

REPORT ON MACHINERY.

No. 40660

DEC 18 1920

Date of writing Report 6-12-20 When handed in at Local Office 6-12-20 Port of Glasgow
No. in Survey held at Glasgow Date, First Survey 3rd June 1919 Last Survey 27th Nov 1920
Reg. Book. S.S. SALABANGKA (Number of Vests 64) Tons Gross 6645 Net 4155
on the S.S. SALABANGKA When built 1920
Master Port Glasgow By whom built Lithgow & Co
Engines made at Glasgow By whom made Rowan & Co (No 735) when made 1920
Boilers made at Rowan By whom made Rowan (No 735) when made 1920
Registered Horse Power _____ Owners _____ Port belonging to _____
Nom. Horse Power as per Section 28 675 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders 3 No. of Cranks 3Dia. of Cylinders 28-46-77 Length of Stroke 54 Revs. per minute 85 Dia. of Screw shaft 17 as per rule 15.5 Material of Steel
as fitted 17 screw shaftIs 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 tightin the propeller boss Yes If the liner is in more than one length are the joints burned No If the liner does not fit tightly at the partbetween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes If twoliners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 5-6Dia. of Tunnel shaft 14.25 as per rule 14.25 Dia. of Crank shaft journals 15.5 as per rule 14.95 Dia. of Crank pin 15.5 Size of Crank webs 12x24 Dia. of thrust shaft undercollars 15.5 Dia. of screw 18-6 Pitch of Screw 15-6 No. of Blades 4 State whether moveable Yes Total surface 944No. of Feed pumps 2 Diameter of ditto 8 Stroke 2-4 Can one be overhauled while the other is at work YesNo. of Bilge pumps 2 Diameter of ditto 8 Stroke 8-2 Can one be overhauled while the other is at work YesNo. of Donkey Engines 3 Sizes of Pumps 19x13x12 duplex No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room (2) 3-1/2 Stroke hold (2) 3-1/2 In Holds, &c. nos 1-2 & 4 holds, 2 deep tanksand 2 coffer dams each 2 Suctions all 3-1/2" dia. Tunnel well (1) 3-1/2No. of Bilge Injections 1 sizes 9 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3-1/2Are 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 YesAre all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks BothAre 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 BelowAre 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 YesWhat pipes are carried through the bunkers None How are they protected YesAre all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times YesAre the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges YesIs the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper deckBOILERS, &c.—(Letter for record S) Manufacturers of Steel WATER TUBE See separate Rpt attached heretoTotal Heating Surface of Boilers 10560 Is Forced Draft fitted Yes No. and Description of Boilers 4 water tube (Howdens)Working Pressure 180 lb Tested by hydraulic pressure to 320 lb Date of test 1-9-20 No. of Certificate 15462Can each boiler be worked separately Yes Area of fire grate in each boiler 45 No. and Description of Safety Valves toeach boiler 2 spring loaded Area of each valve 8.290 Pressure to which they are adjusted 185 lb Are they fitted with easing gear YesSmallest distance between boilers or uptakes and bunkers or woodwork 23 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 _____ 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 _____ Thickness of plates _____ 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 Howdens Date of Approval of Plan 22.12.19 Tested by Hydraulic Pressure to 540 lbDate of Test 25.5.20 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler YesDiameter of Safety Valve 2 Pressure to which each is adjusted 195 lb Is Easing Gear fitted No

W1175-0160

If not, state whether, and when, one will be sent

As a Report also sent on the Hull of the Ship

Lloyd's Register Foundation

IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

2 Top end bolts and nuts ✓ 2 bottom end bolts and nuts, 2 main bearing bolts and nuts, 6 Coupling bolts and nuts ✓ Set of jib and belge Pump Valves, Iron, bolts and nuts assorted and other articles.

The foregoing is a correct description,

David Rowan & Co Ltd

per Alex Sand

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1919 Jun 3 July 14 Aug 25 Sep 25 Oct 9 15 Nov 3 5 20 Dec 1 24 (1920) Jan 12 20 28 Feb 10 17 17 Mar 1 8 9 12 23 25 Apr 2 19 21 22 May 4 13 25 26 27 31 June 3 4 8 10 29 31 July 2 5 6 7 13 Aug 11 16 20 30 Sep 1 6 7 15 Oct 18 22 Nov 4
During erection on board vessel -- Nov 9 10 17 19 24 27
Total No. of visits 64.

Is the approved plan of main boiler forwarded herewith

no

" " " donkey " " " "

Dates of Examination of principal parts—Cylinders 9.10.19 Slides 9.10.19 Covers 1.12.19 Pistons 1.12.19 Rods 24.12.19

Connecting rods 27.5.20 Crank shaft 1.9.20 Thrust shaft 30.3.20 Tunnel shafts 30.8.20 Screw shaft 27.5.20 Propeller 27.5.20

Stern tube 18.5.20 Steam pipes tested 5.11.9 11.20 Engine and boiler seatings 9.6.2 Engines holding down bolts 7.10.20

Completion of pumping arrangements 24.11.20 Boilers fixed 7.10.20 Engines tried under steam 9.11.9 27.11.20

Completion of fitting sea connections 16.7.20 Stern tube 9.6.20 Screw shaft and propeller 16.7.20

Main boiler safety valves adjusted 19.11.20 Thickness of adjusting washers aft PT P32 S32 STAP32 S16 7d P16 S32 STAP P16 S32

Material of Crank shaft Steel Identification Mark on Do. T1100 734 Material of Thrust shaft Steel Identification Mark on Do. T1100 734

Material of Tunnel shafts Steel Identification Marks on Do. (Sub below) Material of Screw shafts Steel Identification Marks on Do. T1100 734

Material of Steam Pipes S.S. Steel Test pressure 540 lb

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 S.S. "Salawati"

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

7538 1093 7539 3798 7528 7540
7216 7516 3897 734 1099 3796
TM 30.8.20. TM 30.8.20. TM 30.8.20. TM 30.8.20. TM 30.8.20. TM 30.8.20.

The Engines and boilers have been built under Special Survey in accordance with the Rules and approved Plans and have been seen working satisfactorily under Steam, materials and workmanship are good.

The Machinery is eligible, in our opinion, to be Classed + LMC 11-20

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 11.20 FD 4 Water Tube Boilers Subject to the Water Tube Boiler being surveyed annually.

10/12/20

ARR

The amount of Entry Fee ... £ 3 : 0 : When applied for, 1.12.19 20. J. and Easthope
Special ... £ 53 : 15 : When received, 3.12.19 20. J. and Easthope
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute Glasgow 7-DEC 1920

Assigned + LMC 11.20

72. CERTIFICATE WRITTEN 12/20

Lloyd's Register Foundation