

REPORT ON MACHINERY.

No. 14

WED. 20 DEC. 1916

REC'D NEW YORK Nov. 27 1916 Received at London Office
 Date, First Survey APRIL 17, 1916 Last Survey NOV. 22nd 1916
 Port of PORT ARTHUR, ONTARIO.

Survey held at PORT ARTHUR ONTARIO
 Date, First Survey APRIL 17, 1916 Last Survey NOV. 22nd 1916
 (Number of Vessels 108)

on the SINGLE SCREW STEEL STEAMER "BLAAMYRA"
 WESTERN DRY DOCK & SHIPBUILDING CO. LIMITED
 When built 11/16

Master C.L. STEPHENS Built at PORT ARTHUR, ONT. By whom built W.D.D. & S.B.CO. LIMITED
 when made 11/16

Engines made at PORT ARTHUR By whom made W.D.D. & S.B.CO. LIMITED
 when made 11/16

Boilers made at PORT ARTHUR By whom made W.D.D. & S.B.CO. LIMITED
 when made 11/16

Registered Horse Power 146.83 Owners GREAT LAKES TRANSPORTATION CO. Port belonging to KRISTIANIA

Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES

Engines, &c.—Description of Engines TRIPLE EXPANSION SURFACE CONDENSING No. of Cylinders THREE No. of Cranks THREE

Dia. of Cylinders 20"-33"-54" Length of Stroke 40" Revs. per minute 90 to 100 Dia. of Screw shaft as per rule 11.22 Material of STEEL

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

Is the propeller boss YES If the liner is in more than one length are the joints burned SOLDERED 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 If two

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 3'-10"

Dia. of Tunnel shaft as per rule 10.49 Dia. of Crank shaft journals as per rule 11.01 Dia. of Crank pin 11.125 Size of Crank webs 22 Dia. of thrust shaft under

collars 11.25 Dia. of screw 13-0 Pitch of Screw 13-0 No. of Blades 4 State whether moveable NO Total surface 61 Sq. Ft. = 46%

No. of Feed pumps 2 Diameter of ditto 6.5 Stroke 20" Can one be overhauled while the other is at work YES

No. of Bilge pumps 2 Diameter of ditto 3.5 Stroke 20" Can one be overhauled while the other is at work YES

No. of Donkey Engines ONE Sizes of Pumps 7.5x8x7 & 6"x4"x6" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 1-6" 3-3" In Holds, &c. 4-3"

No. of Bilge Injections 1 size 6" Connected to condenser, or to circulating pump YES Is a separate Donkey Suction fitted in Engine room & size 3 inch.

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 Are the Discharge Pipes above or below the deep water line ABOVE

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 ONE AIR & SOUNDING PIPE How are they protected BY STEEL COVERING

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

Dates of examination of completion of fitting of Sea Connections 24/10/16 of Stern Tube 24/10/16 Screw shaft and Propeller 24/10/16

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door YES worked from MAIN DECK

OILERS, &c.—(Letter for record 5 (S) 15/11/16 Manufacturers of Steel CARNEGIE STEEL COMPANY

Total Heating Surface of Boilers 5246 Is Forced Draft fitted NO No. and Description of Boilers 2 RE. TUB. SCOTCH SINGLE ENDED

Working Pressure 190 POUNDS Tested by hydraulic pressure to 380 POUNDS Date of test 14/11/16 No. of Certificate 5

Can each boiler be worked separately YES Area of fire grate in each boiler 63 No. and Description of Safety Valves to

each boiler 2 SPRING LOADED Area of each valve 9.62 Pressure to which they are adjusted 190 pounds Are they fitted with easing gear YES

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers 14.5 Length 11'-0" Material of shell plates STEEL

Thickness 1.438 Range of tensile strength 62720 Are the shell plates welded or flanged FLANGED Descrip. of riveting: cir. seams Single

long. seams STRAPS TREBLE Diameter of rivet holes in long. seams 1.4375 Pitch of rivets 4.5 Lap of plates or width of butt straps 21"x1.348

Per centages of strength of longitudinal joint rivets 95.4% Working pressure of shell by rules 218 POUNDS Size of manholes in shell 11"x15" OUT 1.124

Size of compensating ring 33"x1.425 No. and Description of Furnaces in each boiler 3 MORRISON INTERCHANGEABLE FURNACES Material STEEL Outside diameter 46.6875

