

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

(Received at London Office, OCT 28 1940)

Date of writing Report Sept. 7, 1940. When handed in at Local Office Sept. 7, 1940. Port of Newport News, Va.

No. in Reg. Book. 36503. Survey held at Newport News, Va. Date, First Survey June 14, Last Survey Aug. 14, 1940.
(No. of Visits 24.)

on the Machinery of the ~~Wood, Iron or Steel~~ S/S "WEST KEDRON"
Tonnage { Gross 5620
Net 3516. Vessel built at Long Beach, Cal. By whom Long Beach S.B. Co. When 1920.
Engines made at Los. Angles. By whom Llewellyn Iron Wks. When 1920.
Nominal Horse Power | 552 Boilers, when made (Main) 1920 (Donkey)
No. of Main Boilers 3 Owners Douglas Ramsey & Co., Ltd. Owners' Address
No. of Donkey Boilers Managers Port Glasgow. Voyage U.K. via Boston.
Steam Pressure in Main Boilers 210 If Surveyed Afloat & in Dry Dock Yes.
in Donkey Boilers (State name of Dock.) N.N.S.B. & DD. Co.

Last Report No. _____ Port _____
Particulars of Examination and Repairs (if any) Classing LMC.

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?

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

Did the Surveyor personally go inside each Donkey Boiler separately and make a thorough examination at this time? Yes.

If this was not done, state for what reasons?

and what parts of the Boilers could not be thus thoroughly examined?

Also 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 July 31 1940.

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes. To what pressure were they afterwards adjusted under steam? 212 lbs. p.s.i.

Did the Surveyor examine the Safety Valves of Donkey Boiler? Yes. 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. and of the Donkey Boilers?

Did the Surveyor examine the drain plugs of the Main Boilers? Yes. and of the Donkey Boilers?

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

Has screw shaft now been drawn and examined? Yes. Is it fitted with continuous liner? Yes. Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? No.

Has shaft now been changed? No. If so, state reasons _____

Has the 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?

State date of examination of Screw Shaft 27.6.40. State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft Relined.

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

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

The three main boilers opened up and examined throughout. All plain tubes renewed. All boiler mountings opened up and examined. Center boiler safety valves renewed. All other safety valves and boiler mountings overhauled, ground in and repacked. All studs securing mountings on shell and end plates now renewed. Superheater fittings now removed and valves blanked off. Manhole doors and fastenings good. Drain plugs renewed. All main steam and auxiliary steam pipes removed, cleaned, gauged and tested to 630 Lbs. per square inch. One length of copper main steam pipe removed and replaced by a steel pipe. Shell plating, combustion chambers and furnaces drilled, spacing of stays checked and found to agree with the approved plan. Forced draught heater tubes renewed. Boiler seatings examined. All brick work in furnaces renewed. Boilers tested by hydraulic pressure and found good and tight.

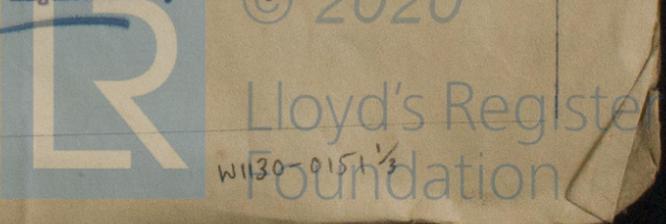
General Observations, Opinion, and Recommendation:— The boilers and machinery of this vessel (State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, E.S. 9,11, R.A.M.S. 9,11, L.E.C. 9,11, or R.L.M.C. 140 lb., F.D., &c.)
CS 224,
are now in good order and the case is respectfully submitted for the record of LMC. 8.40 and propeller shaft seen 6.40 in the Register Book. Fitted for oil fuel F.P. above 150° F. (Fitted when vessel was built).

Survey Fee (per Section 29)..... £ : : Fees applied for
Special Damage or Repair Fee (if any)..... £ : : 19
(per Section 29.)
Travelling expenses (if chargeable)..... £ : : Received by me,
19

G. Musson
Engineer Surveyor to Lloyd's Register of Shipping.

NEW YORK SEP 25 1940

Committee's Minute
Assigned See 1st Entry Report attached



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

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

S/S "WEST KEDRON"

The safety valves of all boilers adjusted to blow at 212 Lbs. per square inch.

Boiler covering and cleading part renewed.

Fuel oil burning arrangements examined. New pipes fitted from service lines to burners - all burners overhauled. New fuel oil heater fitted. Fuel oil strainers and boxes examined. Fuel oil service pumps opened up and examined. Pistons, rods, valve gear and liquid ends good. Fuel oil transfer pump opened up, examined and found in good order. Fuel oil burning equipment tested, examined under working conditions and found to be in good order. All pipes and fittings in connection with the fuel oil burning arrangements examined and found in order.

