

REPORT ON MACHINERY.

No. 1331

FRI. NOV. 30 1917.

REC'D NEW YORK

Nov. 12 1917

Received at London Office

Date of writing Report Nov 7 1917 When handed in at Local Office Nov 7 1917 Port of Newport News 12

No. in Survey held at Newport News 12 Date, First Survey Aug 28 1916 Last Survey Oct 30 1917

Reg. Book. on the T.S.S. "O. B. JENNINGS" (Number of Visits 63)

Master R. A. Smith Built at Newport News By whom built Mrs. J. B. & J. A. Co. Tons Gross 10289
Net 7890 When built 1917-10

Engines made at Newport News By whom made Newport News J. B. & J. A. Co. when made 1917

Boilers made at do By whom made Newport News J. B. & J. A. Co. when made 1917

Registered Horse Power 628 Owners Standard Oil Co. of N. J. Port belonging to Bayonne N. J.

Nom. Horse Power as per Section 28 628 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Twin Screw Triple Expansion No. of Cylinders 6 No. of Cranks 6

Dia. of Cylinders 20 1/2 - 35 - 60 Length of Stroke 42 Revs. per minute 85 Dia. of Screw shaft as per rule 12.4 Material of screw shaft as fitted 13.0 0.45

Is 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 tight

in 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 part

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes If two

liners are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 4' 6"

Dia. of Tunnel shaft as per rule 11.5 Dia. of Crank shaft journals as per rule 11.7 Dia. of Crank pin 12 Size of Crank webs 8 1/4 Dia. of thrust shaft under

collars 12 Dia. of screw 15 1/2 Pitch of Screw 14' 6" No. of Blades 3 State whether moveable yes Total surface 61.7

No. of Feed pumps 3 Diameter of ditto 8 1/2 Stroke 24 Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 4 1/2 Stroke 19 Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps 8 x 8 1/2 x 2 - 6 x 5 1/2 x 8 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Three 3 1/2" In Holds, &c. F. H. Two 3"

Cham. cocks Two 2 1/2"

No. of Bilge Injections 2 sizes 8" Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size 3 1/2"

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 None

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

Are 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 yes

Are 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 yes

What pipes are carried through the bunkers None How are they protected yes

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes

Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door yes worked from yes

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Lukens I & S Co. Cantonville Pa.

Total Heating Surface of Boilers 8700 Is Forced Draft fitted yes No. and Description of Boilers 3 - S. E. Scotch

Working Pressure 200 Tested by hydraulic pressure to 300 Date of test 0.3.10.18.1916 No. of Certificates 159-160-161

Can each boiler be worked separately yes Area of fire grate in each boiler 71 1/4 No. and Description of Safety Valves to

each boiler Two 3 1/2" Area of each valve 9.60 Pressure to which they are adjusted 210 Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 8' 0" Mean dia. of boilers 15' 9" Length 11' 6" Material of shell plates S.

Thickness 1 1/2 Range of tensile strength 28-32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams S. & L.

long. seams S. & L. Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 8 3/8 Lap of plates or width of butt straps 23

Per centages of strength of longitudinal joint rivets 93.5 Working pressure of shell by rules 217 Size of manhole in shell 16 x 12

Size of compensating ring 38 x 34 No. and Description of Furnaces in each boiler 4 Mariani Material S. Outside diameter 44 3/16

Length of plain part top 19 Thickness of plates bottom 32 Description of longitudinal joint Weld No. of strengthening rings yes

Working pressure of furnace by the rules 214 Combustion chamber plates: Material S. Thickness: Sides 5/8 Back 5/8 Top 5/8 Bottom 7/8

Pitch of stays to ditto: Sides 7 x 7 Back 7 x 7 1/4 Top 7 x 8 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 211

Material of stays S. Area at smallest part 1.51 Area supported by each stay 49 Working pressure by rules 236 End plates in steam space:

Material S. Thickness 1 3/32 Pitch of stays 16 x 16 How are stays secured S. & L. Working pressure by rules 211 Material of stays S.

Area at smallest part 234 Area supported by each stay 256 Working pressure by rules 241 Material of Front plates at bottom S.

Thickness 3/4 Material of Lower back plate S. Thickness 3/4 Greatest pitch of stays 7 x 6 3/4 Working pressure of plate by rules 290

Diameter of tubes 2 3/4 Pitch of tubes 4 x 3 3/4 Material of tube plates S. Thickness: Front 25 Back 13 Mean pitch of stays 9 3/4

Pitch across wide water spaces 12 3/4 Working pressures by rules 295 Girders to Chamber tops: Material S. Depth and

thickness of girder at centre Two 10 x 8 Length as per rule 34 Distance apart 8 Number and pitch of stays in each Four 7"

Working pressure by rules 238 Steam dome: description of joint to shell yes % of strength of joint yes

