

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

(Received at London Office)

Writing Report 19.2.1947 When handed in at Local Office 20.2.1947 Port of BARROW.
 Survey held at BARROW. Date. First Survey 24.4.46 Last Survey 18.2.1947
 (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.) By whom COOK WELTON & GEMMELL LTD. When 1934
 Gross 406 394 Vessel built at BEVERLEY By whom Charles D. Holmes & Co. Ltd. When do. do.
 Net 152 160 Engines made at HULL (Donkey) -
 al 102 Boilers, when made (Main) 1934
 wer } 102 Owners IAGO STEAM TRAWLER CO., LTD. Owners' Address -
 Main Boilers 1 SB Managers E.D.W. LAWFORD (if not already recorded in Appendix to Register Book.)
 Donkey Boilers - Port LONDON Voyage -
 Pressure - If Surveyed Afloat or in Dry Dock L.M.S. & BUCCLEUCH DOCKS. Particulars of Classification (which must be inserted
 Main Boilers 200 lbs. (State name of Dock.)
 Donkey Boilers 16s.

Report No. - Port -
 Details of Examination and Repairs (if any)
 Surveys, when held, must be reported in detail and serially in the terms of the Rules. State clearly the cause of Repairs, if any, detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly ed 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 es 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

CHARACTER.	Years assigned now or expired	Machinery and Boiler Surveys (including class of R.B. Many)
* for Special Survey.		
Date of last Survey and of Periodical Surveys.		
* 100 A.1 Stm.		* LMC 7.38
Trawler <u>1-38</u>		TS CL 4.36
SS. H. <u>1-38</u>		
NOTE: Supplements for 1938-39		
not available.		
NOT IN R.B.		

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

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?
 Next date of internal examination of each boiler 5.2.47
 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? -
 If now been changed? - State date of examination of Screw Shaft 6.12.46 State the wear down in the
 approved oil retaining appliance fitted at the after end? - Is electric light and/or power fitted? Yes If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes.
 bush .030 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
fastenings.
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,
ring engine and windlass.
er:- Examined internally and externally with all doors, mountings and fastenings, tested
draulically to 220 lbs^{sq} and finally examined under steaming conditions, the safety valves adjusted
200 lbs^{sq}. the oil fuel burning installations and steam smothering equipment examined and tested
found in good order.
Electrical installation examined and tested. (Continued)

General Observations, Opinion, and Recommendation: The machinery of this vessel is in an efficient
 (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 2,34,
dition and eligible, in our opinion, for re-classification with the notation *LMC 2,47 TS CL12,46
ed for Oil Fuel 2,47 flash point above 150°F, subject to the main circulating pump casing being
owed before the end of January 1948 and Propeller and outside fastenings to be specially examined
owners' 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
ELEC. INSTN. £3. 0. 0
 Damage or Repair Fee (if any) £
 (per Section 29.) SCREW SHAFT £1. 0. 0
 Working expenses (if chargeable) £

Fees applied for
 19
 Received by me,
 19

Abellion L. Home
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute ✓
FRI. 28 MAR 1947
+ LMC 2.47 subjed-
5 (CL) 12.46
 CERTIFICATE WRITTEN

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 ^ffitted.

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. E. Union