

REPORT ON MACHINERY.

No. 39147

Received at London Office

Date of writing Report

When handed in at Local Office

20/9/19 Port of Glasgow

No. in Survey held at Reg. Book.

Glasgow

Date, First Survey

Last Survey 14th Sept 1919

on the Twin Screw Mine Sweeper "Repton"

(Number of Visits)

Tons Gross Net

Master

Built at Glasgow

By whom built C. J. Inglis & Co. (324)

When built 1919

Engines made at Glasgow

By whom made C. J. Inglis & Co. (434)

when made 1919

Boilers made at Renfrew

By whom made Babcock & Wilcox (314)

when made 1919

Registered Horse Power

Owners

Admiralty

Port belonging to

Nom. Horse Power as per Section 28 378

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines

Twin Triples

No. of Cylinders 6

No. of Cranks 6

Dia. of Cylinders 13 1/2 (2) 2 1/2 (2) 3 1/4 (2) Length of Stroke 21 Revs. per minute

Dia. of Screw shaft as per rule 7 3/4 as fitted 7 1/4 Material of screw shaft 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

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

Dia. of Tunnel shaft as per rule 6 3/4 as fitted 6 3/4

Dia. of Crank shaft journals as per rule 7 1/8 as fitted 6 3/4

Dia. of Crank pin 7

Size of Crank webs 14 x 5 Dia. of thrust shaft under collars 6 3/4

Dia. of screw 6 1/8 Pitch of Screw 8 1/2

No. of Blades 4

State whether moveable No

Total surface 18 sq ft

No. of Feed pumps None

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Bilge pumps None

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines 6

Sizes of Pumps

3 1/2 x 5 1/2 x 12 1/2

2 1/2 x 8 x 15

1 1/2 x 4 1/2 x 12

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 1-2 1/2 Forward, 1-2 1/2 Aft, 1-3 1/2 Special

In Holds, &c. 13 in all. In each Stokhold 1-2 1/2 For, 1-2 1/2 Aft, 2 Injectors 3 Dia. in Stokholds

No. of Bilge Injections 2

sizes 6

Connected to condenser, or to circulating pump

ump

Is a separate Donkey Suction fitted in Engine room & size 1-3 1/2 2-1 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 Yes

Are all connections with the sea direct on the skin of the ship Yes except bilge injection

Are they Valves or Cocks

Valves

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 Bilge main, Main & Aux Steam. How are they protected Steam pipes in steel trunk, Guard plates

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 12.5.19 of Stern Tube 11.3.19 Screw shaft and Propeller 12.5.19

Is the Screw Shaft Tunnel watertight None

Is it fitted with a watertight door None

worked from Access from deck hatches

BOILERS, &c.—(Letter for record S)

Manufacturers of Steel Stewart & Lloyd, Glasgow & Scotland, D. Colvill & Bone

Total Heating Surface of Boilers 6990 sq ft Is Forced Draft fitted Yes No. and Description of Boilers Two Yarrow Water Tube

Working Pressure 235 lbs Tested by hydraulic pressure to 352 1/2 lbs

Date of test 23.7.25.4.19

No. of Certificate 14695 & 14699

Can each boiler be worked separately Yes

Area of fire grate in each boiler 65 sq ft

No. and Description of Safety Valves to each boiler Two Cochran's full bore

Area of each valve 2.46

Pressure to which they are adjusted 240 lbs

Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 9"

Mean dia. of boilers 4' 1 1/2"

Length 9' 6"

Material of shell plates S

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 rivets 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 top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

bottom Thickness of plates bottom Working pressure of furnace by 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

5. Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

20. Diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

33. Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

11. 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

17. 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 rivet

29. 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

006067-006079-0148

VERTICAL DONKEY BOILER— Manufacturers of Steel

No.	Description	When made	Where fixed
Made at	By whom made		
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted
If fitted with casing gear	If steam from main boilers can enter the donkey boiler		Date of adjustment
Material of shell plates	Thickness	Range of tensile strength	Descrip. of riveting long. seams
Dia. of rivet holes	Whether punched or drilled	Pitch of rivets	Lap of plating
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates
Working pressure of furnace by rules	Thickness of furnace crown plates	Radius of do.	Stayed by
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey

SPARE GEAR. State the articles supplied:— Spare gear and outfit as per approved Admiralty Specification has been placed on board.

