

REPORT ON MACHINERY.

No. 48637

Port of Newcastle

Received at London Office

1905

No. in Survey held at NewcastleDate, first Survey 13 Nov. 1901 Last Survey Feb 6 1905

Reg. Book.

(Number of Visits 92)

on the

S/S "Prometheus"Gross 7003Tons Net 4589When built 1902Master B. SholemBuilt at JarrowBy whom built Palmers S.B. & C. Co. Ltd.Engines made at JarrowBy whom made Palmers S.B. & C. Co. Ltd. when made 1902Boilers made at "By whom made " when made 1903

Registered Horse Power

Owners Deutsch Amerikanische Petroleum Gesellschaft Port belonging to HamburgNom. Horse Power as per Section 28 564Is Refrigerating Machinery fitted no Is Electric Light fitted yesENGINES, &c.—Description of Engines 3No. of Cylinders 3 No. of Cranks 3Dia. of Cylinders 28" 46 1/2" 77" Length of Stroke 54" Revs. per minute 70 Dia. of Screw shaft 15 1/8" as per rule 15 1/8" Material of S as fitted 16 3/4" screw shaftIs the screw shaft fitted with a continuous liner the whole length of the stern tube yes Is the after end of the liner made water tightin the propeller boss yes If the liner is in more than one length are the joints burned yes If the liner does not fit tightly at the partbetween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes If twoliners are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 5' 6 3/4"Dia. of Tunnel shaft 14 1/2" as per rule 14 1/2" Dia. of Crank shaft journals 15 1/2" as fitted 15 1/2" Dia. of Crank pin 15 1/2" Size of Crank webs 22 1/2" x 11" Dia. of thrust shaft undercollars 15 1/2" Dia. of screw 19 ft. Pitch of screw 19 ft. No. of blades 4 State whether moveable yes Total surface 110 ft.No. of Feed pumps 2 Diameter of ditto 5 1/4" Stroke 30" Can one be overhauled while the other is at work yesNo. of Bilge pumps 2 Diameter of ditto 6" Stroke 30" Can one be overhauled while the other is at work yesNo. of Donkey Engines 4 Sizes of Pumps 7 1/2" x 7 1/2" x 6" 8 1/2" x 7 1/2" x 4 1/2" 5 1/2" x 3 1/2" x 5" No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room 3 of 3 1/2" Stokehold 1 of 3 1/2" In Holds, &c. Crankbunker 1 of 3 1/2" Free Cargo hold 1 of 5" Connected to 6" x 8 1/2" pump.No. of bilge injections 1 sizes 7" Connected to condenser, or to circulating pump C.P. Is a separate donkey suction fitted in Engine room & size yes 5"Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible noneAre all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks bothAre they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the discharge pipes above or below the deep water line aboveAre they each fitted with a discharge valve always accessible on the plating of the vessel yes Are the blow off cocks fitted with a spigot and brass covering plate yesWhat pipes are carried through the bunkers none How are they protected yesAre all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times yesAre the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges yesWhen were stern tube, propeller, screw shaft, and all connections examined in dry dock 27.2.05 Is the screw shaft tunnel watertight noneIs it fitted with a watertight door yes worked from yesBOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 9950 ft. Is forced draft fitted noNo. and Description of Boilers 4 Multitubular S. Ends Working Pressure 180 lb Tested by hydraulic pressure to 360 lbDate of test Can each boiler be worked separately yes Area of fire grate in each boiler 66 1/2 ft. No. and Description of safety valves toeach boiler 2 Spring Area of each valve 7.07 Pressure to which they are adjusted 185 lb Are they fitted with easing gear yesSmallest distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 16' 3" Length 11 ft. Material of shell plates SThickness 1 7/16" Range of tensile strength 29 tons Are they welded or flanged Ends Descrip. of riveting: cir. seams d. rivd long. seams D.T. rivdDiameter of rivet holes in long. seams 1 7/16" Pitch of rivets 9 1/4" Lap of plates or width of butt straps 20 1/2"Per centages of strength of longitudinal joint 86.75 Working pressure of shell by rules 188 lb Size of manhole in shell End 16" x 12"Size of compensating ring flanged No. and Description of Furnaces in each boiler 3 Brown's Material S Outside diameter 4.1 3/4"Length of plain part top Thickness of plates crown 5/8" Description of longitudinal joint weld No. of strengthening rings —Working pressure of furnace by the rules 187 Combustion chamber plates: Material S Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 5/8"Pitch of stays to ditto: Sides 8 1/2" x 8 1/4" Back 8 1/2" x 8 1/2" Top 8 1/2" x 8 1/4" stays are fitted with nuts or riveted heads nuts Working pressure by rules 187Material of stays S Diameter at smallest part 1.5" Area supported by each stay 72 1/4 Working pressure by rules 220 End plates in steam space:Material S Thickness 1 1/8" Pitch of stays 18 1/2" x 16 1/2" How are stays secured d nuts Working pressure by rules 185 Material of stays SDiameter at smallest part 2.84 Area supported by each stay 307 Working pressure by rules 206 Material of Front plates at bottom SThickness 3/4" Material of Lower back plate S Thickness 1" Greatest pitch of stays 14 1/2" Working pressure of plate by rules 248Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates S Thickness: Front 3/4" Back 3/4" Mean pitch of stays 9"Pitch across wide water spaces 15 1/2" Working pressures by rules 240 Girders to Chamber tops: Material S Depth andthickness of girder at centre 9 1/2" x 2" Length as per rule 2' 11 1/2" Distance apart 8 1/2" Number and pitch of Stays in each 3 of 8 1/4"Working pressure by rules 213 Superheater or Steam chest; how connected to boiler yes Can the superheater be shut off and the boiler workedseparately yes Diameter — Length — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivetholes — Pitch of rivets — Working pressure of shell by rules — Diameter of flue — Material of flue plates — Thickness —If stiffened with rings — Distance between rings — Working pressure by rules — End plates: Thickness — How stayed —Working pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

W128-0087

SPARE GEAR. State the articles supplied:— 1 set Connecting rod bolts & nuts, 2 main bearing bolts & nuts, 1 set of coupling bolts, 1 set feed and belze pump valves, propeller, nuts bolts and assorted iron

Patrons Shipbuilding & Iron Co. Ltd. Manufacturer.

Is the approved plan of main boiler forwarded herewith yes

“ ” ” donkey ” ” ” duplicate

It is submitted that
this vessel is eligible for
THE BEORD H.L.M.C. 11.03 ELEC: LIGHT

Ms.
19. 4. 65.

FRI 14 APL 1905

Assigned

+ Lmc 11.03

J. Y. Lindley
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

**MACHINERY CERTIFICATE
WRITTEN.**

Lloyd's Register
Foundation