

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

(Received at London Office _____)

Writing Report 19.2.47 When handed in at Local Office 20.2.47 Port of BARROW.
Survey held at BARROW. Date. First Survey 24.4.46 Last Survey 18.2.47
(No. of Visits 31)

on the Machinery of the Wood, Iron or Steel Trawler "RED KNIGHT" Ex H.M.T. "BERYL", Ex "LADY ADELAIDE"
(R.B.)
Gross 406 394 Vessel built at BEVERLEY By whom COOK WELTON & GEMMELL LTD. When 1934 1
Net 152 150 Engines made at HULL By whom Charles D. Holmes & Co. Ltd. When do. do.
Main Boilers 1 SB Boilers, when made (Main) 1934 (Donkey) -
Owners IAGO STEAM TRAWLER CO., LTD. Owners' Address -
Managers E.D.W. LAWFORD Port LONDON Voyage -
If Surveyed Afloat or in Dry Dock L.M.S. & BUCCLEUCH DOCKS. Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

CHARACTER.	Years assigned or expired	Machinery and Boiler Surveys (including date of N.E. Many)
* 100 A.1 Stm.		* LMC 7.38
Trawler		TS CL 4.36
55 H.M.T. 7.38		
NOTE: Supplements for 1938-39 not available.		
NOT IN R.B.		

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).
Surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly the cause of Repairs, if any, 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 stated at the end of the report. State also the dates and initials of any letters respecting this case.

In 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.
Damage report made by anyone else? If so, by whom? -
Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? Yes

What parts of the Boilers could not be thus thoroughly examined?
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? -
Present condition of funnel(s) Efficient.

Surveyor examine the Safety Valves of the Main Boilers? Yes To what pressure were they afterwards adjusted under steam? 200 lbs. sq. in.
Surveyor examine the Safety Valves of the Donkey Boilers? - To what pressure were they afterwards adjusted under steam? -
Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? Yes, and of the Donkey Boilers? -
Surveyor examine the drain plugs of the Main Boilers? -, and of the Donkey Boilers? -
Surveyor examine all the mountings of the Main Boilers? Yes, and of the Donkey Boilers? -
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? -
If so, state reasons - Has the shaft now fitted been previously used? - Has it a continuous liner? -
Approved oil retaining appliance fitted at the after end? - State date of examination of Screw Shaft 6.12.46 State the wear down in the bush .030" Is electric light and/or power fitted? Yes If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes.
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.
Survey is not complete, state what arrangements have been made for its completion and what remains to be done. COMPLETE

DONE:-
Vessel in dry dock, examined the propeller, screw shaft, stern bush, sea connections and outside fittings.
ENGINE:- Examined the cylinders, pistons, valves, crank, thrust and intermediate shafting, condenser (tested) engine driven pumps and all found or placed in good order as shown below. Steam pipes removed, annealed tested and replaced.
LIARY MACHINERY. Examined the independent pumps and their connections, the dynamo engine, spring engine and windlass.
er:- Examined internally and externally with all doors, mountings and fastenings, tested hydraulically to 220 lbs^{sq} and finally examined under steaming conditions, the safety valves adjusted to 200 lbs^{sq}. the oil fuel burning installations and steam smothering equipment examined and tested found in good order.
rical installation examined and tested.

General Observations, Opinion, and Recommendation: The machinery of this vessel is in an efficient condition and eligible, in our opinion, for re-classification with the notation *LMC 2,47 TS CL12,46
(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.)
ed for Oil Fuel 2,47 flash point above 150°F, subject to the main circulating pump casing being
wed before the end of January 1948 and Propeller and outside fastenings to be specially examined
wners' earliest convenience." Spare set of feed & bilge pump valves & seats & 1 set of valves of
size used for the liquid end of each independent pump required for essential services at sea,
to supply."

Fee (per Section 29.) CONVERSION £8. 8. 0 Fees applied for _____
ELEC. INSTN. £3. 0. 0 _____
Damage or Repair Fee (if any) _____ Received by me, _____
(per Section 29.) SCREW SHAFT £1. 0. 0 _____
Shipping expenses (if chargeable) _____

Committee's Minute FRI. 28 MAR 1947
+ LMC 2.47 subject-
S (CL) 12.46
CERTIFICATE WRITTEN

Abelion, L. D. Home
Engineer Surveyor to Lloyd's Register of Shipping.



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

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

Trawler "RED KNIGHT"FOR CONVERSION TO OIL FUEL.

The vessel fitted for oil fuel, the installation being in accordance with the approved Plans and Rules.

SPARE GEAR.

The spare gear examined but found to be incomplete.

REPAIRS. New propeller ^f fitted.

The main and auxiliary machinery generally overhauled and adjusted. The crankshaft lifted, the lower half bearing ^s examined and the journal between the I.P. & L.P., found slack, was renewed. Metallic packing fitted to H.P. & I.P. piston and valve rods. Dynamo overhauled and tested. The electric wiring and switchboard renewed. The main circulating pump casing was found to be wasted and was cleaned, coated and tested and is considered efficient for 12 months. Condenser tubes removed, cleaned and replaced. The boiler shows signs of slight pitting on the lower parts of the water side. A new centre furnace was fitted at this time and 9 ^{back} CC/stays renewed.

On completion of repairs the main and auxiliary machinery including the pumping arrangements were examined and tested under working conditions and found satisfactory.

NOTE: During the main machinery trial a mooring wire fouled the screw. The wire was cleared by a diver who stated that, as far as could be seen, no damage had occurred. The main engine was again tried and found satisfactory.

S.R.L. It is submitted that the following items should be included in the Special Reasons List - "Main circulating pump casing to be renewed before the end of January 1948". "Propeller and outside fastenings to be specially examined at Owners' earliest convenience". "Spare set of feed and bilge pump valves and seats and 1 set of valves of each size used for the liquid end of each independent pump required for essential services at sea, to supply".

A. Ellison