Length of plain part top 8.812 Thickness of plates crown .593 Description of longitudinal joint welded No. of strengthening rings 635

Working pressure of furnace by the rules 205# Combustion chamber plates: Material STEEL Thickness: Sides .678 Back .678 Top .59 Bottom .64

Pitch of stays to ditto: Sides 6.875 Back 6.875 Top 7x7.5 If stays are fitted with nuts or riveted heads NUTS Working pressure by rules 192#

Material of stays STEEL Diameter at smallest part 1.217 Area supported by each stay 47 Working pressure by rules 192# End plates in steam space: STEEL

Material STEEL Thickness 1.126 Pitch of stays 15x14.5 How are stays secured NUTS Working pressure by rules 212 lbs Material of stays STEEL

Diameter at smallest part 2.375 Area supported by each stay 217.5 Working pressure by rules 212# Material of Front plates at bottom STEEL

Thickness .821 Material of Lower back plate STEEL Thickness .691 Greatest pitch of stays 6.875 Working pressure of plate by rules 209#

Diameter of tubes 3.25 Pitch of tubes 4.25 Material of tube plates STEEL Thickness: Front .821 Back .8 Mean pitch of stays 11"

Pitch across wide water spaces 13.75 Working pressures by rules 194.4 lbs. Girders to Chamber tops: Material STEEL Depth and

thickness of girder at centre 8.625x.796 Length as per rule 2'-10" Distance apart 7.5 Number and pitch of stays in each 3-7"

Working pressure by rules 220# Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

holes 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

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Kay's Register Foundation

IS A DONKEY BOILER FITTED? NO

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:

The foregoing is a correct description,

Witnessed for Western Dry Dock & Ship Repair Co. Ltd.

Dates of Survey while building: During progress of work in shops - - - 22-26-28-30, JULY 25 days, AUGUST 1-9-14-17-23 to 27, Sept. 2 to 6, 20 to 24th. During erection on board vessel - - - OCTOBER 2 to 4, 11 to 13, 23 to 26; NOVEMBER 2 to 15, 17 to 22. Total No. of visits 108

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts - Cylinders 2/9/16 Slides 27/8/16 Covers 2/9/16 Pistons 2/9/16 Rods 2/9/16 Connecting rods 23/8/16 Crank shaft 6/9/16 Thrust shaft 2/7/16 Tunnel shafts 9/8/16 Screw shaft 24/10/16 Propeller 24/10/16 Stern tube 24/10/16 Steam pipes tested 15/11/16 Engine and boiler seatings 2/9/16 Engines holding down bolts 15/11/16 Completion of pumping arrangements 22/11/16 Boilers fixed 2/11/16 Engines tried under steam 18/11/16 Main boiler safety valves adjusted 17/11/16 Thickness of adjusting washers .65 Material of Crank shaft STEEL Identification Mark on Do 15/11/16 Material of Thrust shaft STEEL Identification Mark on Do 15/11/16 Material of Tunnel shafts STEEL Identification Marks on Do 15/11/16 Material of Screw shafts STEEL Identification Marks on Do 15/11/16 Material of Steam Pipes STEEL Test pressure 380 POUNDS

Is an installation fitted for burning oil fuel

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 "THORGERD" (#14)

General Remarks (State quality of workmanship, opinions as to class, &c. THIS VESSEL HAD BEEN BUILT UNDER SPECIAL

SURVEY IN ACCORDANCE WITH THE RULES AND APPROVED PLANS. THE WORKMANSHIP AND MATERIALS ARE

GOOD AND THE ENGINES WILL BE ELIGIBLE IN MY OPINION TO RECEIVE THE NOTATION L M C .PORT ARTHUR,

11/16. THIS VESSEL IS FITTED FOR LIQUID OIL AND IS ENTITLED TO THE RECORD OF THE SAME IN THE

REGISTER BOOK WITH F.P. ABOVE 150° F.

The amount of Entry Fee ... £ \$15.00 : When applied for, Special ... £ \$169.00 : Nov. 21, 1916 Donkey Boiler Fee ... £ Travelling Expenses (if any) £ Nov. 22, 1916

Committee's Minute TUE 20 FEB. 1917

Assigned

Robert Lewis Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

FRI 28 DEC 1917 FRI 7 FEB 1918 TUE - 8 JAN 1918

TUE 23 MAY 1918

TUE AUG 13 1918

TUE SEP 24 1918

TUE 22 OCT 1918

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