28 J.

Rpt. 9. No. 979

REPORT OF SURVEY FOR REPAIRS, &c., OF ENGINES AND BOILERS

(Received at London Office 28 JAN 1953)

Date of writing Report 12th Nov., 19 52. When handed in at Local Office ..... 19 ..... Port of KOBE

No in Reg. Book. 90826 Survey held at Kobe & Osaka Date. First Survey 18th Jan. Last Survey 3rd Sept 19 52. (No. of Visits 128)

on the Machinery of the ~~Wood, Iron or~~ Steel M.V."CALIFORNIA MARU" (EX."KYOKUTO MARU")

Tonnage { Gross 10510.31 / Net 5930.76 }

Nominal Horse Power { 2116.013 }

No. of Main Boilers -

No. of Donkey Boilers 3

Steam Pressure — in Main Boilers -

in Donkey Boilers 12.5 / 8.5

Vessel built at Kobe By whom Kawasaki Dockyard Co.,Ltd. When (Year. Month.) 1934 12

Engines made at " By whom " When

Boilers, when made (Main) (Donkey)

Owners Nippon Oil Tanker K.K. Owners' Address Tokyo (if not already recorded in Appendix to Register Book.)

Managers Port Tokyo Voyage

If Surveyed Afloat or in Dry Dock Both (State name of Dock.) Sakurajima Sy. Hitachi S.B. & Eng. Co.,Ltd., Osaka

Last Report No. Port

Particulars of Classification (which must be inserted Precisely as in Register Book & Supplements).

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)
Reclassification		contemplated.

Particulars of Examination and Repairs (if any) Reclassification survey D.B.S.

(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.

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? No

Did the Surveyor personally go inside each Main Boiler separately and make a through examination at this time? None

" " Donkey " " " Yes

If not, 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? -

State latest date of internal examination of each boiler 9-5-52 (3rd Boiler) 5-3-52 Present condition of funnel(s) Good (renewed)

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

Did the Surveyor examine the Safety Valves of the Donkey Boilers? Yes To what pressure were they afterwards adjusted under steam? 12.5(Fwd.port AND Aft) 8.5(Fwd.Starb'd)

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

Did the Surveyor examine the drain plugs of the Main Boilers? - , and of the Donkey Boilers? None

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

Has the screw shaft now been drawn and examined? Yes Has it a continuous liner? Yes Is an approved oil retaining appliance fitted at the after end? No

Has shaft now been changed? Yes If so, state reasons Hair crack in way of taper Has the shaft now fitted been previously used? No Has it a continuous liner? Yes

Is an approved oil retaining appliance fitted at the after end? - State date of examination of Screw Shaft 9-5-52 State the wear down in the stern bush 1.5 mm 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

Engine parts, when referred to by numbers, should be counted from forward. Auxiliary machinery should be referred to by position in Machinery Space.

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

Now Done:- Vessel placed in dry dock, propeller, stern tube and bush (drawn out examined & tested) sea connections (Part renewed) and valves (Part renewed) with their shell fastenings, examined & found or now placed in good condition. Screw shaft (C.L.) drawn in, examined & found cracks in way of aft end of liner, and condemned. Spare screw shaft (CL) on board the ship removed to shop, examined or now placed in good condition and fitted as a working shaft. Previous marks of this shaft was not eligible and newly stamped as follows:- LLOYD'S JN LR 9-5-52

Main diesel engine and aux. diesel engines removed to the shop of the Kawasaki Dockyard Co.,Ltd., Kobe, and also their auxiliaries opened up, cleaned and examined or now placed in good condition. All cylinders, pistons valve and valve gears, piston rods, connecting rods and their top and bottom end brasses, crossheads, guides, pumps, reversing gears, crank, thrust and intermediate shafts, pumps, valves, cocks, pipes and strainers of the pumping arrangements and bilge system, bilge injection valve opened up examined and found or now placed in good condition. (P.T.O.)

General Observations, Opinion, and Recommendation:—

(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, BS 9,11, B&MS 9,11, ✠ LMC 9,11 ro ✠ LMC 140 lb., FD, &c.)

