pt. 4.

REPORT ON MACHINERY.

Nwc. No. 52851.
Gls. No. 25172
Hull 18987

Port of Glasgow

Received at London Office WED 22 MAY 1907
Nwc. 29 April 07.
Hull. May 7/07

No. in g. Book. Survey held at Coatbridge Date, first Survey 14th March Last Survey 12th April 1907 (Number of Visits 10.)

Surv. on the S.S. "Vinca"

aster Built at Goole By whom built Goole S.B.Co Tons Gross 321 Net 136 When built 1907

gines made at Coatbridge By whom made W.V.V. Lidgetwood (No 763) when made 1907

ilers made at Newcastle By whom made Walland Shipway & Eng.Co Ltd (No 1838) when made 1907

egistered Horse Power Owners Southern Steam Trawling Co Ltd Port belonging to Milford Haven

m. Horse Power as per Section 28 85 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted No

GINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

ia. of Cylinders 12½", 23", 37" Length of Stroke 25" Revs. per minute Dia. of Screw shaft as per rule 7·77" as fitted 8¼" Material of screw shaft Iron

the screw shaft fitted with a continuous liner the whole length of the stern tube no Is the after end of the liner made water tight 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 tween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive ✓ If two ers are fitted, is the shaft lapped or protected between the liners Tanited Length of stern bush 2'·9"

ia. of Tunnel shaft as per rule 6·6" as fitted none Dia. of Crank shaft journals as per rule 6·92" as fitted 7¼" Dia. of Crank pin 7¼" Size of Crank webs 13¾"×4⅝" Dia. of thrust shaft under llars 7¼" Dia. of screw 9'-0" Pitch of Screw 11'-6" No. of Blades 4 State whether moveable no Total surface 32 ☐ft

o. of Feed pumps 1 Diameter of ditto 3" Stroke 12½" Can one be overhauled while the other is at work ✓

o. of Bilge pumps 1 Diameter of ditto 3" Stroke 12½" Can one be overhauled while the other is at work ✓

o. of Donkey Engines two ✓ Sizes of Pumps 5¼"×3½"×5"+6"×4"×6" No. and size of Suctions connected to both Bilge and Donkey pumps e Engine Room two of 2" dia Ejectors (all parts In Holds, &c. one of 2½" dia to hold & one of 2" to each tank. ley Donkey pumps for refrigerating machinery)

Bilge Injections 1 sizes 3½" Connected to condenser, or to circulating pump C.P. Is a separate Donkey Suction fitted in Engine room & size Yes. 2" 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 ✓ connections with the sea direct on the skin of the ship Yes ✓ Are they Valves or Cocks both ✓ 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 ch 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 are carried through the bunkers Wld Suction ✓ How are they protected Wood Casing ✓

s, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes ✓

Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes ✓

examination of completion of fitting of Sea Connections 29. April 07 ✓ of Stern Tube 29. April 07 Screw shaft and Propeller 29. April 07

s the Screw Shaft Tunnel watertight ✓ Is it fitted with a watertight door ✓ worked from ✓

articulars of boiler appended

OILERS, &c.—(Letter for record R) Manufacturers of Steel J Spencer & Sons Ltd

Total Heating Surface of Boilers 1430 0' Is Forced Draft fitted No No. and Description of Boilers 1 S. Ended Cyl Multitubular

Working Pressure 180 lbs ✓ Tested by hydraulic pressure to 360 lbs ✓ Date of test 21.3.07 ✓ No. of Certificate 7449 ✓

Can each boiler be worked separately ✓ ✓ Area of fire grate in each boiler 47¾ ☐ft ✓ No. and Description of Safety Valves to ach boiler two double spring loaded Area of each valve 5·93 ☐" Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes ✓

Smallest distance between boilers or uptakes and bunkers or woodwork 15" ✓ 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 plate 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 bottom Thickness of plates crown bottom 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 Diameter 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

Diameter 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 Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

separately 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

VERTICAL DONKEY BOILER—

Manufacturers of Steel

No. Description

Made at By whom made When made Where fixed

Working pressure tested by hydraulic pressure to Date of test No. of Certificate Fire grate ared Description of

Valves No. of Safety Valves Area of each Pressure to which they are adjusted Date of adjustment

If fitted with easing gear If steam from main boilers can enter the donkey boiler Dia. of donkey boiler Length

Material of shell plates Thickness Range of tensile strength Descrip. of riveting long. seams

Dia. of rivet holes Whether punched or drilled Pitch of rivets Lap of plating Per centage of strength of joint Rivets Plates

Working pressure of shell by rules 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 of joint

Working pressure of furnace by rules Thickness of furnace crown plates Stayed by

Diameter of uptake Thickness of uptake plates Thickness of water tubes Dates of survey

SPARE GEAR. State the articles supplied :— As per rules; 1 safety valve spring

The foregoing is a correct description,

For W. V. V. Lidgerwood Manufacturer.
Vaneddow.

Dates of Survey while building — During progress of work in shops— 1907 March 14 22 April 5. 12

During erection on board vessel — Newc. 1907 April 24 26 29 Hull Mar. 13 - May 6. 7

Total No. of visits 4 + 6 = 10 —

Is the approved plan of main boiler forwarded herewith Yes.

" " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders 22.3.07 Slides 22.3.07 Covers 22.3.07 Pistons 22.3.07 Rods 5.4.07

Connecting rods 5.4.07 Crank shaft 5.4.07 Thrust shaft 5.4.07 Tunnel shafts ✓ Screw shaft 5.4.07 Propeller 22.3.07

Stern tube 22.3.07 Steam pipes tested 26 april 07 Engine and boiler seatings 24. april 07 Engines holding down bolts 24 april 07

Completion of pumping arrangements 29. april 07 Boilers fixed 29. april 07 Engines tried under steam 29 april 07

Main boiler safety valves adjusted 29. april 07 Thickness of adjusting washers PVR 5/16 SVR 3/8"

Material of Crank shaft steel Identification Mark on Do. 263 Material of Thrust shaft steel Identification Mark on Do. 263

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts iron Identification Marks on Do. 263

Material of Steam Pipes Copper Test pressure 360 lbs ✓

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

The machinery has been built under special survey. the material and workmanship being good. It has been forwarded to Forth Shields to be fitted aboard.—

In regard to the pumps: the case was submitted for the Committee's approval and accepted. see London letter 31st January 1907; reference E

The machinery fitted on board, tried under Steam and found Satisfactory in our opinion this Vessel is worthy of the notification + L.M.C. 5. 07.

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

+LMC. 5-07. J.B.L. 27/5/07

H.S. 22.5.07

The amount of Entry Fee, due Glasgow £ 1 - : 0 - 0

Special due Newcastle £ 4 - 5 - 0

Donkey Boiler Fee £ 8 - 10 - 0

Travelling Expenses (if any) £ : :

When applied for, 29 APR 1907 19

When received, 10 5 07 19

Glasgow 29 APR 1907

A. J. Thomas & Leonard Shallcross
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

FRI. MAY 24 1907

Committee's Minute

Assigned Deferred for completion.

For Nwc

+LMC. 5-07.

MACHINERY CERTIFICATE WRITTEN.

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

Certificate (if required) to be sent to