Main Engines:-

The main engines opened up and examined. Cylinders, pistons, slide and piston valves good. H.P. piston and packing rings renewed. Valve casings and cylinder covers good. Cylinder escape valves good.

L.P. junk ring renewed. L.P. balance cylinder bored out and new piston and rings fitted.

H.P. & L.P. valve rods trued up and new metallic packing fitted to all valve rods. Piston rods good. New metallic packing fitted. Piston rod shoes removed - oil way recut and shoes refitted in place and adjusted as found necessary.

Top end pins and blocks good. Reversing gear, links, tumbler blocks and reversing gear shaft and levers in good order. Reversing gear engine overhauled and adjusted.

Bottom end blocks good. Crank shaft removed from the vessel. Crank webs trued up and crank shaft journals renewed. New coupling bolts fitted. Main bearings bored out to suit new crank shaft journals (1/16 larger than original) and crank shaft bedded in same. Crank pin blocks adjusted to crank pins. Old eccentric sheaves refitted to new journals and eccentric straps adjusted.

All holding down bolts overhauled and set up as found necessary. Thrust shaft removed from vessel. Thrust collars trued up and thrust block shoes remetalled and adjusted in place. Thrust block and seating examined and found in good order.

All tunnel shafting and bearings for same examined and found in good order.

Propeller shaft drawn and examined. Condition good. Continuous liner good, now trued up. Stern bush relined. Propeller removed to shop - all blades removed, boss faces cleaned up, studs tested, blades refitted and propeller refitted to propeller shaft. All sea cocks and valves, bilge injection valve and ships side discharge valves opened up, overhauled, examined and refitted in place. Sanitary sea suction valve renewed and bilge pump discharge valve on ship's side renewed.

Main condenser opened up and examined.

All collar studs for after tube plate renewed. Condenser retubed, tested and found tight. Condenser doors recoated and rejointed. Auxiliary condenser removed and a condenser supplied by Owners fitted in place. Condenser tested and found tight. Foundation and piping altered to suit the condenser. Air pump and bilge pumps and valves opened up and examined. After bilge pump body renewed.

Air pump levers, links and bearings examined. Main circulating pump engine opened up and examined. Condition good. All working parts adjusted.

Pump casing, impeller and impeller shaft renewed. Lignum vitae bearings renewed.

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Pump tested and found in good order. Independent feed pumps (2) opened up and examined. Cylinders, pistons, rings, rods, valve gear, liquid ends and valves in good order. Feed and filtre tank cleaned out and new filtering media installed. Pumps tested and found efficient. An injector is also fitted to feed from the fresh water tanks and upon testing same, it was found to be in good working order. Bilge and ballast pump, fire and bilge pump and valves opened up, examined and found in good order. A new duplex sanitary pump has now been fitted - this can also be used as a general service pump.

Feed water heater examined - coils removed, annealed, and refitted in place. Evaporator opened up and examined. Coils removed, annealed and refitted in place. Safety valve adjusted to blow at about 12 Lbs. per square inch. Pumping arrangements examined and found in order. Forced draught fan, bearings and engine opened up and examined and all found in good working order.

Dynamo engines opened up and examined. Cylinders, pistons, rods, piston valves and crank shafts good. Now overhauled and adjusted. Dynamos examined, armatures, coils, commutators, brushes, brush holders, cables, switchboard and fittings, resistance boxes and instruments examined and found in good order. All circuits tested out, wiring renewed as found necessary, tested out, examined under full load conditions and found satisfactory. Spare gear for main engines examined and found to comply with the Rules, except for one propeller blade (bronze).

Steam steering gear engine opened up and examined, cylinders, pistons, rods and crank shafting good. Control valve liner renewed and control valve machined to suit. Double threaded screw, nuts, links and pins in good order. Telemotor and gear overhauled and repacked as necessary.

Windlass lifted and wooden seating under same renewed. Cylinders, pistons, slide valves and rods and control valve opened up and examined. Disc shaft, bearings, bearings for cable lifters and intermediate shafting opened up and examined. Condition good. Spur and pinion wheels good. Windlass refitted in place and all foundation bolts renewed.

On completion of the survey, the main engines, boilers, auxiliary machinery, fuel oil burning equipment, steam steering gear, windlass and electric light installation was examined under working conditions and found to be in good working order. The vessel is equipped with chemical fire extinguishers, sand and fire hose with connections.