

## REPORT ON OIL ENGINE MACHINERY.

No. 55340

Received at London Office 30 JAN 5

Date of writing Report 26-1-1935 When handed in at Local Office 26:1:35 Port of Glasgow

No. in Survey held at 64debank Date, First Survey 1.3.34 Last Survey 25-1-1935  
Reg. Book. Number of Visits 135on the Single }  
Twin }  
Triple }  
Quadruple } Screw vessel "Fort Wyndham"Tons { Gross 8580  
Net 5033Built at 64debank By whom built John Brown & Co. L<sup>d</sup> Yard No. 541 When built 1935Engines made at 64debank By whom made John Brown & Co. L<sup>d</sup> Engine No. 541 When made 1935

Donkey Boilers made at Annan By whom made Cochrane &amp; Co. Annan Boiler No. 12846 When made 1935

Brake Horse Power 9400 Owners Babcock &amp; Wilcox Boiler No. 69/322 When made 1935

Nom. Horse Power as per Rule 1882 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes

Trade for which vessel is intended New Zealand. 27.3 88.9

Type of Engines 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 568 lbs. TOP 950 m/m

Mean Indicated Pressure 90 lbs. Diameter of cylinders 700 m/m Length of stroke BOT 1300 No. of cylinders 4 No. of cranks 4-3 throw

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 7'-3 3/4" Is there a bearing between each crank Yes

Revolutions per minute 110 Flywheel dia. 8'-0" Weight 3 1/2 tons Means of ignition Comp. Kind of fuel used Heavy oil

Crank Shaft, dia. of journals as per Rule 4 1/2" 18-1-34 Crank pin dia. 540 m/m Crank Webs Mid. length breadth 770 m/m Thickness parallel to axis 3 1/2" m/m

Flywheel Shaft, diameter as fitted 500 m/m Intermediate Shafts, diameter as per Rule 4 1/2" 18-1-34 Thrust Shaft, diameter at collars as per Rule 4 1/2" 18-1-34

Tube Shaft, diameter as fitted 700 m/m Screw Shaft, diameter as fitted 17" Is the screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 27/32" Thickness between bushes as per rule 27/32" 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

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 Right fit

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

If so, state type Length of Bearing in Stern Bush next to and supporting propeller 7'-0"

Propeller, dia. 16'-6" Pitch 17'-0" No. of blades 4 Material C.I. Boss whether Moveable Yes Total Developed Surface 90 sq. feet

Method of reversing Engines Sliding cam Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication

Thickness of cylinder liners 25 m/m Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine not overboard

Cooling Water Pumps, No. 2 F.W. 1-S.W. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

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 1-150 tons, 1-350 tons, 1-75 tons. (all per hour)

How driven Electric

Is the cooling water led to the bilges No 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 1-350 tons per hour Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2-9"x11" 100 tons per hour

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 Tunnel 1-3", 2-2 1/2", 2-3", E.R. 4-3", oil bilge 1-2", 1-3", Duct Kiel 1-3", In Pump Room 2-2"

Holds, &amp;c. N°1 2-3 1/2", N°2 2-3 1/2", N°3 2-3 1/2", N°4 4-2 1/2", N°5 2-2 1/2", N°6 2-2 1/2" See L.R. 7-2-35

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2-6"

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

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 Valves

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 Below

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 None How are they protected

What pipes pass through the deep tanks None 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 Yes Is it fitted with a watertight door Yes worked from E.R. Cop. platform

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

Main Air Compressors, No. 2 No. of stages 3 Diameters 15 1/2"-12 1/2"-3 3/4" Stroke 8" Driven by Indol

Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 6"-2 1/2" Stroke 4 1/2" Driven by Steam

Small Auxiliary Air Compressors, No. None No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. 1-on each engine Diameter 1620 m/m Stroke 1300 m/m Driven by Main Engine

Auxiliary Engines crank shafts, diameter as per Rule as fitted See Lon Report N° 100714



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. 3

Cubic capacity of each 250

Internal diameter 5'-4"

thickness 1 13/32

Seamless, lap welded or riveted longitudinal joint T.R.D.B.S. Material S

Range of tensile strength 28-32

Working pressure 25.6

Actual 600

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? Yes 2

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 18-1-34

(If not, state date of approval)

Receivers Yes

Separate Tanks Yes

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 See Attached List.

John Brown & Company, Limited.

The foregoing is a correct description,

W. Beck Sturgesbank Secretary

Manufacturer.

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

1934 Mar: 1-8-13-15-21-28-29 Apr: 4-11-12-17-25-30 May: 3-4-7-9-11-14-16-18-21-22-23-25-28-29-30  
1-3-7-11-12-13-15-18-20-22-25-26-27-29 July: 2-3-4-6-11-24-27-30 Aug: 2-3-6-7-8-10-13-15-16-17-20-21-22-27-28  
Sep: 3-4-5-7-10-11-12-13-14-17-18-20-21-25-27-28 Oct: 3-5-8-9-10-12-15-17-18-19-22-23-29-30-31 Nov: 2-6-7-8-9-13-14  
135- 19-21-22-27-30 Dec: 3-4-6-10-12-13-14-17-18-20-21-25-26-28 (1935) Jan: 7-8-9-11-14-16-17-21-23-25

Dates of Examination of principal parts—Cylinders 1-3-24-26 Covers 30-4-24-26 Pistons 25-6-24-26 Rods 1-6-34-26 Connecting rods 14-5-34

Crank shaft 4-4-34-26 Flywheel shaft 12-4-34-26 Thrust shaft 9-5-34-26 Intermediate shafts 11-7-34-26 Tube shaft None

Screw shaft 25-6-34-26 Propeller 11-7-34-26 Stern tube 21-5-34-26 Engine seatings 21-5-34-26 Engines holding down bolts 17-12-34-26

Completion of fitting sea connections 18-10-34-26 Completion of pumping arrangements 23-1-35 Engines tried under working conditions 23-1-35

Crank shaft, Material S Identification Mark 2007 Flywheel shaft, Material S Identification Mark 2007

Thrust shaft, Material S Identification Mark 2007 Intermediate shafts, Material S Identification Mark P.2103, 4335, 59, 4249, 2074, 4269, 4380

Tube shaft, Material None Identification Mark ✓ Screw shaft, Material S Identification Mark S.4334, 4337, 2075, 4259, 4268, 2102, 4336, P.250, S.2104

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 Not required.

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 built under special survey in accordance with the approved plans

and the Society's Rules and requirements, the materials and workmanship

are good, it has been securely fitted on board and satisfactorily tried

under working conditions, and is in my opinion eligible for the record

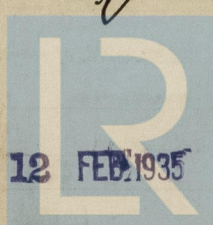
+ L. M. C. 1-35. 2 D. B. 100 lbs.

The amount of Entry Fee .. £ 6 : 0 : 0  
Special ... £ 147 : 8 : 0  
Donkey Boiler Fee ... £ 25 : 4 : 0  
3 Air Receivers ... £ 9 : 9 : 0  
Travelling Expenses (if any) £ : : :  
When applied for, 28 JAN 1935  
When received, 13/1/35

Committee's Minute GLASGOW 29 JAN 1935

Assigned + L.M.C. 1,35

James Cairns  
Engineer Surveyor to Lloyd's Register of Shipping.



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Foundation

CERTIFICATE WRITTEN  
2 D.B. 100 lbs.

TUE. 12 FEB 1935