

REPORT ON MACHINERY.

No.

10, 105

Port of Mull

Received at London Office SAT. 30 NOV 1895

No. in Survey held at Mull

Date, first Survey July 11th

Last Survey Nov 20th

1895.

g. Book.

Number of Visits 23

Supp on the Iron Steam Trawler Redcap

Tons { Gross 135
Net 44

Master

Built at Mull

By whom built Charles B. Sim

When built 1895

Engines made at Mull

By whom made Charles B. Sim

When made 1895

Wheels made at Mull

By whom made Charles B. Sim

When made 1895

Registered Horse Power 45

Owners Pioneer S. S. Co

Port belonging to Primrose

Net Horse Power as per Section 28 47

ENGINES, &c.— Description of Engines Triple Comp. Inv. & A No. of Cylinders Three
Diameter of Cylinders 11" 17" 24" Length of Stroke 21" Revolutions per minute 130 Diameter of Screw shaft 5 1/4"
Diameter of Tunnel shaft 5 1/4" Diameter of Crank shaft journals 5 1/4" Diameter of Crank pin 5 1/4" Size of Crank webs 7 x 3 1/2"
Diameter of screw 7:8" Pitch of screw 9:3" No. of blades 4 State whether moveable In Total surface 21 sq ft
No. of Feed pumps One Diameter of ditto 2 1/2" Stroke 10" Can one be overhauled while the other is at work Yes
No. of Bilge pumps One Diameter of ditto 2 1/2" Stroke 10" Can one be overhauled while the other is at work Yes
No. of Donkey Engines One Sizes of Pumps 3 x 6" No. and size of Suctions connected to both Bilge and Donkey pumps
Engine Room One 2' In Holds, &c. One 2'
Injection with suction in Engine Bilge and Deck Room and discharge on deck
No. of bilge injections One sizes 3 1/4" Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size 4 x 6"
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 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
That pipes are carried through the bunkers Section to forward How are they protected wood cased
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
Then were stern tube, propeller, screw shaft, and all connections examined in dry dock Yes Is the screw shaft tunnel watertight In tunnel
Is it fitted with a watertight door Yes worked from Yes

BOILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 800 sq ft
No. and Description of Boilers One Cylinder Mull Working Pressure 170 lb Tested by hydraulic pressure to 340 lb
Date of test 24/9/95 Can each boiler be worked separately Yes Area of fire grate in each boiler 28 sq ft No. and Description of safety valves to
each boiler See opening loaded Area of each valve 3.14 sq ft Pressure to which they are adjusted 170 lb Are they fitted
with easing gear Yes Smallest distance between boilers or uptakes and bunkers or woodwork 8" Mean diameter of boilers 10:0"
Length 9:6" Material of shell plates Steel Thickness 3 1/2" Description of riveting: circum. seams all lap long. seams all shop
Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 6 7/8" Lap of plates or width of butt straps 10 1/2" 13 1/2"
Percentages of strength of longitudinal joint 84.8% Working pressure of shell by rules 170 lb Size of manhole in shell 16" x 12"
Size of compensating ring 28" x 29 1/2" No. and Description of Furnaces in each boiler Two Plain Material Steel Outside diameter 35"
Length of plain part 6:0" Thickness of plates 1 1/2" Description of longitudinal joint beaded No. of strengthening rings —
Working pressure of furnace by the rules 173 lb Combustion chamber plates: Material Steel Thickness: Sides 9 1/8" Back 9 1/8" Top 9 1/8" Bottom 3 1/2"
Pitch of stays to ditto: Sides 8" Back 8" Top 8" If stays are fitted with nuts or riveted heads Yes Working pressure by rules 171 lb
Material of stays Steel Diameter at smallest part 1 3/4" Area supported by each stay 8 x 8" Working pressure by rules 185 lb End plates in steam space:
Material Steel Thickness 1 1/2" Pitch of stays 4:5" How are stays secured all rivet Working pressure by rules 175 lb Material of stays Steel
Diameter at smallest part 2 5/8" Area supported by each stay 15 x 15" Working pressure by rules 174 lb Material of Front plates at bottom Steel
Thickness 7/8" Material of Lower back plate Steel Thickness 1 1/2" Greatest pitch of stays 14" Working pressure of plate by rules 170 lb
Diameter of tubes 3 1/2" Pitch of tubes 14 1/2" Material of tube plates Steel Thickness: Front 7/8" Back 10 1/8" Mean pitch of stays 9"
Pitch across wide water spaces 13 1/4" Working pressures by rules 179 lb Girders to Chamber tops: Material Iron Depth and
thickness of girder at centre 6 x 2 1/2" Length as per rule 27' Distance apart 7 1/2' Number and pitch of Stays in each two 8"
Working pressure by rules 173 lb Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked
separately 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 —

Lloyd's Register

MUL411-0327

DONKEY BOILER— Description *No donkey boiler*

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure _____ tested by hydraulic pressure to _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____

No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____

Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____

Description of riveting long. seams _____ Diameter of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____

Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of Stays to do. _____

Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description _____

joint _____ Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by rules _____

Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *The top end bolts. Two bottom end bolts. One main bearing bolts. One set coupling bolts. One set feed pump valves. One set bridge pump valves. Set check valves. Safety valve spring.*

The vessel efficient with masts and sails as a drifter.

The foregoing is a correct description,

A. S. Leat Manufacturer.

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

The Machinery and Boiler of this Steam Drifter have been constructed under Special Survey and placed outboard 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 ratification of L.M.C. 11.95. in the Register Book.

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

L.M.C. 11.95.

Pres. 30.11.95.

Certificate (if required) to be sent to *Hull*

The amount of Entry Fee, £ *1 : 6* : _____ When applied for, *29/11/95*

Special £ *0 : 0* : _____

Donkey Boiler Fee £ _____ When received, *7.1.18.26*

Travelling Expenses (if any) £ _____

Committee's Minute **TUES. 3 DEC 1895**

Assigned

James Jones Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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Lloyd's Register Foundation

Signal Letter _____

Official Number _____

10553

No., Date, and _____

Whether British or Foreign Built _____

British

Number of Decks _____

Number of Masts _____

Rigged _____

Stern _____

Build _____

Galleries _____

Head _____

Framework and vessel _____

Number of Buoy _____

Number of water and their capacity _____

Total to quarter at side amidships _____

No. of Engines _____

Duple _____

Triple _____

Number of Iron or Steel Pressure _____

Under Tonnage _____

Closed-in space _____

Space or space _____

Poop _____

Forecastle _____

Round House _____

Other closed _____

Spaces _____

Gross _____

Deductions, as _____

Reg _____

Name of _____

No. of Owners _____

Name, Residence _____

Dated *25* _____

B & L (489w) — 554