

REPORT ON MACHINERY.

No. 28072.

Received at London Office NOV. 17. 1914.

Date of writing Report

19

When handed in at Local Office

16-11-14 Port of Hull

No. in Survey held at
Reg. Book.

at 34 on the

Hull
Sea Ranger

Date, First Survey

15-1-14

Last Survey

13-11-14

19

(Number of Visits 38)

Master

Built at

Lelby

By whom built

Cochrane Bros Ltd

Tons

Gross 263

Net 103

When built 1914-11

Engines made at

Hull

By whom made

Amos Smith Ltd (No. 2501)

when made 1914-11

Boilers made at

Hull

By whom made

Amos Smith Ltd

when made 1914-11

Registered Horse Power

Owners Humber Steam Trawling Co Ltd Port belonging to Hull

Nom. Horse Power as per Section 28

78

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

no

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders 12 1/2 - 21 1/2 - 35 1/4 Length of Stroke 24

Revs. per minute

Dia. of Screw shaft as per rule 7 1/2

Material of 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 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

If two

liners are fitted, is the shaft lapped or protected between the liners

Length of stern bush 34

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

Dia. of Crank shaft journals as per rule 6 9/4

Dia. of Crank pin 7 1/4

Size of Crank webs 4 1/2 x 13 3/4 Dia. of thrust shaft under

collars 7 1/2

Dia. of screw 9-0

Pitch of Screw 11-0

No. of Blades 4

State whether moveable no Total surface 29.57

No. of Feed pumps one

Diameter of ditto 2 3/4

Stroke 12

Can one be overhauled while the other is at work

No. of Bilge pumps one

Diameter of ditto 2 3/4

Stroke 12

Can one be overhauled while the other is at work

No. of Donkey Engines one

Size of Pumps 6 1/4 x 4 3/4 x 6 duplex

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

In Engine Room Two 2" dia

In Holds, &c. one 2" in each compartment also

No. of Bilge Injections one

Size 3

Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size 2 1/2

Are all the bilge suction pipes fitted with roses

yes

Are the roses in Engine room 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

What pipes are carried through the bunkers

Forward Suctions

How are they protected wood casing

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 bilge

yes

Dates of examination of completion of fitting of Sea Connections

23-7-14

of Stern Tube

23-7-14

Screw shaft and Propeller

23-7-14

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

worked from

BOILERS, &c.—(Letter for record

S)

Manufacturers of Steel

Phoenix Alb. Höder & Co. Hörde

Total Heating Surface of Boilers

1320

Is Forced Draft fitted

no

No. and Description of Boilers

one single ended

Working Pressure

200 lbs

Tested by hydraulic pressure to

400 lbs

Date of test

15-10-14

Can each boiler be worked separately

yes

Area of fire grate in each boiler

45

No. and Description of Safety Valves to

each boiler

each boiler two spring loaded

Area of each valve

4.9

Pressure to which they are adjusted

205

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

7

Mean dia. of boilers

153

Length

10-6

Thickens 1/8

Range of tensile strength

29-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams double

long. seams J.P.B.T.

