

## REPORT ON MACHINERY.

No. 20224

Received at London Office

TUE. 17 MAY. 1921

Date of writing Report

15th Mar 1921

When handed in at Local Office

22nd Apr 1921

Port of New York

No. in Survey held at  
Reg. Book.

Brooklyn State Island Date, First Survey

Last Survey

19

on the

S. S. "H. E. OGILVIE"

(Number of Visits)

Tons

Gross 1355.93

Net 785

When built

1921

Master

Built at

Brooklyn

By whom built

Libs Yacht Basin Co

Engines made at

New York

By whom made

White Fuel Oil Co. (Long Island City)

When made

1921

Boilers made at

State Island

By whom made

State Island

when made

1921

Registered Horse Power

156

Owners

Sinclair Oil Co

Port belonging to New York

Nom. Horse Power as per Section 28

156

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

## ENGINES, &amp;c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

16"-25"-42"

Length of Stroke

30"

Revs. per minute

110

Dia. of Screw shaft

as per rule 8.51

Material of

Steel

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

Yes

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

Lute fit

If two

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

Length of stern bush

8'-9 3/8"

Dia. of Tunnel shaft

as per rule 7.97

Dia. of Crank shaft journals

as per rule 8.31

Dia. of Crank pin

9"

Size of Crank webs

18.5617

Dia. of thrust shaft under

collars

8 1/2"

Dia. of screw

9'-8"

Pitch of Screw

10'-0"

No. of Blades

4

State whether moveable

No

Total surface

29.554

No. of Feed pumps

Two

Diameter of ditto

6"

Stroke

12"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

Two

Diameter of ditto

3 1/2"

Stroke

15"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

Three

Sizes of Pumps

12 1/8" x 1/2", 7 1/2" x 1/2", 6"

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

In Engine Room

Three 3"

In Holds, &amp;c.

One 3"

No. of Bilge Injections

1

sizes

5"

Connected to condenser, or to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room &amp; size

Yes 3"

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

Valve cocks

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

Yes

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

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Yes

## BOILERS, &amp;c.—(Letter for record)

Manufacturers of Steel

Lukin

Total Heating Surface of Boilers

2476

Is Forced Draft fitted

Yes

No. and Description of Boilers

Two, S.E. Cylindrical

Working Pressure

180 lb

Tested by hydraulic pressure to

270 lb

Date of test

No. of Certificate 409 &amp; 410

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

Old Burner

No. and Description of Safety Valves to

each boiler

Two Duplex Pop

Area of each valve

4.91"

Pressure to which they are adjusted

182 lb

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

3'-0"

Mean dia. of boilers

10'-6"

Length

11'-0"

Material of shell plates

Steel

Thickness

1"

Range of tensile strength

60,000 lb per sq. in.

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

Double

long. seams

TREBLE DAS

Diameter of rivet holes in long. seams

13/16"

Pitch of rivets

8 1/2"

Lap of plates or width of butt straps

15 1/2"

Per centages of strength of longitudinal joint

rivets 95%

plate 86%

Working pressure of shell by rules

207

Size of manhole in shell

19" x 15"

Size of compensating ring

15" x 1"

No. and Description of Furnaces in each boiler

2 Morrison

Material

Steel

Outside diameter

43"

Length of plain part

top 17 1/2"

bottom 17 1/2"

Thickness of plates

crown 17 1/2"

bottom 17 1/2"

Description of longitudinal joint

Weld

No. of strengthening rings

Yes

Working pressure of furnace by the rules

190

Combustion chamber plates: Material

Steel

Thickness: Sides

9/16"

Back

9/16"

Top

9/16"

Bottom

3/4"

Pitch of stays to ditto: Sides

7 x 6 1/4"

Back

7 x 6 1/4"

Top

7 x 7"

If stays are fitted with nuts or riveted heads

Rivets

Working pressure by rules

184

Material of stays

Steel

Area at smallest part

1.485"

Area supported by each stay

49"

Working pressure by rules

181

End plates in steam space:

Material

Steel

Thickness

1/16" x 1/2"

Pitch of stays

14 x 14"

