

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

Date of writing Report 31/7/1953 When handed in at Local Office 31/7/1953 (Received at London Office)

No. in Reg. Book 65403 Survey held at SYDNEY N.S.W. Port of SYDNEY N.S.W.
 Date: First Survey 17/12/52 Last Survey 21/7/201953
 on the Machinery of the Wood Iron or Steel S.S. "KARUAH"
 Tonnage Gross 1353 Vessel built at Hong Kong
 Net 533 Engines made at Newcastle
 Nominal Horse Power 237 Boilers, when made (Main) 1940 By whom Hong Kong & Whampoa Dkyd
 No. of Main Boilers 2 Owners Newcastle & Hunter River S.S. Co. Ltd. (Donkey) Ltd., ---
 No. of Donkey Boilers --- Managers ---
 Steam Pressure in Main Boilers 235 Lb. Co. Ltd.,
 in Donkey Boilers --- If Surveyed Afloat or in Dry Dock Both Morts. (State name of Dock.)
 Owners' Address (if not already recorded in Appendix to Register Book.)
 Port Newcastle. Voyage

Last Report No. Port

Particulars of Examination and Repairs (if any) Special Survey Screwshaft and Completion of Boiler Survey.
 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 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?

and the Surveyor personally go inside port Main Boiler separately and make a thorough examination at this time? yes

state for what reason is

special means, i.e. the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler?

the latest date of internal examination of each boiler port 17/12/53

the Surveyor examine the Safety Valves of the Main Boilers? yes

the Surveyor examine the Safety Valves of the Donkey Boilers?

the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? port

the Surveyor examine the drain plugs of the Main Boilers?

the Surveyor examine all the mountings of the Main Boilers?

the screw shaft now been drawn and examined? yes

shaft now been changed? no If so, state reasons.

an approved oil retaining appliance fitted at the after end?

ern bush Is electric light and/or power fitted? yes

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

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

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

Done. Propeller, outer end of stern bush and sea connections examined with their fastenings.

screwshaft drawn and examined with stern bush.

valves, cocks, pipes and strainers of the running arrangement examined and tested.

liary engines driving fans, auxiliary diesel engine and electric generators examined.

port boiler and superheater examined internally and externally. All mountings opened up and

lined and safety valves of both boilers adjusted under steam as above.

main steam pipes and essential auxiliary steam pipes over 3 inches bore removed, examined and

ed by hydraulic pressure to 470 lbs per sq. inch.

uel pumps opened up and the oil burning and fire extinguishing installations examined including

alves, tanks, pipes and deck control gear and these installations tested under working conditions.

y of Electrical Installation - Generators 1-20KWS and 1-12 KWS.

The electrical installation examined under working conditions.

ator, cables and all fittings examined. Generators cleaned and overhauled. Main Switchbo

Observations, Opinion, and Recommendation: ..2

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,

*LMC. 140 lb., F.D., &c.)

essel's machinery, so far as seen, is in good condition and, in my opinion, is eligible

as classed and to have records of *LMC-MS with date, B.S. with date, Tailshaft seen

tted for oil fuel 7.53 F.P. above 1500F made in the Register Book, subject to cracke

ing web of top steam and exhaust port of L.P. cyl. being examined by 12,53.

per Section 29) £75 : 0 : 0 Fees applied for,

cal 20 : 0 : 0 27/7/1953

age or Repair Fee (if any) £ : : : Received by me,

per Section 29) Tailshaft 6 : 0 : 0 19

(if chargeable) £ : : :

Minute THURSDAY 10 SEP 1953

+LMC no 5.52

5/12/52 B.S. 12.52 subed

Filed for oil fuel 7.53 F.P. above

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

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 A1 with freeboard		*LMC-MS 7,48 B.S. 1,52
1,52 SS NSW 1,49		T.S. 1,50 CL.
		N.B.

SEE SPL. NOTE S.R.L. (MACHY.)

Present condition of funnel (✓) good
 To what pressure were they afterwards adjusted under steam Sat 235 lbs
Sup 235 lbs

To what pressure were they afterwards adjusted under steam?

yes, and of the Donkey Boilers?

yes, and of the Donkey Boilers?

yes, and of the Donkey Boilers?

Has the shaft now fitted been previously used? yes Has it a continuous liner?

State date of examination of Screw Shaft 30/12/52 State the wear down in the

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

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

complete.

Machinery Report S.S. "KARUAH"

31st July, 1953.

Electrical Installation (continued).

cleaned and overhauled.

Engine room and boiler room lighting partly rewired. Navigation lights overhauled. An oil fuel transfer pump installed, this pump is driven by a Laurence Scott and Electro Motors. Motor $1\frac{1}{2}$ HP - 110 volts - 13.4 Amps 1000 RPM - Shunt wound, continuously rated, Serial No. 122620.

On completion of overhaul, all circuits tested for insulation resistance generators tested for governing and compounding. All found satisfactory.

In S.R. List No. 126

Stiffening web of top steam and exhaust port of L.P. cyl. cracked. This item now examined and found not to have extended as machinery has had little use since last examination, but should be again examined by 12,53.

Repairs due to Wear and Tear.

Water box of auxiliary condenser renewed.

Now Done for Conversion to fuel oil firing:-

The funnel and uptake dampers removed.

The underfeed retort type coking stoker equipment removed from the port and starboard boilers, brick pans installed at furnace bottoms with air trunking led under these to the furnace fronts at the fore end of boilers for air supply to two pressure type burners for each furnace.

The following units now fitted in accordance with approved drawings.

Two steam driven weir type fuel oil pressure pumps $3\frac{1}{2}$ " x 5" x 6" stroke with one pump connected for alternative oil transfer duties and steam supply to both pumps connected for control outside machinery spaces.

Two U type fuel oil heaters with steam drains led to observation drain tank.

Two suction and two discharge fuel oil strainers.

One 2" bore tri lobe type fuel oil transfer pump,

driven thro. reduction gearing by $1\frac{1}{2}$ H.P. elect. motor and connected for stop button outside machinery space.

One $\frac{3}{4}$ " bore gear type pump direct driven by 1 H.P. electric motor for lighting up duties.

One 5 K.W. electric fuel oil heater for lighting up duties.

One observation drain tank for fuel oil heater drains, and heating coil drains from P & S cross bunkers, P & S double bottom tanks and P & S settling tanks.

A CO₂ fire smothering apparatus fitted and the general requirements of Chapter F sections 2 & 3 complied with.

The fuel oil supply valves from cross bunker and settling tanks fitted with extension spindles for control outside machinery space.

The fuel oil supply pipe to burners fitted with a quick closing valve.

The remaining requirements of circular 1866 carried out where applicable.