

# Report of Survey for Repairs, &c., of Engines and Boilers.

(Received at London Office 16 MAY 1950)

Date of writing Report 29th Mar. 1950. When handed in at Local Office 19 Port of SAN FRANCISCO  
 No. in Survey held at San Francisco Bay & Oakland Date, First Survey 1st Feb. Last Survey 21st March 1950  
 ReB. Book 26773 on the Machinery of the Wood, Iron or Steel S. S. "STANVAC WELLINGTON" (No. of Visits 16)

Tonnage { Gross 10,013 Vessel built at Chester, Pa. By whom Sun S.B. & Dry Dock Company When 1941-8  
 Net 6,021 Engines made at Essington, Pa. By whom Westinghouse Electric and Mfg. Company When 1941  
 Nominal Horse Power 1006 MN Boilers, when made (Main) 1941 (Donkey) -  
 No. of Main Boilers 2 WTB Owners Petroleum Shipping Company Owners' Address -  
 No. of Donkey Boilers - Managers - Port Panama Voyage -  
 Steam Pressure in Main Boilers 475 lbs. If Surveyed Afloat or in Dry Dock BOTH Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).  
 (Spt. 450 lbs. in Donkey Boilers) (State name of Dock.) Moore Dry Dock Co.

Last Report No. Port Particulars of Examination and Repairs (if any) L.M.C. and REPAIRS

(Periodical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case.)

CHARACTER * for Special Survey Date of last Survey and of Periodical Surveys.	Years assigned now expired.	Machinery and Boiler Surveys (including date of N.B., if any)
*100 A 1 12,48		* L.M.C.
SS S.Fo. 10,46		M.S. 12,45
		B.S. 1,49
		TS CL 12,48
Carrying Petroleum in bulk. Fit- ted for oil fuel 150°F.	8,41	F.P. above

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined -

Was a damage report made by anyone else? If so, by whom? -

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? Yes

" " Donkey " " " -

If this was not done, state for what reasons? -

And what parts of the Boilers could not be thus thoroughly examined? -

Also what special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler? -

State latest date of internal examination of each boiler Port and Stbd. 3rd March 1950 Present condition of funnel(s) Good

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes To what pressure were they afterwards adjusted under steam? 450 lbs. per sq. inch

Did the Surveyor examine the Safety Valves of Donkey Boiler? - To what pressure were they afterwards adjusted under steam? -

Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? Yes, and of the Donkey Boilers? -

Did the Surveyor examine the drain plugs of the Main Boilers? -, and of the Donkey Boilers? -

Did the Surveyor examine all the mountings of the Main Boilers? Yes, and of the Donkey Boilers? -

Has screw shaft now been drawn and examined? NO Is it fitted with continuous liner? - Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? -

Has shaft now been changed? - If so, state reasons -

Has the shaft now fitted been previously used? - Has it a continuous liner? - Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? -

State date of examination of Screw Shaft - State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft 5/32"

Engine parts, when referred to by numbers, should be counted from forward. Is electric light and/or power fitted? Yes

If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes

Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? Yes

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done. Complete

NOW DONE:  
B.S. Port and Starboard boilers examined externally and internally with all doors, fastenings, mountings, superheaters, economisers, etc.  
 Boilers tested by hydraulic pressure to 725 lbs. per sq. inch and found tight.  
 Boilers examined under steam, the safety valves adjusted, the oil fuel burning arrangements tried under working conditions and found satisfactory.  
L.M.C. H. P. and L.P. turbines, reduction gears, thrust and intermediate shafting opened up and all blading, rotors, rotor shafts, casings, turbine thrusts, 1st and 2nd reduction pinions, intermediate and main gear wheels, all journals and bearings, main thrust,  
 (OVER)

General Observations, Opinion, and Recommendation:— The machinery of this vessel is in satisfactory condition and is eligible, in my opinion, to remain as classed with fresh record of \* L.M.C. 3,50, subject to diaphragm plates and 1st stage stator blading segments of both turbo generators and 1st stage stator blading segments of three turbo feed pumps being renewed before the end of March 1951

Survey Fee (per Section 29) L.M.C. \$ 226.00  
B.S. \$ 82.00  
 Special Damage or Repair Fee (if any) \$ 100.00  
 (per Section 29) Electrical \$ 110.00  
 Travelling expenses (if chargeable) \$ 40.00  
 Late fee \$ 20.00

Fees applied for 29 Mar 1950  
 Received by me, 19

L. Marlborough  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute As now - subject  
 Assigned limit + LMC - 3,50

Is a Certificate required? If so, to be sent to Lloyd's Register of Shipping and Machinery precisely as in the Register Book

S. S. "STANVAC WELLINGTON"

NOW DONE:

L.M.C. (Continued)

thrust bearings and pads, intermediate shaft journals and bearings examined and replaced in good order. Main and auxiliary condensers cleaned out examined and tested. Main and auxiliary steam pipes tested as required by the Rules and found sound and tight.

Both auxiliary turbo electric generators completely opened and examined throughout and found in satisfactory condition with the exception of the 2 diaphragm plates and the 1st stage stator blading segment which were found somewhat eroded. Spares were not available during this survey and these parts remain to be renewed before the end of March 1951. Group "A" defect. The generators are efficient meantime.

Three turbo driven centrifugal feed pumps opened up and examined throughout and found in satisfactory condition except for turbine stator 1st stage blading segments which were somewhat eroded. Spares were not available during this survey and these parts remain to be renewed before the end of March 1951. Group "A" defect. The pumps are efficient meantime.

All remaining auxiliary machinery was opened up examined throughout and, after minor repairs and adjustments was closed up in good working order.

Vessel placed on dry dock. Propeller and all outside fastenings of the ship side injection valves examined and found satisfactory. All injection and discharge valves opened up, examined and replaced in good working order.

Lubricating oil coolers opened up, cleaned, examined, tested and found in good order.

Valves, cocks, pipes and strainers of the vessel's pumping arrangements examined generally, tried under working conditions and found in good order. Heating coils were fitted to all cargo tanks at this time. The coils were tested to 3 times working pressure and found tight. The water return from the heating coils was suitably fitted with an observation tank in the engine room.

Electric generators and all motors were cleaned, examined and found in good order. All fittings on main and distribution switchboards, electric cables, fuses, fittings, etc., examined generally and found in good order. Main generators, motors and all cables meggar tested after removal of various grounds and found in satisfactory condition. Electrical installation examined under working conditions and found in good working order.

REPAIRS CARRIED OUT AT THIS TIME DUE TO WEAR AND TEAR:

H. P. and L.P. turbine rotors removed from vessel and sent to makers local repair shop where they were cleaned, the journals and sealing surfaces were ground true, polished and the rotors dynamically balanced. All labyrinth packing renewed in both turbines. Top and bottom halves of the stator blading were thoroughly cleaned, the rotors replaced, adjusted and the turbines closed up in good order. Main circulating pump impeller shaft renewed and bearings remetalled. Auxiliary circulating pump impeller shaft renewed and bearings remetalled. Bilge pump bucket rods renewed. Ballast pump bucket rods and valve spindles renewed. Port and Starboard condensate pump impeller sealing rings renewed. Fuel service pump plunger rods machined true and refitted with new glands and neck bushes.

On completion of the repairs the main and auxiliary machinery was tried under working conditions and found in good working order.

Certificate B 1 and Letter 4 issued to the Owners and copies herewith.

*E. Marlborough*

*Valid  
renewal as recommended.  
L.L.  
8/6/50.*