

SHIP'S NAME *"Potomahana"* 23904 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Description *Compound Inverted Direct Actg.* Are all the bilge suction pipes fitted with roses *Yes*
 Made by *Mepher Denny & Coy* No. of feed pumps *Two* and sizes *4" x 2 1/2" Stroke*
 When *18 49* At *Stambarton* What gauges are there attached to the engines and boilers ... *Seven Steam, one Vacuum*
 Diameter of cylinder *34 1/2" x 82"* Length of stroke *48"* Compound
 No. of revolutions per minute *about 65* Description and size of Donkey Pumps ... *Double actg 10" Cyl, 5 1/2" x 40" Stroke*
 Point of cut off *.7* Where do they pump *From the Sea & Bilge Hotwell*
 Diameter of screw shaft *15 1/2"* and Ballast Tanks
 Diameter of crank shaft journals *15 1/2"* No. of bilge injections *One* and sizes *4"*
 Diameter of screw, ~~and paddle shaft~~ *14 1/2"* Are they connected to air, or circulating pumps *Circulating*
 Pitch of screw *21 1/2"* Is there a hand pump in the engine room *Yes*
 No. of blades, *Four* Total surface *50 1/2" (flat)* Can it be worked by the main engines *Yes*
 No. of bilge pumps *Two* and sizes *4 3/4" dia x 24" Stroke* Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*
 Do they pump from each compartment *Yes*

MAIN BOILERS.

Number *Five* Description *Round Horizontal* Can the super-heater be shut off and the boilers worked separately *No*
 Made by *Mepher Denny & Coy* Description and area of safety valves on each boiler ... *Two Direct Spring each 125" area*
 When *18 49* At *Stambarton* No. of square feet of fire-grate surface in each boiler *52 1/2*
 Working pressure *70 lbs* Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *Yes*
 Tested by hydraulic pressure to *140 lbs*, Date *June 4th 18 49* Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times ... *Yes*
 Description of super-heating apparatus *Round vertical with single tube*
 Can each boiler be worked separately *Yes*

DONKEY BOILER.

Description *Round Vertical* Tested by hydraulic pressure to *140 lbs*, Date *June 4th 18 49*
 Where fixed *on Main Deck* Description and area of safety valves *Direct Spring 7 1/2" area*
 Working pressure *70 lbs* No. of square feet of fire grate *10 1/2*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *Yes* What pipes are carried through the bunkers *Donkey Discharge*
 Are they Kingston valves or common cocks ... *Screw Down Valves & Cocks* How are they protected *It is a cast iron pipe*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *All fitted above the top of the 1st Bilge* When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *On 1st previous to being launched*
 Are the discharge pipes above or below the deep water line *Above* Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *Yes*
 Are they each fitted with a discharge valve on the plating of the vessel *Yes* Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *Yes*

Denny & Coy Manufacturers.

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (or ~~Wood~~) Screw (or ~~Paddle~~) Steam Vessel *"Potomahana"* owned by *Union Steam Navg Coy New Zealand* of the Port of *Lyttelton* of *864.574* Tons Register, and *400* Registered Horse Power, and that they have been carefully inspected and examined by me at *Stambarton* and found to be at this date, viz., *July 3rd 18 49* in good order and safe working condition.

Amount of Fee for Survey £ *20* : : : *paid*
 (Travelling Expenses, if any, £ *1-11-6*)

James Morrison
 Engineer Surveyor to Lloyd's Register of Shipping.
Clyde District

Report (if any) on Hull of Vessel. No. *4911*

[Form No. 8-1000-21, 5/79]

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ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

MAIN BOILERS.

DONKEY BOILER.

PIPES, COCKS, AND CONNECTIONS.

The Machinery of this vessel has been
examined and tested in accordance with the
rules submitted that site is situated
to the Suez Canal N.P. and a machine
certificate from 5th July 1879

7.7.79