

No. 19,291

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

Date of writing Report	27/7/43	When handed in at Local Office	27/7/43	Port of Sydney, N. S. W.
No. in e. Book	Survey held at Sydney, N. S. W.		Date, First Survey	21/1/43
1894	on the Machinery of the Wood Iron or Steel		Last Survey	19/7/1943
tonnage	Gross 10222	SS "MOBILUBE"		(No. of Visits) 42
	Net 6181			
Nominal horse Power	769	Vessel built at Spuyten Duyvil, New York, by whom Bethlehem Steel Co. S.B. dist. When 1939-6	Year. Month.	
o. of Main Boilers	2	Engines made at Philadelphia by whom Westinghouse Elec. Mfg Co. When 1939		
o. of Donkey Boilers	✓	Boilers, when made (Main) 1939 (Donkey)		
eam Pressure— in Main Boilers	450 lb	Owners Socony - Vacuum Oil Co. Inc. Owners' Address Managers Port New York Voyage		
in Donkey Boilers	✓	If Surveyed Afloat or in Dry Dock afloat.		

Last Report No. Port

Particulars of Examination and Repairs (if any) during action.

Periodical Surveys, when held, must be reported in detail and serially 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.

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

as 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, as under.

" " Donkey "

this was not done, state for what reasons?

What parts of the Boilers could not be thus thoroughly examined?

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?

Latest date of internal examination of each boiler. Date 19/3/43

Present condition of funnel(s) Fired.

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes. Standard

To what pressure were they afterwards adjusted under steam? 450 lbs.

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. Standard

, 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. Standard

, and of the Donkey Boilers?

Screw shaft now been drawn and examined?

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?

Shaft now been changed? If so, state reasons

✓ Shaft drawn and not replaced.

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?

Date of examination of Screw Shaft

State the distance between lignum vitæ or bearing metal of stern bush and top of after bearing of screw shaft

Engine parts, when referred to by numbers, should be counted from forward.

Is electric light and/or power fitted?

Did the Surveyor examine the generators, motors, switchgear, cables and fuses?

Yes.

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

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

Completed as under.

(Damage Reports dated 2/2/43, 3/3/43 and 22/7/43 attached.)
At the request of the American Agents and the Agents for the United States War Shipping Administration examined the machinery for damage stated to have been sustained by enemy action on the 18th January 1943.

On examination found the machinery space flooded to a height of about 8 inches above the platform deck for the electrical machinery on the port side and the work shop and refrigerating machinery on the starboard side.
The vessel was tilted, all water cleared from the engine room, and on further examination found:- The main turbine gear case slightly out of alignment and a number of holding down bolts and nuts

Several Observations, Opinion, and Recommendation:-

(continued)

State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, B.S. 9,11, B.M.M.S. 9,11, X.L.M.C. 9,11, or FLMC 140 lb. F.D., &c.)
CS 3,31,

For the information of the Committee.

Fee (per Section 29).....

£ : : £ : :

Fees applied for

23/7/1943

Damage or Repair Fee (if any).....

£ 65.00

g expenses (if chargeable).....

£ : : £ : :

Received by me

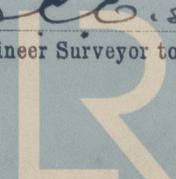
Committee's Minute

FRI. 24 SEP 1943

Deferred

Jas C. Esham © 2021

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
Foundation

011823-011825-0107

No. 7.

MACHINERY AS THIS 5.5.1943 16.8.43

sewing turbines to gear case broken, the mild steel gear case slightly distorted and bent heavily. The turbines and gears were opened out, rotors lifted, and examined with the gears and appear to be undamaged. The running gear and motor damaged. Two lengths of intermediate shafting bent and the coupling bolts broken or stretched. Turbines and gears for two 300 kw. generators and one 30 kw. generator damaged by sea water only.

The following badly damaged or missing:- Two type turbines motor. Two sanitary pumps. One lube pump. One main fire pump. One general service pump. One drinking water pump. One main feed pump and one air compressor. The remainder of the engine room auxiliaries were undamaged or had sustained slight damage only, except the electric motors, starters etc. which had been submerged. (These parts detailed in attached damage report.)

Bailes:- When permanent repairs are carried out on the hull, the port and starboard bailes will require to be removed for access to the bailes room deck and the baile seatings.

The starboard baile found undamaged structurally, but the fire brick lining and insulation damaged by sea water. The port baile tiles found distorted, the relative positions of the two drums altered, some mountings broken and the casing and piping distorted. Uptakes for both bailes distorted. Steam, oil and water pipes, platform, gratings and ladders, spare gear, telegraphs etc. damaged as detailed in attached damage report.

Electric Installation:- Damaged by immersion in sea water:- Switch boards, generators, motors, wiring and fittings as detailed in attached damage report.

After examination it was arranged that owing to local conditions as regards the repairs to the hull, the minimum temperature required to enable the vessel to be turned to a U.S. Pacific port be carried out. It was later arranged that the vessel be used as a non propelling floating workshop and repairs as follows were carried out:- The main turbines and gears opened out, cleaned and coated with special grease to prevent deterioration and rusting. The two damaged lengths of intermediate shafting removed. The propeller removed, propeller shaft drawn and blank flanges fitted at each end of stem tube. Main steam pipes between regulating valves and turbines removed.

Additional pumps:- In order to temporarily replace essential pumps which were badly damaged, a motor driven pump was fitted for sanitary service and a vertical steam supply pump and a horizontal steam supply pump fitted, each pump for fire or lube service. (continued) *J. A. Clark*

MACHINERY AT THE S.S. "YUBIKI".

as part permanent repairs:- The steering gear placed in good working condition and tested. The two 300 h.p. and one 300 h.p. turbines reconditioned and placed in good working condition. All pumps and auxiliaries (except those found badly damaged or missing - see attached damage report) reconditioned and adjusted as necessary. Motors removed, starters reconditioned and all placed in good working condition. The starboard boiler cleaned, all mountings overhauled, joints renewed and the boiler tested by water pressure to 600 lbs. per square inch. The firebrick lining and insulation removed as necessary and the boiler placed in order for the normal working pressure of 450 lbs. per square inch. Any piping steam pipes from starboard boiler to the generators and steam driven auxiliaries refitted or renewed as necessary. Fuel pipes and oil and water pipes sufficient for use with the starboard boiler were first removed and all placed in working condition. The boiler room platform replaced in way of the starboard boiler and a gangway arranged to the port side for access to valves. Electric wiring and fittings in engine room partly renewed; as far as possible the wiring renewed was arranged to be permanent.

The main switchboard, main generator switchboard and main cargo pump switchboard, with all fittings and instruments reconditioned and placed in good working condition.

On completion of these repairs, all machinery except those auxiliaries which are essential for the main turbines only, was tested under working conditions and found satisfactory.

Permanent repairs as detailed in attached report remain to be carried out at the Owners convenience.

The vessel is now under Navy control and manned by a U. S. Navy crew.