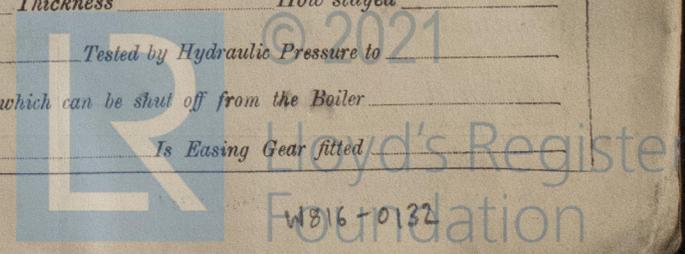
Diameter yes Thickness of shell plates yes Material yes Description of longitudinal joint yes Diam. of rivet holes yes

Pitch of rivets yes Working pressure of shell by rules yes Crown plates yes Thickness yes How stayed yes

SUPERHEATER. Type yes Date of Approval of Plan yes Tested by Hydraulic Pressure to 2021

Date of Test yes Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes

Diameter of Safety Valve yes Pressure to which each is adjusted yes Is Easing Gear fitted yes



IS A DONKEY BOILER FITTED? Yes

If so, is a report now forwarded? Yes

SPARE GEAR. State the articles supplied:— Propeller box & side flange— Tail shaft, Crank shaft— Valve stem, Two eccentric straps, A.P. bracket, C.P. propeller A.P. rod, Top & bottom end brasses & bolts, Main bearing bolts, Set of coupling bolts, Feed & bilge pump valves, Piston rings and springs, Piston tubes, Condenser tubes, Bolts, nuts, washers of various sizes, etc.

The foregoing is a correct description, Newport News Shipbuilding & Dry Dock Co.,

By J.D. Palmer Manufacturer, Resident.

Dates of Survey while building: During progress of work in shops -- 128, 15, 18, 21, A. 4, 22, S. 13, 14, 20, 26, 29, O. 3, 9, 10, 13, 18, 23, 28, 19, 16 - G. 20, 24, M. 2, 7, 5, 22, 23, 29, J. 8, 11, 19, 26, 29, S. 5, 9, 14, 16, 20, 26, 31, A. 2, 3, 4, 6, 10, 15, 16, 20, 22 - During erection on board vessel -- A. 30, S. 4, 5, 10, 17, 24 - O. 3, 4, 6, 11, 12, 19, 26, 28, 29, 30 - Total No. of visits 63 - Is the approved plan of main boiler forwarded herewith Yes

Dates of Examination of principal parts—Cylinders M. 7, 29 Slides M. 19, 31 Covers J. 76 Pistons J. 19, 31 Rods M. 7, 431 Connecting rods J. 8, 11 Crank shaft A. 30, 10, 17 Thrust shaft A. 3 Tunnel shafts A. 2 Screw shaft A. 2, 17 Propeller J. 19 Stern tube J. 16 Steam pipes tested A. 15, 17, 0, 3, 4 Engine and boiler seatings A. 14 Engines holding down bolts Sep 24 Completion of pumping arrangements S. 4, 0, 11, 26 Boilers fixed S. 24, 0, 12 Engines tried under steam 0, 12 Completion of fitting sea connections A. 22, 0, 6 Stern tube J. 31, A. 3 Screw shaft and propeller A. 10, 0, 6 - Main boiler safety valves adjusted 0, 12 Thickness of adjusting washers LOCK NUTS - Material of Crank shaft S. Identification Mark on Do. J. 17, 9, 7 Material of Thrust shaft S. Identification Mark on Do. J. 17, 3, 8, 17 Material of Tunnel shafts S. Identification Marks on Do. J. 17, 2, 8, 17 Material of Screw shafts S. Identification Marks on Do. J. 17, 2, 8, 17 Material of Steam Pipes STEEL & COPPER Test pressure S. 600 C. 400 J. 17, 8, 17

Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150°F. Yes Have the requirements of Section 49 of the Rules been complied with Yes Is this machinery duplicate of a previous case Yes If so, state name of vessel "F. Q. BARTON"

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery has been built under special survey in accordance with the approved plans and Rules for the intended service of T.M.C. The materials and workmanship are good, and the engines have been tested under steam and found to work well. The vessel is fitted to burn oil fuel in the main boiler; the oil to be carried in the fuel tank & after sumner tank. The pumping arrangements for these tanks are separated from the cargo oil system and bilge system and the requirements of Section 49 are complied with. The oil is atomized by mechanical burners and supplied by special fuel pumps in the stokehold. The vessel is eligible, in my opinion, to have the records of T.M.C. 10.17 - 11B 200 H. 11B 180 H. "Fitted for oil fuel #P above 150°F" in the Register Book.

The amount of Entry Fee ... \$15.00 : When applied for, 1.11.17 Special ... \$25.75 : When received, 7.11.17 Donkey Boiler Fee ... \$10.00 Travelling Expenses (if any) £ : Committee's Minute New York NOV 13 1917 Assigned + Lumb 10.17 Fitted for oil fuel 10.17 Elec Light Mchly aft J.D.



Certificate (if required) to be sent to the Registrar of Shipping

The Surveyors are requested not to write on or below the space for Committee's Minute.