How are stays secured

Rivets

Working pressure by rules

207 lb

Material of stays

Steel

Area at smallest part

3.98"

Area supported by each stay

14 x 14"

Working pressure by rules

211

Material of Front plates at bottom

Steel

Thickness

1/16"

Material of Lower back plate

Steel

Thickness

1/16"

Greatest pitch of stays

13 1/2" x 7"

Working pressure of plate by rules

195

Diameter of tubes

3"

Pitch of tubes

4 x 4 1/8"

Material of tube plates

Steel

Thickness: Front

1/16"

Back

5/8"

Mean pitch of stays

8 1/8"

Pitch across wide water spaces

13"

Working pressures by rules

186 lb

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

7 1/2" x 1 1/2"

Length as per rule

28"

Distance apart

7"

Number and pitch of stays in each

3 x 7"

Working pressure by rules

208

Steam dome: description of joint to shell

% of strength of joint

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

## SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

008040-008048-0123



IS A DONKEY BOILER FITTED? *Yes*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:— *Two Connecting Rods Top & Bottom end bolts and nuts Two main Bearing Bolts Nuts. One set of coupling bolts. One Sail Shaft. One propeller. One Counter, 3 sets of piston rings. One set of valves for bilge & fuel pumps. Bolts Nuts & Iron of various sizes*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1920- Aug 14 23 Sep 3 7 14 20 Oct 2 6 Nov 23 Dec 11 16 16 20 22 29 1921 Jan 5-6 Feb 2 14 15 18 21 26 28 Mar 1 3  
During erection on board vessel ---  
Total No. of visits

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

Dates of Examination of principal parts—Cylinders 19-10-20 Slides 19-10-20 Covers 19-10-20 Pistons 19-10-20 Rods 19-10-20  
Connecting rods 19-10-20 Crank shaft 6-11-20 Thrust shaft 19-10-20 Tunnel shafts ✓ Screw shaft 6-11-20 Propeller 6-11-20  
Stern tube 6-11-20 Steam pipes tested 16-2-21 Engine and boiler seatings 8-1-21 Engines holding down bolts 17-2-21  
Completion of pumping arrangements 28-2-21 Boilers fixed 18-2-21 Engines tried under steam 28-2-21  
Completion of fitting sea connections 28-12-20 Stern tube 28-12-20 Screw shaft and propeller 28-12-20  
Main boiler safety valves adjusted 26-2-21 Thickness of adjusting washers *Adjusting nuts*  
Material of Crank shaft *Steel* Identification Mark on Do. 6-11-20 TFR Material of Thrust shaft *Steel* Identification Mark on Do. 6-11-21 TFR  
Material of Tunnel shafts Identification Marks on Do. ✓ Material of Screw shafts *Steel* Identification Marks on Do. 6-11-20 TFR  
Material of Steam Pipes *Polished Drawn Steel* Test pressure 540 lbs per sq in  
Is an installation fitted for burning oil fuel *Yes* Is the flash point of the oil to be used over 150°F. *Yes*  
Have the requirements of Section 49 of the Rules been complied with *Yes*  
Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *S.S. "MANUEL TIONDA"*

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

*The Machinery of this Vessel has been built under Special Survey in accordance with the Rules & the Approved Plans. The Workmanship & Materials are good. The Machinery has been tried under steam & found satisfactory. This Vessel's Machinery is now in good efficient condition and capable for service + LMC 3.21. Fitted FOR OIL FUEL 3.21 F.P above 150°F.*

**It is submitted that**  
**this vessel is eligible for**  
**THE RECORD + LMC. 3.21. FD. CL**  
**Fitted for Oil Fuel 3.21 FP above 150°F**

*Roll*  
*23/5/21*

*APR*

The amount of Entry Fee ... £ 15 :  
Special ... £ 195 :  
Donkey Boiler Fee *PL* ... £ 100 :  
Travelling Expenses (if any) £ :  
When applied for, 27 April 1921  
When received, 20 May 1921

*John O Roblox*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York APR 26 1921

Assigned *+ LMC. 3.21*

CERTIFICATE WRITTEN 17.5.21



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