CS 3,34

The Machinery of this vessel is in good condition and eligible in our opinion to be worthyfor Reclassification ✠ LMC 9,52 DBS 9,52, ✠ NDB (2) made 1919 refitted 5,52 and TS (N) CL 7,52.

Survey Fee (per Section 23) Reclass. ¥ 204,000
D.B.S. 75,000
Special ~~Damage or~~ Repair Fee (if any) £ 350,000 (per Section 23.)
Travelling expenses (if chargeable) (See Rpt. 8) : 6,600
~~Date attendances~~ Fee

Fees applied for 13-1 19 52 Locally. Received by me, 19

M. Lamakawa for D. Currie + self. K. Tabuchi

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned See minute on Rel 12/15

Insert Character of Ship and Machinery precisely as in the Register Book

Is a Certificate required? If so, to be sent to

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Air receivers together with pressure pipes cleaned and examined internally and found or now place in good condition, air receivers tested by hydraulic pressure to 45 kgs/cm² and found tight and i good condition. Air receiver for Aux. diesel engine was renewed. (Approved date 30-6-52 Kobe)

Oil fuel storage and daily service tanks with their fittings and connections opened up cleaned an examined internally and found or now placed in good condition.

Oil burning Installations completely renewed in accordance with the Rules and approved plans and tested as per Rules and also under working condition.

Steam smothering and deck control gears have been fitted and tested as per Rules.

Electrical Equipment:-

Prime movers opened up and examined.

Generators and all motors driving essential auxiliary machinery examined throughout, 3 main gene rewounded and the other renewed on account of serious damage.

All fittings on main and sub-distribution switch boards and boxes examined and renewed.

Electric cables were renewed with new one.

Generator, motors, cables, and other apparatus, heater fittings etc., tested, insulation resista found to be not less than 100,000 ohms.

All generators run in turns or simultaneously.

All main switches and current breakers operated. (See report 13 attached)

B.S.:- Forward port and aft-donkey boilers removed ashore on account of serious wastage and 2 bo have now been newly installed, these boilers are not new, but previously installed on board S. "EAST PORT", built 1919 at Innoshima Japan. (See Kobe Rpt.4 No.2315 SS "EAST PORT" and SECRETARY'S letters dated 5-7-52 and 1 & 20-10-52)

The scantlings of these boilers agree to ~~your~~ letter dated 31-7-52. These boilers examined, repaired and hydraulically tested to 16 kgs/cm² and found or now placed in good order. (for repairs see below)

Forward starb'd exhaust gas boiler (composite boiler) removed to shop, cleaned, examined & hydrau tested to 12 kgs per sq.cm. or now placed in good order.

The safety valves adjusted under steam as stated above. (Donkey and exhaust gas boilers)

Repairs due to wear and tear:-

Main Engine:-

Crank shaft skimmed up to the following diameter

Dia. of journal 520 mm Dia. of crank pin No.4,6,7,8 ..... 515 mm
No.1,2,3,5 ..... 510 mm

All crank & crosshead brasses remetalled.
Crosshead pins skimmed up to 348 mm dia.
All main bearing brasses remetalled.
Fly wheel shaft-skimmed up to 520 mm dia.
All piston rods skimmed up to 250 mm dia. and No.2 piston rod renewed.
No.8 top cylinder cover renewed.
All cylinder covers, liners and pistons hydraulically tested.
Thrust shaft skimmed up to 485 mm dia.
Intermediate shaft skimmed up to 444.5 mm dia.
Screw shaft skimmed up taper part (after machining dia. 488 mm)

NOTE

On completion of Machining of this shaft, The Crank has goastlines an of pitting. Ship are going to rene shaft at the earl opportunity.

Donkey Boilers

Forward port boiler :-
Port wing combustion chamber top plate and back plate partly renewed.
Minor repairs effected.

Aft boiler:-
One small stay renewed.
Port wing combustion chamber top plates and back plate partly renewed.
Minor repairs effected.

Forward starb'd boiler:- (EXHAUST GAS BOILER)
61 stay tubes renewed. All plain smoke tubes renewed.
23 small stays renewed. 71 revets renewed. Minor repairs effected.

