

REPORT ON MACHINERY

No. 17635.
WED. MAY 5 1920

Received at London Office

Date of writing Report 24 April 1920 When handed in at Local Office 28 April 1920 Port of Greenwich

No. in Survey held at Greenwich, Port of Harrow Date, First Survey 18th March, 1919, Last Survey 27th April, 1920.
Reg. Book.on the *Neel Uman "Moto"*

(Number of Visits 102.)

Gross 2693.37.

Net 1361.68.

When built 1920

Master *G. H. Woodfield* Built at *Port Harrow* By whom built *Mundoch Murray*Engines made at *Greenock* By whom made *John S. Kincaid & Co.* when made 1920Boilers made at *Greenock* By whom made *John S. Kincaid & Co.* when made 1920Registered Horse Power Owners *The Pelton Steamship Co., Ltd.* Port belonging to *Newcastle-on-Tyne*.Nom. Horse Power as per Section 28 *431* Is Refrigerating Machinery fitted for cargo purposes *2* Is Electric Light fitted *2*

ENGINES, &c.—Description of Engines

*Triple Compound*No. of Cylinders *Three*No. of Cranks *Three*Dia. of Cylinders *25" 41" 68"* Length of Stroke *48"* Revs. per minute *70* Dia. of Screw shaft *as per rule 1.591* Material of *Steel*
as fitted 1.412 screw shaft)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 tightin the propeller boss *Yes* If the liner is in more than one length are the joints burned *—* 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 *—* If twoliners are fitted, is the shaft lapped or protected between the liners *—* Length of stern bush *58"*Dia. of Tunnel shaft *as per rule 1.269* Dia. of Crank shaft journals *as per rule 1.332* Dia. of Crank pin *1.571* Size of Crank webs *21" 8 1/2"* Dia. of thrust shaft undercollars *1.571* Dia. of screw *16" 6"* Pitch of Screw *19" 0"* No. of Blades *4* State whether moveable *2* Total surface *90 sq ft*No. of Feed pumps *Two* Diameter of ditto *3 1/2"* Stroke *27"* Can one be overhauled while the other is at work *Yes*No. of Bilge pumps *Two* Diameter of ditto *4"* Stroke *27"* Can one be overhauled while the other is at work *Yes*No. of Donkey Engines *Two* Sizes of Pumps *9" 8" 6" 8"* No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room *Three 3"* In Holds, &c. *Two 3" One 2 1/2" Tunnel 2 1/2"*No. of Bilge Injections *Two* sizes *8"* Connected to condenser, or to circulating pump *Two* Is a separate Donkey Suction fitted in Engine room & size *Two 3"*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 *—*Are all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Both*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 *—* How are they protected *—*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 *Yes* Is it fitted with a watertight door *Yes* worked from *Top of Main*BOILERS, &c.—(Letter for record *S*)Manufacturers of Steel *White Iron Cement Works**4. S. B.*Total Heating Surface of Boilers *7780 sq ft* Is Forced Draft fitted *2* No. and Description of Boilers *Four single ended*Working Pressure *180 lb* Tested by hydraulic pressure to *360 lb* Date of test *27/2/20* No. of Certificate *1430*Can each boiler be worked separately *Yes* Area of fire grate in each boiler *57 1/2 sq ft* No. and Description of Safety Valves toeach boiler *Two Spring* Area of each valve *5.94 sq in* Pressure to which they are adjusted *185 lb* Are they fitted with easing gear *Yes*Smallest distance between boilers or uptakes and bunkers or woodwork *15"* Mean dia. of boilers *14" 6"* Length *10" 6"* Material of shell plates *Steel*Thickness *1 3/16"* Range of tensile strength *20-32* Are the shell plates welded or flanged *—* Descrip. of riveting: *Seams all with*long. seams *all with* Diameter of rivet holes in long. seams *1 1/4"* Pitch of rivets *8 1/4"* Lap of plates or width of butt straps *16 1/2" (15 1/2")*Per centages of strength of longitudinal joint *87.7* Working pressure of shell by rules *183 lb* Size of manhole in shell *16" 12"*Size of compensating ring *15 1/16"* No. and Description of Furnaces in each boiler *3 Dighton* Material *Steel* Outside diameter *46 1/4"*Length of plain part *top 1" bottom 1"* Thickness of plates *crown 9 1/16" bottom 9 1/16"* Description of longitudinal joint *Welded* No. of strengthening rings *One*Working pressure of furnace by the rules *190 lb* Combustion chamber plates: Material *Steel* Thickness: Sides *2 1/32"* Back *2 1/32"* Top *2 1/32"* Bottom *2 1/32"*Pitch of stays to ditto: Sides *9 1/4" 8 1/4"* Back *9 1/4" 8 1/4"* Top *9 1/4" 8 1/4"* If stays are fitted with nuts or riveted heads *Both* Working pressure by rules *180 lb*Material of stays *Steel* Area at smallest part *1.79 sq in* Area supported by each stay *82"* Working pressure by rules *196 lb* End plates in steam space:Material *Steel* Thickness *1 3/16"* Pitch of stays *19 1/4"* How are stays secured *all with* Working pressure by rules *180 lb* Material of stays *Steel*Area at smallest part *6.9 sq in* Area supported by each stay *380 sq in* Working pressure by rules *196 lb* Material of Front plates at bottom *Steel*Thickness *1"* Material of Lower back plate *Steel* Thickness *1 3/16"* Greatest pitch of stays *15"* Working pressure of plate by rules *182 lb*Diameter of tubes *3 1/2"* Pitch of tubes *4 1/2" 4 9/16"* Material of tube plates *Steel* Thickness: Front *1"* Back *12 1/16"* Mean pitch of stays *9 1/4"*Pitch across wide water spaces *14"* Working pressures by rules *180 lb* Girders to Chamber tops: Material *Steel* Depth andthickness of girder at centre *8 1/2" 14 1/2"* Length as per rule *31.59"* Distance apart *8 1/4"* Number and pitch of stays in each *all 9 1/4"*Working pressure by rules *—* Steam dome: description of joint to shell *—* % of strength of joint *—*Diameter *—* Thickness of shell plates *—* Material *—* Description of longitudinal joint *—* Diam. of rivet holes *—*Pitch of rivets *—* Working pressure of shell by rules *—* Crown plates *—* Thickness *—* How stayed *—*SUPERHEATER. Type *—* Date of Approval of Plan *—*Tested by Hydraulic Pressure to *—*Date of Test *—* Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler *—*Diameter of Safety Valve *—* Pressure to which each is adjusted *—* Is Easing Gear fitted *—*

