

REPORT ON MACHINERY.

No. 26767

Received at London Office SAT 29 JUL 1916

Date of writing Report

19

When handed in at Local Office

26th July 1916 Port of Sunderland.

No. in Survey held at Sunderland.

Date, First Survey

19 Mar '15 Last Survey

25 July 1916

Reg. Book.

on the STEEL SCREW STEAMER "USKMOUTH."

(Number of Visits)

Gross 2320

Net 1273

Tons

When built 1916.

Master J. W. Heasley Built at Sunderland By whom built J. Priestman & Co.Engines made at Sunderland By whom made North Eastern Marine Eng'g Coy Ltd when made 1916.Boilers made at Sunderland By whom made North Eastern Marine Eng'g Coy Ltd when made 1916.Registered Horse Power Owners R. W. Jones & Co. Port belonging to Newport, Mon.Nom. Horse Power as per Section 28 218 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes.ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks ThreeDia. of Cylinders 21"-35"-57" Length of Stroke 39" Revs. per minute 72 Dia. of Screw shaft 11.26" Material of screw shaft IronIs 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 1 length 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 Yes If twoliners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 4' 0"Dia. of Tunnel shaft 10.56" Dia. of Crank shaft journals 11.08" Dia. of Crank pin 11.8" Size of Crank webs 18 1/2 x 7" Dia. of thrust shaft undercollars 11.8" Dia. of screw 14' 9" Pitch of Screw 15' 6" No. of Blades 4 State whether moveable No Total surface 68 sq. ft.No. of Feed pumps 2 Diameter of ditto 3" Stroke 21" Can one be overhauled while the other is at work YesNo. of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 21" Can one be overhauled while the other is at work YesNo. of Donkey Engines 3 Sizes of Pumps 8 1/2 x 11 x 10 1/2" 2 1/2 x 3 1/2 x 5" No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room Three - 3" In Holds, &c. 2 1/2" dia 2-3" dia 2 1/2" dia 2-3" dia2 1/2" dia 2-3" dia 2 1/2" dia 2-3" dia 2 1/2" diaNo. of Bilge Injections 1 sizes 4" Connected to condenser, or to circulating pump C.P. Is a separate Donkey Suction fitted in Engine room & size Yes 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 YesAre all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks BothAre 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 AboveAre 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 YesWhat pipes are carried through the bunkers None How are they protected YesAre all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times YesAre the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges YesDates of examination of completion of fitting of Sea Connections 22/11/15 of Stern Tube 25/7/16 Screw shaft and Propeller 25/7/16Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper platformBOILERS, &c.—(Letter for record 5) Manufacturers of Steel J. Spencer & SonsTotal Heating Surface of Boilers 3340 Is Forced Draft fitted No No. and Description of Boilers 2: Cylindrical SingleWorking Pressure 180 lbs Tested by hydraulic pressure to 260 lbs Date of test 1/9/15 No. of Certificate 3312Can each boiler be worked separately Yes Area of fire grate in each boiler 45 sq. ft. No. and Description of Safety Valves toeach boiler 2: Direct Spring Area of each valve 49" Pressure to which they are adjusted 185 lbs Are they fitted with easing gear YesSmallest distance between boilers or uptakes and bunkers or woodwork 2 feet Mean dia. of boilers 13' 6" Length 10' 6" Material of shell plates SteelThickness 1 1/2" Range of tensile strength 29 1/2 to 33 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Lap & Clinchlong. seams Butt Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 9 1/4" Lap of plates or width of butt straps 18 1/2"Per centages of strength of longitudinal joint 87.44 Working pressure of shell by rules 180 lbs Size of manhole in shell 16" x 12"Size of compensating ring Plate No. and Description of Furnaces in each boiler 3: plain Material Steel Outside diameter 3' 1 1/4"Length of plain part 6' 1 1/2" Thickness of plates 1 1/2" Description of longitudinal joint Weld No. of strengthening rings NoneWorking pressure of furnace by the rules 182 lbs Combustion chamber plates: Material Steel Thickness: Sides 2 1/2" Back 3" Top 2 1/2" Bottom 2 1/2"Pitch of stays to ditto: Sides 12 1/2 x 8 1/2" Back 12 x 8 1/2" Top 10 x 8 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 180 lbsMaterial of stays Steel Diameter at smallest part 2 1/8" Area supported by each stay 8 1/2" Working pressure by rules 180 lbs End plates in steam space:Material Steel Thickness 1 1/2" Pitch of stays 24 1/2 x 18 1/2" How are stays secured Double washers Working pressure by rules 180 lbs Material of stays SteelDiameter at smallest part 7/8" Area supported by each stay 456" Working pressure by rules 182 lbs Material of Front plates at bottom SteelThickness 3" Material of Lower back plate Steel Thickness 2 1/8" Greatest pitch of stays 14 1/2" Working pressure of plate by rules 182 lbsDiameter of tubes 3 1/4" Pitch of tubes 4 1/2 x 4 1/2" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 10.5"Pitch across wide water spaces 14 1/2" Working pressures by rules 192 lbs Girders to Chamber tops: Material Steel Depth andthickness of girder at centre 8" x 1 1/2" Length as per rule 31" Distance apart 10" Number and pitch of stays in each 2: 8 1/2"Working pressure by rules 182 lbs Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler workedseparately Yes 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

