

REPORT ON MACHINERY.

45740

No. _____ Received at London Office **THURS 24 DEC, 1885**

No. in Survey held at London Date, first Survey Aug. 27 Last Survey Dec. 15th 1885.

Reg. Book. _____ (Number of Vials 7)

on the Wreck Boiler of S. S. "Merikara" Tons _____

Master _____ Built at _____ By whom built _____ When built _____

Engines made at _____ By whom made Denny & Co. when made 1875.

Boilers made at Bromley by Bm By whom made Fraser & Fraser when made 1885.

Registered Horse Power 400 Owners S. McNeil & S. Denny Port belonging to Glasgow.

ENGINES, &c.—

Description of Engines _____

Diameter of Cylinders _____ Length of Stroke _____ No. of Rev. per minute _____ Point of Cut off, High Pressure _____ Low Pressure _____

Diameter of Screw shaft _____ Diam. of Tunnel shaft _____ Diam. of Crank shaft journals _____ Diam. of Crank pin _____ size of Crank webs _____

Diameter of screw _____ Pitch of screw _____ No. of blades _____ state whether moveable _____ total surface _____

No. of Feed pumps _____ diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____

No. of Bilge pumps _____ diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____

Where do they pump from _____

No. of Donkey Engines _____ Size of Pumps _____ Where do they pump from _____

Are all the bilge suction pipes fitted with roses _____ Are the roses always accessible _____ Are the sluices on Engine room bulkheads always accessible _____

No. of bilge injections _____ and sizes _____ Are they connected to condenser, or to circulating pump _____

How are the pumps worked _____

Are all connections with the sea direct on the skin of the ship _____ Are they Valves or Cocks _____

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the discharge pipes above or below the deep water line _____

Are they each fitted with a discharge valve always accessible on the plating of the vessel _____ Are the blow off cocks fitted with a spigot and brass covering plate _____

What pipes are carried through the bunkers _____ How are they protected _____

Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times _____

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges _____

When were stern tube, propeller, screw shaft, and all connections examined in dry dock _____

Is the screw shaft tunnel watertight _____ and fitted with a sluice door _____ worked from _____

BOILERS, &c.—

Number of Boilers One Description Multitubular Whether Steel or Iron Steel

Working Pressure 80lbs. Tested by hydraulic pressure to 160lbs. Date of test _____

Description of superheating apparatus or steam chest Steam dome

Can each boiler be worked separately ☒ Can the superheater be shut off and the boiler worked separately ☒

No. of square feet of fire grate surface in each boiler 15 Description of safety valves Quickspring No. to each boiler One

Area of each valve 9.6 Are they fitted with easing gear yes No. of safety valves to superheater _____ area of each valve ☒

Are they fitted with easing gear ☒ Smallest distance between boilers and bunkers or woodwork ☒ Diameter of boilers 7' 3 1/2"

Length of boilers 7' 6" description of riveting of shell long. seams double lap circum. seams double lap Thickness of shell plates 7/8"

Diameter of rivet holes 1 whether punched ☒ drilled ☒ shiprived ☒ pitch of rivets 3 1/2" Lap of plating 4 1/8"

Per centage of strength of longitudinal joint 70.6 working pressure of shell by rules 98lbs. size of manholes in shell 17" X 13"

Size of compensating rings 6" X 9/16" No. of Furnaces in each boiler One

Outside diameter 3' 4 7/8" length, top 4' 6" bottom 6' 6" thickness of plates 7/8" description of joint double butt if rings are fitted ☒

Greatest length between rings ☒ working pressure of furnace by the rules 98lbs. combustion chamber plating, thickness, sides 15/32" back 15/32" top 15/32"

Pitch of stays to ditto, sides 9" back 8 1/2" top 8 1/2" If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 93lbs. Diameter of stays at smallest part 1 1/2" working pressure of ditto by rules 131lbs. end plates in steam space, thickness 5/8"

Pitch of stays to ditto 12" how stays are secured double nuts & washers working pressure by rules 97lbs. diameter of stays at smallest part 2" working pressure by rules 130lbs. Front plates at bottom, thickness 5/8" Back plates, thickness 5/8"

Greatest pitch of stays 7 3/4" working pressure by rules 200lbs. Diameter of tubes 2 1/2" pitch of tubes 3 1/4" thickness of tube plates, front 5/8" back 5/8" how stayed st. tubes pitch of stays 9 3/4" width of water spaces 6"

Diameter of Superheater or Steam chest 2' 1" length 1' 10" thickness of plates 3/8" description of longitudinal joint single lap diam. of rivet holes 13/16"

Pitch of rivets 2" working pressure of shell by rules 180lbs. diameter of flue ☒ thickness of plates ☒ If stiffened with rings ☒

Distance between rings ☒ working pressure by rules ☒ end plates of superheater, or steam chest; thickness 1/2" how stayed Angles & Lii plates

Superheater or steam chest; how connected to boiler Double riveted

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