

REPORT ON MACHINERY.

No. 154 JAN 1920

Received at London Office

Date of writing Report SEP 29 1919 When rendered in at Local Office OCT. 4 1919 Port of TORONTONo. in Survey held at TORONTODate, First Survey MCH. 18. 1919 Last Survey DEC. 9. 1919Reg. Book. on the S.S. "CANADIAN SETTLER"

(Number of Plates)

Gross 3548Net 2155Master P. A. Robertson Built at THREE RIVERS. By whom built TIDE WATER SHIPBUILDERS When built 1919Engines made at GALT. ONT. By whom made GOLDIE & McCULLOCH & CO LTD when made 1919Boilers made at Lachine Que. By whom made Dominion Bridge Co. Ltd. when made 1919Registered Horse Power 226.5 Owners Canadian Government Merchant Marine Port belonging to MontrealNom. Horse Power as per Section 28 470 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES

ENGINES, &c.—Description of Engines INVERTED TRIPLE EXPANSION No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 25 - 41 - 68 Length of Stroke 45 Revs. per minute 13.76 Dia. of Screw shaft as per rule 13.76 Material of O.H.S.
 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 NO 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 NO If two
 liners are fitted, is the shaft lapped or protected between the liners NO Length of stern bush 5'-2"
 Dia. of Tunnel shaft as per rule 12.4 Dia. of Crank shaft journals as per rule 13.03 Dia. of Crank pin 13.25 Size of Crank webs 25.5 x 8.5 Dia. of thrust shaft under
 collars 13.25 Dia. of screw 16'-6" Pitch of Screw 15'-9" No. of Blades 4 State whether moveable NO Total surface 84 sq
 No. of Feed pumps 2 Diameter of ditto 3.5 Stroke 24 Can one be overhauled while the other is at work YES
 No. of Bilge pumps 2 Diameter of ditto 3.5 Stroke 24 Can one be overhauled while the other is at work YES
 No. of Donkey Engines 3 Sizes of Pumps 39" x 14" x 18" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 4-3" 1-3 1/2" In Holds, &c. Bilge 1-3 1/2" No. 1. 1-4" No. 2. 3-4" No. 3. 1-3"
S. 2-3 1/2" No. 4. 3-4" No. 5. 1-3 1/2" No. 6. 1-3 1/2" No. 7. 1-3 1/2" No. 8. 1-3 1/2" No. 9. 1-3 1/2" No. 10. 1-3 1/2"
 No. of Bilge Injections 1 sizes 8" Connected to condenser, or to circulating pump YES Is a separate Donkey Suction fitted in Engine room & size 1-7"
 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 YES
 Are all connections with the sea direct on the skin of the ship YES Are they Valves or Cocks YES
 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 Below
 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
 Dates of examination of completion of fitting of Sea Connections _____ of Stern Tube _____ Screw shaft and Propeller _____
 Is the Screw Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

BOILERS, &c.—(Letter for record _____) Manufacturers of Steel _____
 Total Heating Surface of Boilers 7275 Is Forced Draft fitted YES No. and Description of Boilers 3 CYLINDRICAL MULTITUBULAR
 Working Pressure 180 Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____
 Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of Safety Valves to
 each boiler _____ Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted with easing gear _____
 Smallest distance between boilers or uptakes and bunkers or woodwork _____ Mean dia. of boilers _____ Length _____ Material of shell plates _____
 Thickness _____ Range of tensile strength _____ Are the shell plates welded or flanged _____ Descrip. of riveting: cir. seams _____
 long. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps _____
 Per centages of strength of longitudinal joint _____ Working pressure of shell by rules _____ Size of manhole in shell _____
 Size of compensating ring _____ No. and Description of Furnaces in each boiler _____ Material _____ Outside diameter _____
 Length of plain part _____ Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
 Working pressure of furnace by the rules _____ Combustion chamber plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____
 Pitch of stays to ditto: Sides _____ Back _____ Top _____ If stays are fitted with nuts or riveted heads _____ Working pressure by rules _____
 Material of stays _____ Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ End plates in steam space _____
 Material _____ Thickness _____ Pitch of stays _____ How are stays secured _____ Working pressure by rules _____ Material of stays _____
 Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____
 Thickness _____ Material of Lower back plate _____ Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____
 Diameter of tubes _____ Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____
 Pitch across wide water spaces _____ Working pressures by rules _____ Girders to Chamber tops: Material _____ Depth and _____
 thickness of girder at centre _____ Length as per rule _____ Distance apart _____ Number and pitch of stays in each _____
 Working pressure by rules _____ 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 rivets _____
 Pitch of rivets _____ Working pressure of shell by rules _____ Diameter of flue _____ Material of flue plates _____ Thickness _____
 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 _____