Auxiliaries:-

Crank shaft of forw'd inboard aux. diesel engine renewed. Stamp KW-CK-107
" " " aft " " " " " KW-CK-108
" " " forw'd outboard " " " skimmed up to 168 mm dia.

Cylinder covers, liners, and jackets, pistons hydraulically tested.

3 Camshafts of above stated generators renewed.

Following pumps removed to shop, cleaned, examined or now placed in good order.

1 Fresh water cooling pump	1 sea water cooling pump
1 Common reserve pump	2 L.O.Pumps
1 Fresh water pump	1 Fire and Sanitary pump
2 O.F. Service pumps	2 O.F. transfer pumps
1 L.O. Cooler	1 Ballast pump
1 Aft windlass and mooring winch	1 Windlass
1 Exhaust gas fan	1 Steering engine
2 Ventilating fans in Engine room	1 Bilge, ballast & O.F.transfer pump in Aux room
1 Stripper pump	4 Cargo oil pumps.

Following pumps newly installed.

1 Port use cooling pump	1 G.S. pump
1 Bilge & ballast Pump	2 Feed Water pumps
2 O.F. burning pumps.	1 Forced draft fan
1 Fresh water cooler	1 Feed Heater for donkey boiler
1 Aux. condenser	1 drain cooler
2.O.F. heaters.	3 Aux. L.O. coolers.
1 Evaporator	1 Distiller.
1 Stripper pump.	1 Butter worth pump
1 Butter worth heater.	1 Ventilating fan in boiler room.

On completion of the above repairs and renewals, Sea trials carried out and machinery fuel oi equipments, bilge and ballast and electrical installations tested under full working conditio accordance with the Rules) and found satisfactory. General pumping arrangement approved (24-9-

Informing particulars:-

Max. B.H.P. 8162
" R.P.M. 115
Heating surface of donkey boilers 2 x 251.2 M²
" " " exhaust gas boiler (Oil burning 57.20 M², Exhaust gas 286.8 M²) Total 344 M²

Interim Certificate No.FE8878 issued, copy attached hereto.
First Entry Report for Elect. Inst. forwarded.
Approved plan for air receiver of aux. diesel engine & engine room arrang plan attached hereto.

Rpt. 9a.

Port of Kobe — Continuation of Report No. 19/979 dated — on the

The following documents attached herewith:

Plans # 032997 Pumping Plan
016421 General Piping Arrangement in Aux. Pump Room
016837 Cylindrical Marine Boiler with Wet Combution Chamber
222063 Starting Air Receiver for Aux. Generator

Copy of Certificates

FE 8878 Machinery Interim Certificate on completion of Repairs

M 5746	1 Clyinder Cover	M 6505	1 Crankshft
6921	1 Crankshaft	5850	1 Cyinder cover
11551	1 Piston Rod	5301	1 Camshaft for Generator
6924	2 Camshaft for Generator	6009	2 O.F. Burning Pump
6393	1 30 KW DC Generator	6973	1 Cooling Water Pump
7120	2 O. F. Heater	7213	1 Forced Draft Fan Engine
7338	1 Bilge and Ballast Pump	199	2 350 KW DC Motor
7291	1 General Service Pump	7006	1 Stripper Oil Pump
7217	1 Butterfork Pump	69273	Top Cylinder Cover
6832	2 Feed Water Pump	AR11721	1 Air Receiver, Aux. Use.
11810	11 Evaporator Coil	EV11809	1 Evaporator
8703	7 Evaporator Coil	M11808	1 Distiller

~~The Makers Test Rerulst~~

118	1	20 KW Motor Generator
~~245~~	~~1~~	~~20 HP Steering Motor~~
103	1	3 " Fam Motor
~~109~~	~~1~~	~~6 " Sanitary Pump Motor~~
101	1	5 " Fam Motor
~~102~~	~~1~~	~~5 " Fam Motor~~
108	1	15 " Coloing Water Pump Motor
~~107~~	~~1~~	~~5 " O.F. Transfter Pump Motor~~
106	1	5 " O.F. Transfter Pump Motor
~~105~~	~~1~~	~~3 " O.F. Service Pump Motor~~
104	1	3 " O.F. Service Pump Motor
	~~1~~	~~30 KW DC Generaotr.~~

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