

REPORT ON OIL ENGINE MACHINERY.

No. 10.739

16 DEC 1931

Received at London Office

Date of writing Report 19... When handed in at Local Office 15th Dec 1931 Port of Belfast

No. in Survey held at Reg. Book 18367 on the Belfast Date, First Survey 8th Feb 1930 Last Survey 9th Dec 1931 Number of Visits 22

"CORBIS" Tons Gross 8132 Net

built at Belfast By whom built Workman, Belknap (1928) Ltd. Yard No. 519 When built 1931

Engines made at Wallsend By whom made North Eastern Iron Works Ltd. Engine No. 2704 When made 1931

Donkey Boilers made at Belfast By whom made Workman, Belknap (1928) Ltd. Boiler No. 519 When made 1931

Brake Horse Power 4000 Owners Anglo Saxon Petroleum Co. Port belonging to London

Tom. Horse Power as per Rule 714 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes

Trade for which vessel is intended

TYPE OF ENGINES, &c.—Type of Engines Weeksport, supercharged. 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

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 Mid. length thickness Thickness parallel to axis Thickness around eye-hole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted

Stern Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the shaft fitted with a continuous liner

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

Propeller, dia. 18'-3 1/2" Pitch 10'-4" No. of blades 4 Material Bronze whether Moveable No. Total Developed Surface 53 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. 4 Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size 2 — 8" x 8" x 10" Duplex How driven Steam

Ballast Pumps, No. and size 2 — 8" x 8" x 10" Duplex 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, No. and size:—In Machinery Spaces 3 — 3 1/2" In Pump Room

In Holds, &c. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-6 1/2" 1-6" 1-3" CARGO PUMP RM. 303"

Are all the Bilge Suction pipes in Holds and Trunk Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces

Are they fixed from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

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 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 Yes

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 Mchly aft 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. One No. of stages 3 Diameters Stroke Driven by Steam

Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

Exhausting Air Pumps, No. Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule as fitted Position

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

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

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. 4 Total cubic capacity 1420 cu ft. Internal diameter 5' thickness 3/8"

Seamless, lap welded or riveted longitudinal joint Yes Material steel Range of tensile strength 28/32 Tons Working pressure by Rules Actual 376 lbs/sq. in. 350 lbs/sq. in.

IS A DONKEY BOILER FITTED? *Yes.*

If so, is a report now forwarded? *Yes.*

Is the donkey boiler intended to be used for domestic purposes only *No.*

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval)

Receivers *Yes.*

Separate Tanks

Donkey Boilers *Yes.*

General Pumping Arrangements *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 *As per list enclosed with Newcastle report.*

The foregoing is a correct description,

pro WORKMAN CLARK (1928) LIMITED,

A. Cunningham Secretary.

Manufacturer.

Dates of Survey while building	During progress of work in shops--	<i>1930</i> Oct 8, 20, 27 Dec 1, 4, 12, 16, 28 <i>1931</i> Feb 4, 6 Mar 27, 30 Apr 1, 8, 16, 16, 22, 30 May 7, 11, 14, 21, 28	
		During erection on board vessel--	June 4, 6, 16, 19, 30 July 7, 21, 22, 24, 27, 30 Aug 19, 26 Sept 4, 8, 14, 16, 21, 22, 30 Oct 5, 20, 27
		Total No. of visits	52

Dates of Examination of principal parts—Cylinders	<input checked="" type="checkbox"/>	Covers	<input checked="" type="checkbox"/>	Pistons	<input checked="" type="checkbox"/>	Rods	<input checked="" type="checkbox"/>	Connecting rods	<input checked="" type="checkbox"/>
Crank shaft	<input checked="" type="checkbox"/>	Flywheel shaft	<input checked="" type="checkbox"/>	Thrust shaft	<input checked="" type="checkbox"/>	Intermediate shafts	<i>5/6/31.</i>	Tube shaft	<input checked="" type="checkbox"/>
Screw shaft	<i>1/4/31. 14/4/31.</i>	Propeller	<i>21/11/31. 7/6/31.</i>	Stern tube	<i>14/5/31.</i>	Engine seatings	<i>19/4/31. 5/12/31.</i>	Engines holding down bolts	<i>15/9/31. 9/10/31.</i>
Completion of fitting sea connections	<i>21/11/31.</i>	Completion of pumping arrangements	<i>2/12/31.</i>	Engines tried under working conditions	<i>3/12/31.</i>				
Crank shaft, Material	<input checked="" type="checkbox"/>	Identification Mark	<input checked="" type="checkbox"/>	Flywheel shaft, Material	<input checked="" type="checkbox"/>	Identification Mark	<input checked="" type="checkbox"/>		
Thrust shaft, Material	<input checked="" type="checkbox"/>	Identification Mark	<input checked="" type="checkbox"/>	Intermediate shafts, Material	<i>Steel.</i>	Identification Marks	<i>4282 } R.L.M. 5 4247 } 4289 } 4224 }</i>		
Tube shaft, Material	<input checked="" type="checkbox"/>	Identification Mark	<input checked="" type="checkbox"/>	Screw shaft, Material	<i>Steel.</i>	Identification Mark	<i>4222. } J.K. 5 4211. } SP. 4248. } 7/5</i>		

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

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. *The machinery of this vessel has been efficiently installed in the vessel. The main and auxiliary machinery was tried out under working conditions with satisfactory results. The air relief valves have been adjusted & the donkey boiler's safety adjusted under steam. In my opinion the vessel is now eligible for notation in the Register Book of + LMC 12, 31. C.L. Donkey boiler pressure 150 lbs. q. Fitted for oil fuel 12, 31. FP above 150° F.*

Certificate (if required) to be sent to
(The Surveyors are requested to write on or below the space for Committee's Minute.)

<i>1/2</i> of Special	The amount of Entry Fee	.. £ 22 : 3	When applied for, <i>15° Dec. 19 31.</i>
<i>air reservoirs.</i>	Special £ 16 : 16	
	Donkey Boiler Fee £ 16 : 12	When received, <i>1.1.19 32</i>
	Travelling Expenses (if any)	£ : :	

John K. Williams.
Engineer Surveyor to Lloyd's Register of Shipping.



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Committee's Minute

TUE. 22 DEC 1931

Assigned

+ L.M.C. 12, 31 C.L.

CERTIFICATE WRITTEN.

oil Eng. 2 NB. 150 lb.