Diameter of rivet holes in long. seams

1/32

Pitch of rivets

7 3/4

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets 89.6

plate 85

Working pressure of shell by rules

209

Size of manhole in shell

Size of compensating ring

9 x 1 1/8

No. and Description of Furnaces in each boiler

3 plain

Material

S

Length of plain part

top 20

Thickness of plates

crown 2 13/16

Description of longitudinal joint

welded

Working pressure of furnace by the rules

223

Combustion chamber plates: Material

S

Thickness: Sides

1/16

Pitch of stays to ditto: Sides

9 1/2 x 8 1/2

Back

9 x 9

Top

9 x 8 1/2

Material of stays

S

Diameter at smallest part

2 07

Area supported by each stay

81

Material

S

Thickness

1 3/32

Pitch of stays

16 1/2 x 17

How are stays secured

A. H. 9 1/4

Working pressure by rules

201

Material of stays

S

Diameter at smallest part

6 1/4

Area supported by each stay

280

Working pressure by rules

226

Material of Front plates at bottom

S

Thickness

1 1/16

Greatest pitch of stays

3 3/4 x 10

Working pressure of plate by rules

210

Material of Lower back plate

S

Thickness

1 1/16

Diameter of tubes

3 1/2

Pitch of tubes

5 x 4 3/4

Material of tube plates

S

Pitch across wide water spaces

13 3/4

Working pressures by rules

203

Girders to Chamber tops: Material

S

Thickness of girder at centre

9 1/2 x 1 3/4

Length as per rule

34

Distances apart

9

Working pressure by rules

216

Superheater or Steam chest; how connected to boiler

yes

Can the superheater be shut off and the boiler worked

yes

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

yes

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

yes

Area of safety valves to superheater

yes

Are they fitted with easing gear

yes

W383-0048

Lloyd's Register Foundation

IS A DONKEY BOILER FITTED? *Yes*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:—

Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set feed, bilge & air pump valves, one main & one donkey check valve, a quantity of bolts & nuts & iron of various sizes

The foregoing is a correct description,

FOR AMOS & SMITH LTD,

S. J. Robinson

Secretary/Manufacturer.

Dates of Survey while building

(During progress of work in shops --
During erection on board vessel --
Total No. of visits 38

1914: Jan 15 May 28 Jun 12 Jul 3, 21, 23, 31 Aug 21, 26, 28 Sep 1, 4, 9, 15, 18, 21, 23, 25, 29 Oct 1, 2, 7, 9, 14, 15, 16, 20, 22, 27, 28, 29, 30 Nov 2, 3, 4, 5, 10, 13.

Is the approved plan of main boiler forwarded herewith? *Yes*

Rpt 28030

Dates of Examination of principal parts—Cylinders *18-9-14* Slides *14-10-14* Covers *14-10-14* Pistons *14-10-14* Rods *14-10-14*

Connecting rods *14-10-14* Crank shaft *29-9-14* Thrust shaft *7-10-14* Tunnel shafts ☒ Screw shaft *21-7-14* Propeller *21-7-14*

Stern tube *21-7-14* Steam pipes tested *30-10-14* Engine and boiler seatings *23-7-14* Engines holding down bolts *2-11-14*

Completion of pumping arrangements *5-11-14* Boilers fixed *2-11-14* Engines tried under steam *5-11-14*

Main boiler safety valves adjusted *5-11-14* Thickness of adjusting washers *10/32 1 3/8*

Material of Crank shaft *Steel* Identification Mark on Do. *1287 FLS* Material of Thrust shaft *Steel* Identification Mark on Do. *1293 FLS*

Material of Tunnel shafts ☒ Identification Marks on Do. Material of Screw shafts *Iron* Identification Marks on Do. *1301 FLS*

Material of Steam Pipes *solid drawn copper* Test pressure *400 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 *yes* If so, state name of vessel *11 Sea Lecher*

General Remarks (State quality of workmanship, opinions as to class, &c. *The Engines & boiler of this vessel have*

been constructed under special survey in accordance with the approved plan

& the rules of this society, the materials & workmanship are good. The boiler &

main steam pipes have been tested by hydraulic pressure to 400 lbs found

sound good. The machinery has been properly fitted & secured on board

for completion tried under steam found satisfactory. The safety valves

have been adjusted under steam & tested for accumulation which did

not exceed 210 lbs

In my opinion the vessel is eligible for the record + L.M.C. 11.14

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C. 11.14.

The amount of Entry Fee ... £ 1 : 0 :
Special ... £ 11 : 14 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ - : 4 - 2

When applied for,

16-11-1914

When received,

30-11-1914

Frank A. Stanger

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

Committee's Minute

Assigned

FRI. NOV 20. 1914

+ L.M.C. 11.14

MACHINERY CERTIFICATE
WRITTEN.



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Foundation