

Rpt. 9

Date of writing report

Survey held at

Received London

No. of visits

THURSDAY 18 SEP 1958 SINGAPORE

First date 1-8-58

Last date

11th Sept. '58

12830

## REPORT OF PERIODICAL SURVEYS &amp; REPAIRS OF MACHINERY

No. in R.S. 78151 Name M.V. "SAN VENANCIO" Gross tons 8181 Date of build 1942-1

Owners EAGLE OIL &amp; SHIPPING CO. LTD. Managers Part of Registry LONDON

Engines made 1942-1 By HAWTHORN, LESLIE &amp; CO. LTD. Type Oil Eng. ASA BCy

No. of Main Engines 1 No. of Screws 1

No. of Main Boilers 1 W.P. 180 lb

No. of A/E/Donkey Boilers 1db W.P. 180 lb

Surveyed Afloat or in Dry Dock Afloat

Nature of Survey MCHY REPAIRS

Was Damage Report issued? No Int. Cont. No.

Last Report (For Head Office only)

Records of Survey &amp; Special Notations as per Register Book

Hull	Machinery
+100Al carrying petroleum in bulk	+LMC 12,54
Dkg. 3,58	DBS 3,58
SS.Nwc.(Dr) 12,54	TSCL 2,58
	Sps. 12,54
	Mchy.aft.

The condition of any of the following items is to be described as "good" only when the part has been examined, found or placed in good condition, and is considered to be acceptable until the due date of the next Periodical Examination. Where it is considered that re-examination or repairs should be effected before the due date of the next Periodical Examination a distinguishing mark thus + should be inserted against the item and the circumstances and action recommended described fully under "defects and repairs". At part or complete Special Surveys those items which are not applicable to the ship should be cancelled with a black line; this need not be done when the machinery is on a continuous survey basis. When any part has been subjected to pressure test this should be stated. Engine parts when referred to by numbers should be counted from forward.

DOCKING Propellers Wear Down of Stern Bushes Oil Glands Sea Connections

Fastenings Has Screwshaft Tubeshaft been drawn? Date of Examination Has Shaft been changed?

Has Shaft now fitted been previously used? Has Shaft now examined/fitted a continuous liner? Approved oil gland?

MAIN ENGINES (Recip. Steam or I.C.) PORT STARBOARD

1 Cyls., Covers, Pistons &amp; Rods

2 Valves &amp; Gears

3 Connecting Rods, Side

Top Ends &amp; Guides Centre

4 Crankpins &amp; Bearings Side

Centre

5 Journals &amp; Bearings + Nos 5 &amp; 6 JOURNAL BOULDER FRAGILES FRACTURED

MAIN ENGINE DRIVEN AIR COMPRESSORS

6 Cyls., Covers, Pistons &amp; Rods

7 Connecting Rods &amp; Top Ends

8 Crankpins &amp; Bearings

9 Journals &amp; Bearings

10 Coolers &amp; Safety Devices

MAIN ENGINE DRIVEN SCAVENGE PUMPS

11 Cyls., Covers, Pistons &amp; Rods

12 Connecting Rods &amp; Top Ends

13 Crankpins &amp; Bearings

14 Journals &amp; Bearings

15 Levers

16 SCAVENGE BLOWERS

17 SUPERCHARGERS

MAIN TURBINES

18 Casings, Rotors, Blading, Bearings &amp; Thrusts

19 EXHAUST STEAM TURBINES (WITH RECIP. ENGINES)

20 STEAM COMPRESSORS

21 CLUTCHES &amp; HYDRAULIC COUPLINGS

22 REDUCTION GEARING

23 THRUST BLOCKS, SHAFTS &amp; BEARINGS

24 INTERMEDIATE SHAFTS &amp; BEARINGS

25 HOLDING DOWN BOLTS &amp; CHUCKS

26 CONDENSERS (MAIN &amp; AUX.)

27 STEAM RE-HEATERS

28 DE-SUPERHEATERS

29 STOP &amp; MANOEUVRING VALVES

30 MAIN ENGINE DRIVEN PUMPS

31 CRANKCASE DOORS &amp; EXPLOSION RELIEF DEVICES

Have Main Engines been tested working and manoeuvring?

OPINION OF MACHINERY AND RECOMMENDATIONS

The machinery of this ship has been examined &amp; found to be defective in way of the main engine crankshaft centre coupling &amp; as a consequence of this &amp; other economical factors the machinery is being scrapped together with the ship. It is recommended that the records relating to this ship's machinery be now deleted from the Register Book.

Date of Committee

Decision

TUESDAY 14 OCT 1958

50m. 0.00. T. (MADE AND PRINTED IN ENGLAND)

Noted

W. S. Taylor &amp; Co.

Engineer Surveyor to Lloyd's Register of Shipping

Lloyd's Register of Shipping

005503-005511-0240 1/2

Foundation



Rpt. 9a.

Port of

Continuation of Report No. 12830 dated 12/9/38

on the

M.V. SAN VENANCIO

SHEET 2.