26767-0135

IS A DONKEY BOILER FITTED? *None* ✓ If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 Main Bearing Bolts & nuts, 2 P.R. Crosshead Bolts & nuts, 2 Crank pin Bush Bolts & nuts, 1 Set Shaft Coupling Bolts & nuts, 2 Feed pump valves, 2 Bilge pump valves, 1 Cut Iron plate 1 Cut Iron Bars, 1 Cut Bolt & nut, 10 Condenser tubes, 6 Boiler tubes, 2 Safety valve springs 2 Escape valve springs 1 set H.P. Piston rings, 1 set Air pump valves, 1 set Circulating pump valves, 6 Junk Rung Studs 1 Propeller

The foregoing is a correct description,
FOR THE NORTH EASTERN MARINE ENGINEERING CO. LD.

Geo. D. Hair 5/5/16

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 1915 Mar 19 25 Apr 9 16 22 30 May 6 14 20 27 Jun 2 11 18 22 Jul 6 Sept Oct 4 5 Nov 5 9 12 15 22 27 30
{ During erection on board vessel - - - } Dec 8 11 15 21 24 29 31 Jan 5 7 12 17 25 29 Feb 3 8 10 16 18 25 29 Mar 7 14 20 26 27 30 Apr 6 13 14 26 May 2
Total No. of visits *July 18 25* (58) Is the approved plan of main boiler forwarded herewith *Yes*

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 12/1/16. Slides 17/1/16 Covers 25/1/16. Pistons 12/1/16. Rods 12/1/16. Connecting rods 12/1/16. Crank shaft 25/1/16. Thrust shaft 25/1/16. Tunnel shafts 21 25/12/15 Screw shaft 21/12/15 Propeller 17/1/16. Stern tube 31/12/15. Steam pipes tested 14/4/16. Engine and boiler seatings 22/11/15. Engines holding down bolts 13/4/16.

Completion of pumping arrangements 2/5/16. Boilers fixed 2/5/16. Engines tried under steam 2/5/16. Main boiler safety valves adjusted 2/5/16. Thickness of adjusting washers PORT BOILER. A.V. 3 1/2 F.V. 5 1/2 STB. BOILER 3 3/4

Material of Crank shaft *Steel* Identification Mark on Do. 979 N. Material of Thrust shaft *Steel* Identification Mark on Do. 1442 N. Material of Tunnel shafts *S. Iron* Identification Marks on Do. 1031 N. Material of Screw shafts *S. Iron* Identification Marks on Do. 1031 N.

Material of Steam Pipes *Copper*

Test pressure 360 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 ✓ If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Engines and Boilers of this vessel were built under special Survey and the materials and workmanship are good. On completion they were examined under steam at moorings and found to work satisfactorily.

The Machinery throughout is now in good and efficient condition and eligible in our opinion to have the record of *LMC 7/16* marked in the Society's Register Book.

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

+ LMC 7/16

T.J.S.
29.7.16

J.R.S.

The amount of Entry Fee ... £ 2 : :
Special ... £ 30 : 18 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 28 JUL 1916
When received, 17-8-1916 18/8/16

Committee's Minute

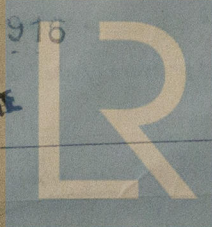
TUE 1-AUG. 1916

Assigned

+ LMC 7/16

TUE. 22 AUG. 1916

MACHINERY CERTIFICATE
WRITTEN.



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Lloyd's Register
Foundation