

REPORT ON MACHINERY.

Port of *Leith*

MUN 28 NOV 1898

Received at London Office

No. in Survey held at *Leith* Date, first Survey *25th Jan* Last Survey *25th Nov* 1898
Reg. Book.

on the *S. S. "Sifka"*

(Number of Visits *35*)

Tons *Gross 1102.6*
Net 657.2

Master *J. Pole* Built at *Leith* By whom built *Ramage & Ferguson* When built *1898*

Engines made at *Leith* By whom made *Ramage & Ferguson* when made *1898*

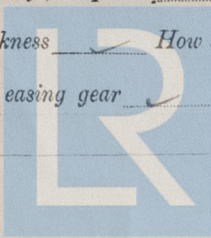
Boilers made at *Do* By whom made *Do* when made *1898*

Registered Horse Power *99* Owners *J. L. Salvesen & Co* Port belonging to *Grangemouth*

Nom. Horse Power as per Section 28 *111*
115

ENGINES, &c.— Description of Engines *Triple expansion* No. of Cylinders *3*
Diameter of Cylinders *17" - 27" & 44"* Length of Stroke *30* Revolutions per minute *95* Diameter of Screw shaft *as per rule 8.38"*
Diameter of Tunnel shaft *as per rule 7.54"* Diameter of Crank shaft journals *Rule 7.99"* Diameter of Crank pin *8.2"* Size of Crank webs *13 1/4" x 6"*
Diameter of screw *12' 0"* Pitch of screw *13' 8"* No. of blades *4* State whether moveable *no* Total surface *42.7 sq*
No. of Feed pumps *2* Diameter of ditto *2 1/2"* Stroke *15"* Can one be overhauled while the other is at work *yes*
No. of Bilge pumps *2* Diameter of ditto *3"* Stroke *15"* Can one be overhauled while the other is at work *yes*
No. of Donkey Engines *Two* Sizes of Pumps *10" x 12" x 10" & 6" x 4" x 6"* No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room *Four 2" dr.* In Holds, &c. *Two to each hold 2" dr. & one to tunnel well 2 1/2" dr.*
No. of bilge injections *1* sizes *4"* Connected to condenser, or to circulating pump *yes* Is a separate donkey suction fitted in Engine room & size *yes 2 1/4"*
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 *none*
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 *above*
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 *✓*
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*
When were stern tube, propeller, screw shaft, and all connections examined in dry dock *New vessel* Is the screw shaft/tunnel watertight *yes*
Is it fitted with a watertight door *yes* worked from *Top platform.*

BOILERS, &c.— (Letter for record *3*) Total Heating Surface of Boilers *175.7 sq*
No. and Description of Boilers *One cylindrical single ended* Working Pressure *160 lbs* Tested by hydraulic pressure to *320 lbs*
Date of test *12-9-98* Can each boiler be worked separately *✓* Area of fire grate in each boiler *57 sq* No. and Description of safety valves to
each boiler *Two, spring* Area of each valve *7.07 sq* Pressure to which they are adjusted *165 lbs* Are they fitted
with easing gear *yes* Smallest distance between boilers or uptakes and bunkers *on woodwork 9"* Mean diameter of boilers *14' 3"*
Length *10' 0"* Material of shell plates *Steel* Thickness *1 1/8"* Description of riveting: circum. seams *Lap & Riv'd* long. seams *S. B. S. & Riv'd*
Diameter of rivet holes in long. seams *1 3/16"* Pitch of rivets *8 1/2"* Lap of plates or width of butt straps *18"*
Per centages of strength of longitudinal joint *86.1* Working pressure of shell by rules *168 lbs* Size of manhole in shell *16" x 12"*
Size of compensating ring *McNeil's* No. and Description of Furnaces in each boiler *3, Purvis* Material *Steel* Outside diameter *43"*
Length of plain part *top 1"* Thickness of plates *bottom 2"* Description of longitudinal joint *welded* No. of strengthening rings *✓*
Working pressure of furnace by the rules *161 lbs* Combustion chamber plates: Material *Steel* Thickness: Sides *9/16"* Back *9/16"* Top *9/16"* Bottom *9/16"*
Pitch of stays to ditto: Sides *7 3/4"* Back *7 3/4"* Top *7 3/4"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *182 lbs*
Material of stays *Steel* Diameter at smallest part *1 1/9"* Area supported by each stay *60 sq* Working pressure by rules *160 lbs* End plates in steam space:
Material *Steel* Thickness *1 5/16"* Pitch of stays *16"* How are stays secured *S. B. & W.* Working pressure by rules *162 lbs* Material of stays *Steel*
Diameter at smallest part *4 1/16"* Area supported by each stay *25.6 sq* Working pressure by rules *160 lbs* Material of Front plates at bottom *Steel*
Thickness *3/4"* Material of Lower back plate *Steel* Thickness *7/8"* Greatest pitch of stays *12 3/4"* Working pressure of plate by rules *160 lbs*
Diameter of tubes *3 1/2"* Pitch of tubes *4 3/4" x 4 5/8"* Material of tube plates *Steel* Thickness: Front *1 5/16"* Back *3/4"* Mean pitch of stays *9 1/2"*
Pitch across wide water spaces *15 1/2"* Working pressures by rules *210 lbs* Girders to Chamber tops: Material *Steel* Depth and
thickness of girder at centre *6 3/4" x 13 1/4"* Length as per rule *26"* Distance apart *7 3/4"* Number and pitch of Stays in each *2 - 7 3/4"*
Working pressure by rules *214 lbs* Superheater or Steam chest; how connected to boiler *none* 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
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 *✓*


