

REPORT ON MACHINERY.

No. 82600.

Received at London Office

WED. 24 AUG. 1921

Date of writing Report

10

When handed in at Local Office

5 AUG 1921

Port of

LIVERPOOL

No. in Survey held at
Reg. Book.

Saltney + Birkenhead.

Date, First Survey

13 Sept 20

Last Survey

28 July

19 21.

on the

S.S. Allegheny.

(Number of Visits)

24

Tons

Gross

822

Net

397

When built

1911

Master

Built at Bonmahs Quay

By whom built

J. Brighton & Co.

Engines made at

Lytham

By whom made

Lytham S.B. & Eng. Co. - No. 437

when made

1921

Boilers made at

Middlesbrough

By whom made

Riley Bros. Ltd.

when made

1920

Registered Horse Power

Owners

Anglo American Oil Co. Ltd.

Port belonging to

Liverpool.

Nom. Horse Power as per Section 28

101

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Vertical Triple

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

14, 22, 38

Length of Stroke

24

Revs. per minute

120

Dia. of Screw shaft

as per rule 7 1/2

Material of

M.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

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

yes

If two

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

yes

Length of stern bush

3-2

Dia. of Tunnel shaft

as per rule 6 1/2

Dia. of Crank shaft journals

as per rule 7 1/2

Dia. of Crank pin

7 1/4

Size of Crank webs

11 x 4 1/4

Dia. of thrust shaft under

collars

7 1/4

Dia. of screw

9-0

Pitch of Screw

10-6

No. of Blades

4

State whether moveable

no

Total surface

260'

No. of Feed pumps

2

Diameter of ditto

2 1/2

Stroke

12

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

2 1/2

Stroke

12

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

Sizes of Pumps

6" x 4" 7.5"

6" x 8"

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

In Engine Room

4-2 1/2"

In Holds, &c. Store room 1-3 1/2" Pump room 1-3 1/2" from

Ballast pump + F.P.I. 1-3 1/2"

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 1-3 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

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

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

none

Is it fitted with a watertight door

yes

worked from

yes

BOILERS, &c.

(Letter for record)

Manufacturers of Steel

See Middlesbrough Reports Nos. 10843 + 10857.

Total Heating Surface of Boilers

1880

Is Forced Draft fitted

no

No. and Description of Boilers

2 S.B. Boilers

Working Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test

18.10.20.

No. of Certificates

6164.

Can each boiler be worked separately

yes

Area of fire grate in each boiler

31 1/2

No. and Description of Safety Valves to

each boiler

2 Direct Spring

Area of each valve

3 1/4"

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

yes

Smallest distance between boiler or upakes and bunkers or woodwork

3'-0"

Mean dia. of boilers

Length

Material of shell plates

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

Working pressure of furnace by the 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

Area at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

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

Working pressure by rules

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

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Lloyd's Register
Foundation

002808-002915-0023

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

Two top & 2 bottom end bolts & nuts, 2 main bearing bolts & nuts, 1 set of coupling bolts, 1 set of feed & bilge pump valves, 1 set of piston rings, propeller, bolts & nuts & iron of various sizes.

THE LYTHAM SHIPBUILDING
ENGINEERING COMPANY, LIMITED,

The foregoing is a correct description,

DIRECTOR

Manufacturer.

Dates of Survey while building { During progress of work in shops - - - 1920. Sept 13. 27. Oct 27. Nov 12. 23. Dec 15. 21. 1921. Jan 14. 21. Feb 14. Apr 7. 13. May 6. 20. 31. June 15. 20. July 6. 11. 12. 13. 20. 21. 22. 23. 25. 28. }
Total No. of visits 29.

Is the approved plan of main boiler forwarded herewith with 10857 Middlebrook 10858

Dates of Examination of principal parts—Cylinders 6.8.20 Slides 6.8.20 Covers 6.8.20 Pistons 6.8.20 Rods 6.8.20
Connecting rods 6.8.20 Crank shaft 6.8.20 Thrust shaft 27.10.20 Tunnel shafts ✓ Screw shaft 21.1.21 Propeller 21.1.21
Stern tube 15.12.20 Steam pipes tested Hull 16/6/21. Engine and boiler seatings 12/4/21. Engines holding down bolts 30/6/21.
Completion of pumping arrangements 25-7-21. Boilers fixed 30/6/21. Engines tried under steam 27/7/21.
Completion of fitting sea connections 14/3/21. Stern tube 7/4/21. Screw shaft and propeller 7/4/21.
Main boiler safety valves adjusted 22/7/21. Thickness of adjusting washers S.B.L.R. P 4. S 3/8.
Material of Crank shaft M.S. Identification Mark on Do. 1186 Material of Thrust shaft M.S. Identification Mark on Do. 1483
Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts M.S. Identification Marks on Do. 1469
Material of Steam Pipes Copper. Test pressure 360 lbs.

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 (Engines only) so, state name of vessel S.S. 'Glenageary'.

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

This machinery - Boiler Report 10857 Middlebrook. has been securely fitted on board & satisfactorily tried under steam. it is eligible in our opinion for classification & to have record Club 7.21 W.P. 180 lbs. Fitted for oil fuel 7.21 F.P. above 150°F. See Secretary's letter E. 9/5/21.

It is submitted that
this vessel is eligible for
THE RECORD. + LMC. 7.21. CL.

Fitted for Oil Fuel 7.21. F.P. above 150°F.

Recll
25/8/21

Certificate (if required) to be sent to

The amount of Entry Fee ... £ 3 : 0 :
Lytham Engines 7/5 £ 10 : 2 :
Orkney. Fitting on board 5 : 1 :
Donkey Boiler Fee ... £ 2 : 1/4 :
Travelling Expenses (if any) £ 4 : 1/4 :
Orkney. Fitting.

When applied for,
23 AUG 1921

When received,

23 AUG 1921

S. Townend. A. J. Barretts
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute LIVERPOOL

Assigned

MACHINERY DEPT.
WRITTEN 19/10/21
(dated 24/8/21)

L.M.C. 7.21
Fitted for oil fuel 7.21 F.P. above 150°F.
When fee is paid



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