/1 1938*

Travelling Expenses (if any) £ *2* : *0* : *1938*

Committee's Minute **GLASGOW** *1 FEB 1938*

Assigned *+ LMC 1,38.*

M. Brown
Engineer Surveyor to Lloyd's Register of Shipping.



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Foundation