Lloyd's Register
Foundation

LTH 568-0045

DONKEY BOILER— Description *Vertical, Lye Patent.*
 Made at *Gateshead* By whom made *Clarke Chapman & Co* When made *15.8.98* Where fixed *Stokehold*
 Working pressure *75 lbs* tested by hydraulic pressure to *150 lbs* No. of Certificate *5343* Fire grate area *16 sq* Description of safety valves *Spring*
 No. of safety valves *One* Area of each *9.6 sq* Pressure to which they are adjusted *75 lbs* If fitted with easing gear *yes* If steam from main boilers can enter the donkey boiler *no* Diameter of donkey boiler *5' 9"* Length *13 ft* Material of shell plates *Steel* Thickness *3/8"*
 Description of riveting long. seams *S. R. Lap* Diameter of rivet holes *1 3/4"* Whether punched or drilled *drilled* Pitch of rivets *2 3/4"*
 Lap of plating *3 5/8"* Per centage of strength of joint Rivets *12.8* Thickness of shell crown plates *17/32"* Radius of do. *5 ft* No. of Stays to do. *4 gussets*
 Dia. of stays. *1 1/2"* Diameter of furnace Top *2' 2 3/4"* Bottom *4' 11 3/4"* Length of furnace *4 ft* Thickness of furnace plates *17/32"* Description of joint *S. R. Lap* Thickness of *comb. cham* furnace crown plates *17/32"* Stayed by *tubes* Working pressure of shell by rules *82 lbs*
 Working pressure of furnace by rules *98 lbs* Diameter of uptake *15"* Thickness of uptake plates *7/16"* Thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:— *As per Rule & in addition, a spare propeller, two safety valve springs, two escape valve springs, 12 boiler tubes & 6 condenser tubes.*

The foregoing is a correct description,
Ramage & Leguarn Ltd
Alex. J. Leguarn Manufacturer.

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

Dates of survey while building
 During progress of work in shops— *1898, Jan 25, Apr 14, 22, 28, May 4, 13, 18, 24, 30, June 22, 29, July 8, 11, 21, 26, 28, Aug 3, 10, 12, 20*
 During erection on board vessel— *Oct. 19, 27, 31, Nov 8, 14, 25.*
 Total No. of visits *35*

The engines & boilers of this vessel have been constructed under special survey & the materials & workmanship are found & good. The engines have been tried under steam & the safety valves of main & donkey boilers adjusted under steam at their working pressures.

The machinery is now in good & safe working condition & eligible in my opinion ~~to be~~ to have the notation of *+LAC* 11.98.

The approved boiler tracings are forwarded herewith.

It is submitted that
 this vessel is eligible for
THE RECORD. ☒ L.M.C. 11.98.

A.C.H.
[Signature]
 28.11.98

Certificate (if required) to be sent to

The amount of Entry Fee. £ 2 : - : -
 Special : : : £ 16 : 16 : -
 Donkey Boiler Fee : : : £ - : - : -
 Travelling Expenses (if any) £ - : - : -

When applied for, *26 Nov 1898*
 When received, *2-12-98*

Thomas Field
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

MACHINERY CERTIFICATE
WRITTEN
105, 29 NOV 1898

Assigned

+LAC 11.98



(The Surveyors are requested not to write on or below the space for Committee's Minute.)