32 Essential Independent Pumps (Identify by position)

33 Bilge, Ballast &amp; Oil Fuel Suction Lines, Fittings &amp; Controls

34 Have the remaining Piping Arrangements &amp; Fittings in the machinery space been examined as considered necessary?

35 Fresh Water Coolers

36 Eng. Oil Coolers

37 Heaters (state service)

38 Independent Air Compressors, Sooters &amp; Safety Devices

39 Air Receivers &amp; Safety devices—Main

40 Auxiliary

41 Oil Fuel Tanks (Not forming part of hull structure)

42 Evaporators

43 Have Evaporator Safety Valves been tested under steam?

44 Steering Machinery

45 Windlass

46 Fire Extinguishing Arrangements

AUXILIARY ENGINES (Identify by position)

PROPULSION

PORT

STARBOARD

ELECTRICAL EQUIPMENT

AUXILIARY EQUIPMENT

a Generators

b Exciters

c Air Coolers

d Motors

e Air Coolers

f Control Gear, Cables, etc.

g Insulation Resistance

h Insulating Oil Test

i Overspeed Governors

j Magnetic Couplings

k Air Gap

1 Generators &amp; Governors

m Motors

n Switchboards &amp; Fittings

o Circuit Breakers

p Cables

q Insulation Resistance

r Steering Gear Generators and Motors

s Navigation Light Indicators

BOILERS OPENED UP &amp; EXAMINED (Identify by position and state latest date of internal examination of each boiler)

MAIN

AUXILIARY, DONKEY or PRESS

Superheaters

Safety Valves

Mountings, Doors &amp; Fastenings

Safety Valves Adjusted to

Sat.

Spt.

Boiler Securing Arrangements

Main Economisers

Exhaust Gas Heated Economisers

Steam Heated Steam Generators

Steam Generator Safety Valves Adjusted to

Were Oil Burning System &amp; Remote Controls examined working in accordance with Rules?

Forced Circulating Pumps

Have Saturated Steam Pipes in cylindrical boiler smoke boxes been examined as required by Rules?

Funnel

EXAMINATION &amp; TESTING OF STEAM PIPES (State material)

Main

Auxiliary (over 3 in. bore)

Were Copper Pipes annealed?

Have Saturated Pipes in cylindrical boiler smoke boxes been tested?

PARTICULARS OF DEFECTS &amp; REPAIRS, ETC. (Damage repairs should be detailed separate from wear and tear repairs; state what action has been taken regarding items which are subjects of class)

Attended on board initially at request of Owner's Representative on account of alleged damage to the propeller the cause & extent of the damage was unknown.

DAMAGE FOUND:-

The blade tip which had previously been bent on was found to be broken through the bronze weld. (It was noted that all other blade tips had been removed in the same manner.)

DAMAGE REPAIRS.

At the request of the Owners the defective blade was dressed up & rounded off & the opposite blade cut down to the same diameter.

MACHINERY DEFECTS

Whilst aboard the ship for the above repair the Chief Engineer informed the writer that during a routine crankshaft inspection a number of coupling bolts of the M.E. crankshaft centre coupling were found broken & a no. of chain timing sprocket bolts found slack or broken on the same coupling flange. A formal request for a survey of the coupling was made.

Survey fee \$ 850

(CONTINUED)

Damage fee \$ 15

Expenses...

Date when A/c rendered 11/9/38

## MACHINERY DEFECTS (CONTD):-

& it was recommended that all coupling bolts be removed for examination. The bolts were found to be seriously worn & ridged in way of the joint of the two faces. The bolts which failed due to fatigue had parted approx. 1" from the head, inside the after flange.

It was stated that this was the third failure of the bolts in the past 15 months & deflection readings of the crankshaft tended to give the impression that alignment was at fault. However, on checking the coupling flanges, after the removal of the bolts, it became obvious that alignment was not the cause of the trouble as the faces remained fairly true vertically & in the horizontal plane.

Whilst using a feeler gauge between the faces it was noticed that the gauge was failing to pass the bolt holes, indicating burning in way of same. The shaft was turned so that the after face could be seen through a coupling bolt hole & the face found to be seriously corroded. It was then recommended that the shaft be lifted in place, one half at a time, so that the faces could be fixed up in the engine bearings.

The repairs stated that they could do the job much more quickly by lifting the forward half shaft whole & doing only the aft half in place - this was agreed to.

On removal of the forward half shaft the coupling faces were examined & found to be in extremely poor condition due to corrosion. It was noted that there was a deep heavy score mark between two bolt holes & that approx only 5% of the faces had any bearing surface.

It would appear that the trouble initially had been caused by the reaming of the bolt holes, some considerable time ago, the removal of the service bolts & the turning of one half of the shaft with burrs left in way of the holes thus causing scoring & leaving metal between the faces, preventing the complete closing of same.

Upon closer examination it was noted that the flange of the after shaft was fractured between a coupling bolt hole & a chain sprocket bolt hole. It was then recommended that a magnaflex test using the welding wire (300 amp) technique be placed upon both coupling flanges with the result that practically every bolt hole was found fractured to varying degree.

It was further recommended that the coupling bolt flanges, together with their integral journals, be renewed.

After careful consideration of the economic situation, bearing in mind the imminent special survey of the ship & the magnitude of the necessary engine repair at this time, the Owners decided to dispose of the ship to be broken up & she was eventually prepared for towing to Hong Kong as an unclassified hulk.

It is therefore recommended that the records of machinery surveys for this ship be deleted from the Register Book.

W. S. J.

Lloyd's Register Foundation