

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

(Received at London Office

2 MAR 1951

Date of writing Report 13th February 1951. When handed in at Local Office 27th February 1951. Port of Gothenburg

No in Reg. Book. Survey held at Gothenburg Date. First Survey 26th Oct., 1950 Last Survey 3rd February 1951. (No. of Visits 35)

65675 on the Machinery of the ~~XXXXXXXXXX~~ Steel Steamer "KIRUNA"

Tonnage	Gross 5522	Vessel built at Gothenburg	By whom A-B. Götaverken	Year. 1921	Month. 4
	Net 2935	Engines made at Gothenburg	By whom A-B. Götaverken	Year. 1921	Month. 4
Nominal Horse Power	430 MN	Boilers, when made (Main)	1921 - 4	(Donkey)	---
		Owners Trafik A-B. Gränesberg-Oxelösund	Owners' Address	---	---
No. of Main Boilers	3 (500 hp)	Managers E. Waldenström	Port Stockholm	Voyage	---
No. of Donkey Boilers	0	If Surveyed Afloat or in Dry Dock Both	A-B. Götaverken		
Steam Pressure in Main Boilers	185 lb.	(State name of Dock.)			
in Donkey Boilers	---				

Last Report No.

Port

Particulars of Examination and Repairs (if any) Docking, LMC, Alterations.

Periodical Surveys, when held, must be reported in detail and serialim in the terms of the Rules. State clearly the nature 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

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

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

Donkey

Donkey

not, state for what reasons.

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

at 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?

the latest date of internal examination of each boiler Port: 9/11 1950. Centre & Starboard: 23/11 1950

the Surveyor examine the Safety Valves of the Main Boilers? Yes To what pressure were they afterwards adjusted under steam? 178 lbs/sq. inch

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

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

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

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

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

shaft now been changed? --- If so, state reasons. --- Has the shaft now fitted been previously used? --- Has it a continuous liner? ---

an approved oil retaining appliance fitted at the after end? --- State date of examination of Screw Shaft. --- State the wear down in the

ern bush --- Is electric light ~~not~~ fitted? Yes If so, 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? Yes

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

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

done:

The propeller, sea connections and their fastenings examined.

The cylinders, pistons, slide valves with casings, covers and rods, crank-, thrust- and intermediate shafts, ps, forced draught fan, condenser and evaporator examined.

The valves, cocks, pipes and strainers of the pumping arrangement examined and tested under working conditions.

All 3 main boilers and superheaters examined internally and externally with safety valves and mountings.

The safety valves adjusted of the boilers and superheaters under steam as above (Chief Engineer's request), the oil burning- and steam smothering installations tested under working conditions.

A selected number of steam pipes over 3" bore removed, examined and tested hydraulically to double the working pressure.

The electrical installation examined, megger tested and tested under working conditions. (Continued)

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 or *LMC 140 lb., FD, &c.)

CS 3,34

The machinery of this vessel is in good condition and eligible, in our opinion, to remain as classed with fresh record of LMC 2,51, subject to the MP and LP piston rod boxes being again examined by November, 1951 (8 months after last survey). The notation of "Fitted for oil fuel 2,51. FP above 150° F." to be made in the Register Book.

Survey Fee (per Section 29)	LMC	Kr. 560:00
Operation Survey Fee		Kr. 150:00
Boiler Repair Fee (if any)		Kr. 150:00
Electric Inst. Survey Fee		Kr. 90:00

Fees applied for 27/2 1951.

Received by me, --- 19---

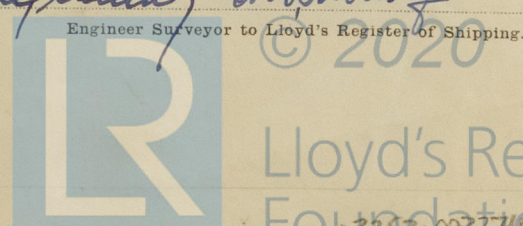
TUES. 3 APR 1951

+ LMC 2,51, subject

Fitted for oil fuel, 2,51 F.P. above 150° F.

CERTIFICATE WRITTEN.

Confessing



Lloyd's Register Foundation

Yes, Gothenburg Office.

machinery of the steamer "Kiruna", of Stockholm, No. 65675 in the Register Book.

The steering gear and windlass examined.

Repairs effected due to wear and tear:

The brass covering ring for the blow off cock renewed (missed).

Steam jacket for LP piston rod box found cracked, probably caused by frost. A 20 mm. bolted clamp has been fitted around the steam jacket. The clamp has also been connected to the cylinder bottom by means of 7 clips and 1" studs and nuts.

A vertical crack also found on the steam jacket for the MP piston rod box. A $\frac{1}{2}$ " copper pipe has been drawn from this steam jacket to the condenser. It was recommended that the steam jackets for MP and LP piston rod boxes should be again examined on the vessel's return to this port for docking in November, 1951 (8 months' limit).

The HP crosshead renewed (slightly bent). Found marked:

LLOYD'S No. 7608
GA 29.12.50

The HP piston valve rings renewed (worn).

The top- and bottom nuts of the HP piston rod renewed (slack in threads).

All pumps overhauled and repaired as necessary.

The electrical installation overhauled, and new cables fitted where necessary.

Port boiler:

3 screw stays renewed (broken).

2 plain tubes renewed (leaky).

1 donkey feed check renewed (worn).

Centre boiler:

8 screw stays renewed (broken or partly cracked).

The internal steam pipe renewed (wasted).

1 water stand gauge renewed (worn).

The siren valve renewed (worn).

Starboard boiler:

2 screw stays renewed (broken).

1 water stand gauge renewed (worn).

The siren valve renewed (worn).

About 250 plain tubes in the air heaters renewed (corroded).

Alterations:

Oil fuel burning installation of Todd's system has now been fitted.

The daily fuel oil tanks and heating coils have been fitted in accordance with the Rules and approved plans.

The oil fuel pipes, heaters and fittings have been tested after jointing as per Rule, and the installation has on completion been tested under working conditions and found to work satisfactorily.

Funnel dampers removed and steam smothering arrangement fitted under the boilers and controlled from deck as required by the Rules. 3 additional foam fire extinguishers fitted in the engine- and boiler rooms.

A vertical duplex pump, size 6" x 6" x 6", à 6600 gallons per hour has been fitted as oil fuel transfer pump.

Certificate in respect of oil burning unit attached.