

REPORT ON MACHINERY. No. 118

Received at London Office
of writing Report RECID NEW YORK N.Y. 21-1919.
When handed in at Local Office Feb 20 1919 Port of Toronto
Survey held at Toronto Date, First Survey July 2nd 1918 Last Survey 15th JANUARY 1920
Book. (Number of Visits 74)
on the S.S. No 300 Bridgeburg, Canb- 88 War Vicer
ter JARVIS Built at Bridgeburg Ont By whom built Canadian Allis Chalmers When built
ines made at Toronto By whom made Canadian Allis Chalmers when made 1919
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stered Horse Power Owners IMPERIAL MUNITIONS BOARD Port belonging to
Horse Power as per Section 28 274 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

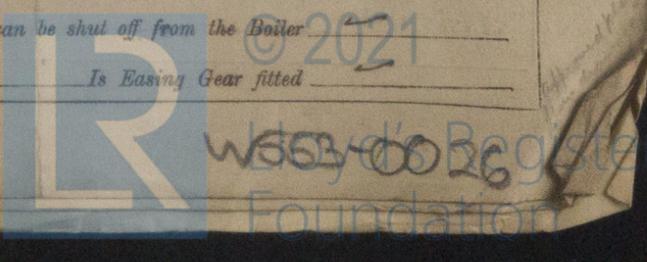
ENGINES, &c.—Description of Engines Double triple expansion No. of Cylinders 3 No. of Cranks 3
of Cylinders 20, 33, 54 Length of Stroke 40 Revs. per minute 85-90 Dia. of Screw shaft as per rule 11.64 Material of screw shaft 6 H.S.
screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight
propeller boss Yes If the liner is in more than one length are the joints burned No If the liner does not fit tightly at the part
in the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two
are fitted, is the shaft lapped or protected between the liners Length of stern bush 4' 0"
of Tunnel shaft as per rule 10.3 Dia. of Crank shaft journals as per rule 10.81 Dia. of Crank pin 11.125 Size of Crank webs 7 x 3.1 Dia. of thrust shaft under
as fitted 10.375 as fitted 11.125
s 11.125 Dia. of screw 14.5 Pitch of Screw 15-3 No. of Blades 4 State whether moveable No Total surface 68.45
of Feed pumps Diameter of ditto 6" x 8" Stroke 18" Can one be overhauled while the other is at work Yes
Bilge pumps 2 Diameter of ditto 3.5 Stroke 20 Can one be overhauled while the other is at work Yes
Donkey Engines 2 Sizes of Pumps 7 1/2 x 9 x 10 - 9 x 5 1/2 x 10 No. and size of Suctions connected to both Bilge and Donkey pumps
Engine Room 2. 3" In Holds, &c. Fore hold - 2 of 3" After hold - 1 of 3" in

workship well.
Bilge Injections 1 sizes 6" Connected to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 4"
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 Produces
connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
ey 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 above
y 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
pipes are carried through the bunkers Forward deck steam pipe How are they protected Heavy iron piping
Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top platform

ERS, &c.—(Letter for record R.S.B.) Manufacturers of Steel Carnegie Steel Co
Heating Surface of Boilers 4180 Is Forced Draft fitted Yes No. and Description of Boilers 2 cylindrical Multitubular
ing Pressure 180 Tested by hydraulic pressure to 270 Date of test 9-11-19+16-1-19 No. of Certificate 81 and 82
h boiler be worked separately Yes Area of fire grate in each boiler 54.45 sq ft No. and Description of Safety Valves to
ler 2 Springloaded Area of each valve 7.06 sq in Pressure to which they are adjusted 180 lbs Are they fitted with easing gear Yes
distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 14.0 Length 12.0 Material of shell plates 6.H.S.
s 1 1/2 Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams double
ms 1/2 Diameter of rivet holes in long. seams 1 3/16 Pitch of rivets 8.125 Lap of plates or width of butt straps 18"
ages of strength of longitudinal joint rivets 87.1 Working pressure of shell by rules 190 Size of manhole in shell back 12 x 16
plate 85.4

compensating ring No. and Description of Furnaces in each boiler 3 corrugated Material 6.H.S Outside diameter 46.5
plain part top Thickness of plates crown 7/16 Description of longitudinal joint No. of strengthening rings
bottom 7/16
pressure of furnace by the rules 190 Combustion chamber plates: Material 6.H.S Thickness: Sides 19/32 Back 3/4 Top 19/32 Bottom 1/4
stays to ditto: Sides 9 x 7 Back 8 x 8 Top 1.5 x 1.5 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 194
of stays 6.H.S Area at smallest part 1.48 Area supported by each stay 64 Working pressure by rules 185 End plates in steam space:
6.H.S Thickness 1.125 Pitch of stays 15 x 20 How are stays secured Secured + nuts Working pressure by rules 181 Material of stays 6.H.S
smallest part 5.9 Area supported by each stay 300 Working pressure by rules 204 Material of Front plates at bottom 6.H.S
Material of Lower back plate 6.H.S Thickness 3/4 Greatest pitch of stays 12.75 x 19.75 Working pressure of plate by rules 183
of tubes 2.75 Pitch of tubes 3 1/2 x 3 1/2 Material of tube plates 6.H.S Thickness: Front 13/16 Back 3/4 Mean pitch of stays 7 1/8
ross wide water spaces 13 3/4 Working pressures by rules 226 Girders to Chamber tops: Material 6.H.S Depth and
of girder at centre 8.75 1.25 Length as per rule 30 Distance apart 7.5 Number and pitch of stays in each 3 7.5
pressure by rules 201 Steam dome: description of joint to shell % of strength of joint

Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
Working pressure of shell by rules Crown plates Thickness How stayed
TEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to
Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
Safety Valve Pressure to which each is adjusted Is Easing Gear fitted



IS A DONKEY BOILER FITTED? No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

- 1. Set of coupling bolts and nuts ✓
- 2. Connecting Rod bottom end bolts and nuts ✓
- 2 do do top do do do ✓
- 2. Main bearing bolts and nuts. ✓
- 1. Set bilge pump valves. 1 Set air pump valves ✓
- 1. Set H.P. I.P. and L.P. piston rings ✓

The foregoing is a correct description,

The Canadian Alis-Balmers Co Ltd of Halifax Manufacturer.

1918.
 Dates of Survey while building: During progress of work in shops -- July 2, 8, 10, 16, 18, 26, 29, Aug. 20, Sep. 3, 12, 18, Oct. 8, 10, 11, 15, 16, 27, 29, Nov. 4, 6, 12, 14, 19, 26, Dec. 9, 12, 13, 19, 31, Jan. 20, 27, 9, 16, 27, Feb. 3, 11, 12.
 During erection on board vessel -- Oct. 27, 1918, Feb. 26, 1919, March 3-20, May 15-23, June 6-13, July 17-26.
 Total No. of visits 66 HALIFAX, N.S. DEC. 1917-19, 20, 24, 26, 30, JAN. 2, 7, 10. Is the approved plan of main boiler forwarded herewith
 " " " " 74 " " " " donkey " " " "

Dates of Examination of principal parts—Cylinders 10, 10, 18 Slides 12, 12, 18 Covers 10, 10, 18 Pistons 12, 11, 18 Rods 12, 11

Connecting rods 8, 10, 15 Crank shaft 12, 2, 19 Thrust shaft 18, 2, 19 Tunnel shafts 17-7-19 Screw shaft 29, 10, 18 Propeller 4, 11

Stern tube 26-2-19 Steam pipes tested 26-7-19 Engine and boiler seatings 13-6-19 Engines holding down bolts 6-6-19

Completion of pumping arrangements 7-10-19 Boilers fixed 10-10-19 Engines tried under steam 1-11-19

Completion of fitting sea connections 3-3-19 Stern tube 26-2-19 Screw shaft and propeller 26-2-19

Main boiler safety valves adjusted 1-11-19 Thickness of adjusting washers Star boiler 7/16" Port boiler 7/16"

Material of Crank shaft G.H.S Identification Mark on Do. 12-2-19 Material of Thrust shaft G.H.S Identification Mark on Do. 7-19

Material of Tunnel shafts O.H.S Identification Marks on Do. 2-19 Material of Screw shafts G.H.S Identification Marks on Do. 7-19

Material of Steam Pipes Universal steel, lap welded Test pressure 540 lbs ✓

Is an installation fitted for burning oil fuel No ✓ Is the flash point of the oil to be used over 150°F.

Have the requirements of Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case No ✓ If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery and boilers have been constructed under special survey, they are of good material and workmanship and eligible for record with date when survey is completed. Tunnel shafting shipped without examination.

To complete Engines to be fitted and secured on board with auxiliaries and connections according to rules. Boiler mountings to be fitted to boiler.

Buffalo N.Y. These engines and boilers have been fitted on board in a satisfactory manner allow the vessel to proceed to Montreal and eligible for record with date when survey is completed.

To complete. Rivets on lower part of all furnace flanges connected to combustion chamber drilled out—flanges set up—re-riveted and recaulked.

Height of water gauge fitting—water end—on port boiler, to be raised one inch.

Spare gear to be supplied. The above recommendations have been carried out in an efficient manner and spare gear supplied. Machinery under steam with satisfactory results. These engines and boilers are in my opinion, to be classed A.L.C.

W. Smith Halifax, N.S.

The amount of Entry Fee ... £8 10:00 :
 Toronto Special 2/3 of 168-50 ... \$ 112.40 :
 Buffalo 1/3 do ... \$ 56.20 ✓
 Donkey Boiler Fee ... \$ 40:70 :
 Travelling Expenses (if any) \$ 40:70 :
 When applied for, Feb 14, 1919 Toronto
 2005 19, 1919 Buffalo
 When received, 3/21/19

Alexander Scott
 Engineer Surveyor to Lloyd's Register of Shipping
 Toronto,
 J.W. Bredell Buffalo, N.Y.
 W. V. Lewis Buffalo

Committee's Minute New York FEB - 3 1920
 Assigned + L.M.C. 1.20

MACHINERY DEPT
 WRITTEN 23/2/20