

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

No. 12220 Date of Writing Report May 16th 1893 Port of Glasgow
No. in Reg. Book. Survey held at Glasgow Date, first Survey May 1st Last Survey 8th May 1893
481 on the Machinery of the P. P. Ethel Master Macdonald No. of Visits 3
Tonnage Gross 287 Net 133 Vessel built at Belfast By whom Warriman Clark When 1880 Boilers, when made (Main) 1880 (Donkey) 1880
Registered Horse Power 10 Engines made at Glasgow Owners D. Macdonald Port Glasgow Voyage
No. of Main Boilers 2 Steam Pressure 65 lbs If Surveyed Afloat or in Dry Dock Both
in Main Boilers in Donkey Boiler Class of Vessel & Machinery + 90 A 16 92
(As in Register Book, including dates of Special Surveys of Ship and of last Boiler Survey.) S. 5 5 1892
Last Survey No. Port + L.M.C. 8.92

Particulars of Examination and Repairs (if any) Special No 3
(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 should be separated from Repairs due to other causes. State also the dates and initials of any letters respecting this case.

Did the Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? Yes
Do. " Donkey " " " No
If this was not done, state for what reasons? Donkey boiler not to be used
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?
Did the Surveyor examine the Safety Valves of the Main Boiler? Yes
At what pressure were they afterwards adjusted under steam? Not Adjusted
Did the Surveyor examine the Safety Valves of Donkey Boiler?
To what pressure were they afterwards adjusted?

Examined Cylinders, pistons & valves, Circulating bilge & feed pumps & valves & found all in good order. Crank shaft & Main bearings, tunnel & thrust shaft & bearings, examined. Flaw in No 3 main bearing, this flaw when last seen was marked at the ends and has not extended beyond the marks then made. Boiler examined throughout; furnaces being removed from second Bowling hoops from front end on account of their hoops being worn out: part of front end plate between furnaces cut out & patch fitted. Old patch removed at bottom of boiler & new one fitted. Rivets of the stay in water space are slightly damaged but are still of ample strength. When on the ship, all sea cocks & connections were examined & found in good order. Propeller & ruddering, examined externally & found satisfactory. To complete this survey the air pump has to be examined & the safety valves of main boiler tested under steam.

General Observations, Opinion, and Recommendation:— As far as seen the machinery of this vessel is in safe working condition & in my opinion eligible to remain as classed and have certification + L.M.C. 5-93 when this survey has been completed.

Office or Registration Fee (per Sec. 27) £ : : Fees applied for 14/5 1893
Survey Fee (per Section 28) £ 1 : " :
Special Damage Fee (per Section 28) £ : :
Travelling Expenses (if chargeable) £ : :
Received by me, 14/5 1893
A. M. McHard
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

*State if Certificate is required
Committee's Minute FRI 19 MAY 1893
Assigned FRI 9th MAY 1893