007342-007351-0281

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied: - 2 CONNECTING ROD TOP END BOLTS & NUTS - 2 CONNECTING
ROD BOTTOM END BOLTS & NUTS - 2 MAIN BEARING BOLTS & NUTS - 3 CRANK
SHAFT COUPLING BOLTS & NUTS - 3 TUNNEL SHAFT COUPLING BOLTS & NUTS
1 EACH SUCTION & DISCHARGE VALVE FOR FEED PUMPS. - 1 EACH SUCTION &
DISCHARGE VALVE FOR BILGE PUMPS. - SIX GLINDER COVER STUDS & NUTS.
6 PISTON BOLTS & NUTS - 6 STEAM CHEST COVER STUDS & NUTS. - 12 JUNK RING
STUDS & NUTS - 1 HP PISTON VALVE. - 25 CONDENSER TUBES. 50 FERRULES
1 PROPELLER.

The foregoing is a correct description,

A. F. Crauford

Manufacturer.

Dates of Survey while building { During progress of work in shops - - - MCH. 18. 20. APR. 10. 18. 22. MAY. 2. 22. 30. JUNE 11. 14. JULY 4. 16. AUG. 14. 29. SEP. 11. 24. 27
During erection on board vessel - - - APR. 20. OCT. 8. 21. NOV. 1. 10. 15. 21. 26. 29. 30. & 2. 9.
Total No. of visits - 29.

Is the approved plan of main boiler forwarded herewith 16.

Dates of Examination of principal parts - Cylinders 4. 7. 19 Slides 29. 8. 19 Covers 4. 7. 19 Pistons 29. 8. 19 Rods 14. 8. 19
Connecting rods 14. 8. 19 Crank shaft 27. 9. 19 Thrust shaft 29. 8. 19 Tunnel shafts 16. 7. 19 Screw shaft 14. 8. 19 Propeller
Stern tube 16. 7. 19 Steam pipes tested 24. 11. 19 Engine and boiler seatings 24. 11. 19 Engines holding down bolts 15. 10. 19
Completion of pumping arrangements 1. 12. 19 Boilers fixed 21. 11. 19 Engines tried under steam 29. 11. 19
Main boiler safety valves adjusted 24. 11. 19 Thickness of adjusting washers S 25 P 21 S 23 P 32 S 24 P 32
Material of Crank shaft O.H.S. Identification Mark on Do. 1506-27. 9. 19 Material of Thrust shaft O.H.S. Identification Mark on Do. 996-29. 8.
Material of Tunnel shafts O.H.S. Identification Marks on Do. 976 to 980 Material of Screw shafts O.H.S. Identification Marks on Do. 984-14. 8.
Material of Steam Pipes STEEL & COPPER Test pressure 540 STEEL 360 COPPER

Is an installation fitted for burning oil fuel

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 HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY

THE MATERIAL AND WORKMANSHIP ARE GOOD.

IT WILL BE ELIGIBLE FOR RECORD WITH DATE WHEN SURVEY IS COMPLETED

TO COMPLETE MACHINERY TO BE FITTED AND SECURED ON BOARD WITH

AUXILIARIES & CONNECTIONS, ACCORDING TO RULES

These main engines and the necessary auxiliary machinery have been fitted aboard the vessel and tried out under steam at full working conditions with satisfactory results
In my opinion they are eligible to be classed in the Register Book of the Society and to have the record of L.M.C. 12-19.

It is submitted that this vessel is eligible for THE RECORD.

+L.M.C. 12. 19. F.D.

The amount of Entry Fee ... £ : :
Special ... \$ 72 : 50 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ 49 : 20 :
When applied for, OCT 3 1919
When received, 22/11/20

Committee's Minute

FRI. JAN. 16. 1920

Assigned

+L.M.C. 12. 19

Alexander Scott. R. J. Alderson
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

FRI. JUL. 2 1920
TUE. SEP. 27 1921

Lloyd's Register Foundation