The foregoing is a correct description,

A. & J. INGLIS LIMITED Manufacturers. *William Booth, Secy.*

Dates of Survey while building	During progress of work in shops	1914 Aug 29, Sep 13, 10, 15, Oct 3, 18, 24, 25, Nov 1, 8, 15, 19, 21, 29, Dec 4, 5, 7, 11, 18, 24, 25, 28, 1918 Jan 10, 11, 16, 17, 21, 22, Feb 13, 14, 18, 19, 20, 22, 23, 24, 25, 26, 28, 29, Mar 4, 12, 18, 19, 20, 22, 25, 26, 28, Apr 3, 4, 15, 16, 18, 22, 23, 29, May 2, 6, 14, 24, June 3, 10, 21, 25, 29, Aug 12, 19, 28, Nov 5, 29, Dec 3, 9, 16, 19, 1919 Jan 10, 13, 20, 22, Feb 7, 11, 13, 18, 26, 28, Mar 4, 5, 17, 21, 25, 27, 28, Apr 1, 3, 7, 15, 18, 24, 30, May 12, June 10, 17, 23, 30, July 31, Aug 8, 12, 14, 18, 22, 29, Sept 3
	During erection on board vessel	17, 21, 25, 27, 28, Apr 1, 3, 7, 15, 18, 24, 30, May 12, June 10, 17, 23, 30, July 31, Aug 8, 12, 14, 18, 22, 29, Sept 3
	Total No. of visits	111.

Dates of Examination of principal parts—Cylinders	10.1.19	Slides	11.3.19	Covers	13.3.19	Pistons	11.3.19	Rods	11.3.19
Connecting rods	11.3.19	Crank shaft	28.3.19	Thrust shaft	28.3.19	Intermediate Tunnel shafts	30.4.19	Screw shaft	18.4.19
Stern tube	11.3.19	Steam pipes tested	18.8.19	Engine and boiler seatings	12.5.19	Engines holding down bolts	30.6.19		
Completion of pumping arrangements	29.8.19	Boilers fixed	14.8.19	Engines tried under steam	22.8.19				
Main boiler safety valves adjusted	22.8.19	Thickness of adjusting washers	Forward Boiler P ² 3/8, Off Boiler P ² 3/8						
Material of Crank shaft	S	Identification Mark on Do.	676 M 437	Material of Thrust shaft	S	Identification Mark on Do.	783 M 4		
Material of Intermediate Tunnel shafts	S	Identification Marks on Do.	783 M 437	Material of Screw shafts	S	Identification Marks on Do.	783 M 4		
Material of Steam Pipes	Solid Drawn Steel	Test pressure	705 lbs per sq in						

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

The Machinery has been built under Special Survey in accordance with the approved Admiralty Specification and the Rules of the Society. The workmanship and materials of good quality throughout. The Machinery & Boilers have been securely fitted on board and tried under steam and found satisfactory and is now eligible in my opinion for the Record of + LMC 8.19 in the Register Book.

Glasgow.

It is submitted that this vessel is eligible for THE RECORD + LMC 9.19 F.D.

W.D.
24/9/19
J.R.S.

The amount of Entry Fee	.. £	:	:	When applied for.
Special	£ 125. 14	:	23.9.19
Donkey Boiler Fee	£	:	When received.
Travelling Expenses (if any)	£	:	:	28/11/19

W.D. Murray
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

Committee's Minute GLASGOW 23 SEP 1919

Assigned + LMC 9.19



Surveyor's Signature