006601-006613-0246

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded? -

SPARE GEAR. State the articles supplied: -

The top end bolts. The bottom end bolts. The main
bearing bolts. One set coupling bolts. One set feed pump valves. One set
bridge pump valves. One escape valve opening each side. The safety valve spring
bolts nuts & gaskets.

The foregoing is a correct description,
FOR JOHN G. KINCAID & COY., LIMITED.

Robert Greer.

Secretary.

Manufacturer.

Dates of Survey while building { During progress of work in shops - - { (1919) Mar 18. Apr 8. 10. 25. 30. May 12. 14. 28. June 9. 12. 16. 20. 23. July 17. 22. 25. Aug 4. 7. 8. 13. 15. 20. 26. 29. Sept
During erection on board vessel - - { 13. 14. 15. 16. 19. 22. 26. Oct 1. 6. 9. 13. 15. 17. 20. 23. 27. 29. Nov 4. 6. 10. 12. 14. 17. 18. 20. 21. 24. 27. 28. Dec 1. 2. 4. 5. 9. 12. 14. 19. 23. 24. 26. 29. (1920)
Total No. of visits 102. Is the approved plan of main boiler forwarded herewith? -

" " " donkey " " " "
Dates of Examination of principal parts - Cylinders 16/2/20 Slides 5/3/20 Covers 16/2/20 Pistons 5/3/20 Rods 5/3/20
Connecting rods 9/4/20 Crank shaft 1/12/19 Thrust shaft 1/12/19 Tunnel shafts 20/2/20 Screw shaft 12/12/19 Propeller 17/12/19
Stern tube 2/12/19 Steam pipes tested 14-16/4/20 Engine and boiler seatings 19/2/20 Engines holding down bolts 29/3/20
Completion of pumping arrangements 20/4/20 Boilers fixed 2/4/20 Engines tried under steam 27/4/20
Completion of fitting sea connections 18/2/20 Stern tube 19/2/20 Screw shaft and propeller 18/2/20
Main boiler safety valves adjusted 20/4/20 Thickness of adjusting washers For P 9 1/2 5 9 1/2 11 1/2 12 1/2 13 1/2 14 1/2 15 1/2 16 1/2 17 1/2 18 1/2 19 1/2 20 1/2 21 1/2 22 1/2 23 1/2 24 1/2 25 1/2 26 1/2 27 1/2 28 1/2 29 1/2 30 1/2 31 1/2 32 1/2 33 1/2 34 1/2 35 1/2 36 1/2 37 1/2 38 1/2 39 1/2 40 1/2 41 1/2 42 1/2 43 1/2 44 1/2 45 1/2 46 1/2 47 1/2 48 1/2 49 1/2 50 1/2 51 1/2 52 1/2 53 1/2 54 1/2 55 1/2 56 1/2 57 1/2 58 1/2 59 1/2 60 1/2 61 1/2 62 1/2 63 1/2 64 1/2 65 1/2 66 1/2 67 1/2 68 1/2 69 1/2 70 1/2 71 1/2 72 1/2 73 1/2 74 1/2 75 1/2 76 1/2 77 1/2 78 1/2 79 1/2 80 1/2 81 1/2 82 1/2 83 1/2 84 1/2 85 1/2 86 1/2 87 1/2 88 1/2 89 1/2 90 1/2 91 1/2 92 1/2 93 1/2 94 1/2 95 1/2 96 1/2 97 1/2 98 1/2 99 1/2 100 1/2 101 1/2 102 1/2
Material of Crank shaft I Steel Identification Mark on Do. 354 Material of Thrust shaft I Steel Identification Mark on Do. 354
Material of Tunnel shafts I Steel Identification Marks on Do. 354 Material of Screw shafts I Steel Identification Marks on Do. 354
Material of Steam Pipes Copper Test pressure 400 lb
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? - If so, state name of vessel -
General Remarks (State quality of workmanship, opinions as to class, &c. Workmanship good)

The Engines and Boilers of the Steamer have been
constructed under Special Survey and placed on board in
accordance with the Society's Rules. They are now in my opinion
in safe working condition and the case is respectfully submitted
for the Certification + L.M.C. 4.20 in the Register Book.

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C. 4.20

7/5/20

W.D.

GRK

The amount of Entry Fee ... £ 3 : 0 :
Special ... £ 41 : 11 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 28th April, 1920.
When received, 8/5/1920

James Jones

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASCOW 4 - MAY 1920

Assigned + L.M.C. 4.20

MACHINERY CERT.
WHITTEN 5.5.20



© 2021

Lloyd's Register
Foundation