

REPORT ON MACHINERY.

No. 52600

Received at London Office

WED. 24 AUG. 1921

Date of writing Report 19 When handed in at Local Office 5 AUG 1921 Port of LIVERPOOL

No. in Survey held at Salford & Birkenhead. Date, First Survey 13 Sept 20 Last Survey 28 July 19 21.
 Reg. Book. 07978 on the S.S. Allegheny. (Number of Visits 24)

Master Built at Bonmahon Quay By whom built J. Brighton & Co. Tons Gross 822 Net 397 When built 1911

Engines made at Lytham By whom made Lytham S.B. & Eng. Co. - no. 437 when made 1921

Boilers made at Middlebrook 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 7.92 as fitted 8" Material of screw shaft 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 6.8 as fitted Dia. of Crank shaft journals as per rule 7.2 as fitted 7 1/4 Dia. of Crank pin 7/4 Size of Crank webs 11 x 4 1/4 Dia. of thrust shaft under collars 7/4 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" 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.J. 1-3 1/2

No. of Bilge Injections 1 sizes 4" Connected to condenser, or to circulating pump Circ. P. 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

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 worked from

BOILERS, &c. (Letter for record (3) Manufacturers of Steel See Middlebrook Reports nos. 10843 + 10857.

Total Heating Surface of Boilers 1880 Is Forced Draft fitted no. No. and Description of Boilers 2 H.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 sq ft 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 uptakes 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 plate.....

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 bottom.....

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

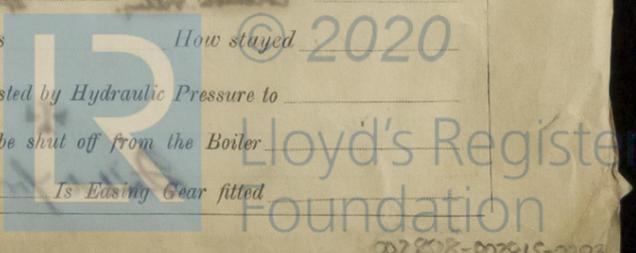
Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

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

If no date whether, and when, one will be sent



IS A DONKEY BOILER FITTED? *no.*

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 SHIPBOUILDING
ENGINEERING COMPANY, LIMITED,

The foregoing is a correct description,

W. L. Lumsden
DIRECTOR

Manufacturer.

Dates of Survey while building: *1920. Sept 13. 27. Oct 27. Nov 12. 23. Dec 15. 21. 1921. Jan 4. 11. Feb 14. Apr 7. 13. May 6. 20. 31. June 15. 30. July 6. 11. 12. 13. 20. 21. 22. 22. 25. 28.*
During progress of work in shops --
During erection on board vessel --
Total No. of visits *29.*

Is the approved plan of main boiler forwarded herewith *with photo 1084 1085*

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 13/4/21. 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 *P.B.L.R. P 4. S 7/8. 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) *no.* so, state name of vessel *s.s. 'Glenageary'.*

General Remarks (State quality of workmanship, opinions as to class, &c.) *This machinery - Boiler Reports 1084 + 1085 Middlesbrough, 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. FP above 150°F.

R. C. M.
A. R. R.
25/8/21

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

The amount of Entry Fee ... £ 3 : 0 :
Lytham Engines 7/5 ... £ 10 : 2 :
Orkton. Fitting on board 1/5 ... £ 5 : 1 :
Donkey Boiler Fee ... £ : :
Lytham Engines ... £ 2 : 1/4 :
Travelling Expenses (if any) £ *Orkton. Fitting.* ... £ 4 : 1/4 :
When applied for, **23 AUG 1921**
When received, **23 AUG 1921**

P. Townend. A. G. Bassetts
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **LIVERPOOL**

Assigned *L.M.C. 7.21*
Fitted for oil fuel 7.21 FP above 150°F
MACHINERY DEPT. WRITTEN 19/10/21
(dated 24/8/21)

