

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

No. 18862

(Received at London Office 28 SEP 1947)

Date of writing Report 4-9-47 When handed in at Local Office 4-9-47 Port of WEST HARTLEPOOL

No. in Reg. Book Survey held at West Hartlepool Date First Survey 12<sup>th</sup> July 1946 Last Survey 28<sup>th</sup> August 1947

on the Machinery of the ~~Wood, Iron or Steel~~ Le Thomas ARCTIC VIKING (In ARCTIC PIONEER)

Tonnage Gross 533 Vessel built at Selby By whom Lochrane & Sons Ltd

Net 204 Engines made at Hull By whom Angus & Smith Ltd

Nominal Horse Power 1937 When 1937 3

No. of Main Boilers 1 Owners Boyd Line Ltd (Donkey)

No. of Donkey Boilers 220 Managers Owners' Address

Steam Pressure in Main Boilers 220 If Surveyed Afloat or in Dry Dock both Swanton St. Port Hull Voyage

in Donkey Boilers

Last Report No. Port (NE)

Particulars of Examination and Repairs (if any) + L.M.C. 15.

Periodical Surveys, when held, must be reported in detail and variation 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.

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.

" " Donkey " " "

This was not done, state for what reasons

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

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?

What latest date of internal examination of each boiler? 6 Nov 46.

Did the Surveyor examine the Safety Valves of the Main Boiler? Yes.

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

Did the Surveyor examine all the manholes, doors and their fastenings of this Main Boilers? Yes.

Did the Surveyor examine the drain plugs of the Main Boilers? None fitted

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

Has the screw shaft now been drawn and examined? Yes.

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

Has the shaft now fitted been previously used? 15<sup>th</sup> May 47

State the distance between lignum vits or bearing metal of stern bush and top of after bearing of screw shaft

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

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.

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

This vessel sustained damage through enemy action and sinking while on naval service. She was subsequently raised, partly repaired under Admiralty supervision at Southampton and eventually towed to West Hartlepool for the installation of new machinery, relassing and for completion of boiler repair.

A whole of the machinery, including main and auxiliary machines and all fuel lines, in the engine room have now been renewed except the thrust, intermediate and screw shafts. (See 1<sup>st</sup> Entry Report Hull 53830 & W Hartlepool 18862)

(Continuation sheet)

General Observations, Opinion, and Recommendation: The machinery of this vessel is, in my opinion, eligible for record + L.M.C. 8.47 and to have notations NE 8.47 + Tail shaft seen (C) 5.47. Fitted for oil fuel 8.47 Flash point above 150°F

Fees (see Section 20) £ : : Fees applied for

Recondition Repairs £ 15 : 15 : 0

Any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, B.S. 9,11, B.A.M.S. 9,11, L.M.C. 9,11, or L.M.C. 140 lb., F.D., &c.)

Printing expenses (if chargeable) £ : :

Committee's Minute 17 OCT 1947

Signed See minute on Hull 54366.

Phu Thulay for self & A.O. Oxford 2021  
Engineer Surveyor to Lloyd's Register of Shipping.



S/Trawler 'Arctic Viking' (machinery)

now done.

Vessel placed in dry dock. Propeller, outside fastenings of sea connections and tail end shaft, examined and placed in good order. Sea cocks & valves all renewed.

Tail shaft tried in lathe, found true. Shaft liner machined. Stern bush completely renewed. Thrust intermediate shafts examined and found in good order.

The boiler removed to shop and the repairs, originally put in hand at Southampton by Messrs John J Thornycroft & Co Ltd, now completed -

Boiler back plate cropped and port side renewed. Welded at crop and an inside strap riveted over weld. (See drawing  $\frac{R}{236}$  approved 2.5.46.

All plain and stay tubes in port box renewed. All girder stays renewed, two longitudinal stays renewed and all port wing and partition stays to comb. chr. renewed.

Port Comb. chr back plate removed, faired refitted riveted and all port back comb chr stays renewed.

Mountings overhauled and made good. Boiler refitted to vessel and turned round end for end. Examined under hydraulic pressure 360 lbs & found sound tight.

All main steam pipes superheater header pipes renewed. Tested to 660 lbs p.s.i. Owners superheater elements (repaired & tested) fitted. Superheaters retested on completion to 660 lbs p.s.i.

A Wallsend Howden type oil fuel burning installation has been fitted satisfactorily in accordance with the approved plans and the Rule Requirements.

Boiler examined under steam and found in order. Safety Valves adjusted under steam to 220 lbs p.s.i.

Owners new Steering Engine "Donkins" No 7700 satisfactorily fitted and tested out.

On completion, the whole of the main and auxiliary machinery tried under steam and found satisfactory. Pumping arrangements tested and found in order.

Note. Since writing above report, the vessel was prepared for sea and is proceeding to Hull. Two items which were not completed at this port will be done there and the Hull Surveyors have been advised.

1. Steam smothering to be tried
2. The port and starboard wing pipes, oil fuel delivery to the burners are to be renewed in solid drawn steel and the system retested to 400 lbs p.s.i.

J