

REPORT ON MACHINERY.

Port of

Glasgow

THUR. 3 JUL 1902

Received at London Office

19

To, in Survey held at
Book.

Glasgow

Date, first Survey

Last Survey

19

on the

S.S. "Langkah"

(Number of Visits)

Tons } Gross
Net

ter Built at By whom built

When built

ines made at By whom made when made

ers made at By whom made when made

istered Horse Power Owners Port belonging to

Horse Power as per Section 28

Is Refrigerating Machinery fitted

Is Electric Light fitted

MACHINERY, &c.—Description of Engines

No. of Cylinders

No. of Cranks

of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft as per rule as fitted Lgth. of stern bush
of Tunnel shaft as per rule as fitted Dia. of Crank shaft journals as per rule as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under
rs Dia. of screw Pitch of screw No. of blades State whether moveable Total surface
of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps
Engine Room In Holds, &c.

of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size

all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

all connections with the sea direct on the skin of the ship Are they Valves or Cocks

they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the discharge pipes above or below the deep water line

they each fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate

at pipes are carried through the bulkheads How are they protected

all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times

the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges

en were stern tube, propeller, screw shaft, and all connections examined in dry dock Is the screw shaft tunnel watertight

fitted with a watertight door worked from

BOILERS, &c.—

(Letter for record B)

Total Heating Surface of Boilers

2081 sq ft Is forced draft fitted yes

and Description of Boilers On single ended return tube

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs

e of test Can each boiler be worked separately Area of fire grate in each boiler 50 sq ft No. and Description of safety valves to

boiler on pair duct Area of each valve 9.62 sq ft Pressure to which they are adjusted 180 lbs Are they fitted with easing gear yes

allest distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 14.0" Length 11.6" Material of shell plates steel

ckness 1 3/32 Range of tensile strength 28 1/2 Are they welded or flanged no Descrip. of riveting: cir. seams double lap long. seams tubular butt

meter of rivet holes in long. seams 1 1/32 Pitch of rivets 9 1/4 Lap of plates or width of butt straps 20 1/8"

centages of strength of longitudinal joint rivets 89 plate 88.4 Working pressure of shell by rules 200 lbs Size of manhole in shell 16 x 12"

of compensating ring 27 x 31" No. and Description of Furnaces in each boiler 3 furnaces Material steel Outside diameter 43"

gth of plain part top bottom Thickness of plates crown 9 bottom 7 1/16 Description of longitudinal joint welded No. of strengthening rings 1

rking pressure of furnace by the rules 200 lbs Combustion chamber plates: Material steel Thickness: Sides 1 3/32 Back 1 3/32 Top 1 3/32 Bottom 2 3/32

h of stays to ditto: Sides 7 3/4 x 7 3/4 Buck 7 1/2 x 7 3/4 Top 7 1/4 x 7 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 215.205

erial of stays steel Diameter at smallest part 1.514 Area supported by each stay 58 sq in Working pressure by rules 207 lbs End plates in steam space: 224T

erial steel Thickness 1 9/16 Pitch of stays 15 1/4 x 14 1/4 How are stays secured 27 nuts Working pressure by rules 365 lbs Material of stays steel

meter at smallest part 4.84 Area supported by each stay 217 sq in Working pressure by rules 222 lbs Material of Front plates at bottom steel

ckness 1 3/16 Material of Lower back plate steel Thickness 1 3/16 Greatest pitch of stays 13 1/2 with 18 pounds Working pressure of plate by rules 239 lbs

meter of tubes 2 1/2 Pitch of tubes 8 5/8 x 8 5/8 Material of tube plates steel Thickness: Front 1 3/16 Back 2 3/8 Mean pitch of stays 8.156"

ch across wide water spaces 13 1/2 with 18 pounds Working pressures by rules 366.7290 lbs Girders to Chamber tops: Material steel Depth and

keness of girder at centre 8 x 7/8 double Length as per rule 28 5/8 Distance apart 7 1/2 Number and pitch of Stays in each then 7 1/4"

rking pressure by rules 240 lbs Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked

rately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

fitted with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

rking pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

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Foundation

WS24-0006

DONKEY BOILER— No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure _____ tested by hydraulic pressure to _____ No. of Certificate _____ Grate area _____ Description of safety valves _____

No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ 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 _____ 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 _____

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

Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,
Alex. Scott, Secy. Manufacturer.

Dates { During progress of work in shops - - }
 of Survey { During erection on board vessel - - }
 while building { Total No. of visits _____ }

Is the approved plan of main boiler forwarded herewith _____

“ “ “ donkey “ “ “

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

Material of screw shaft _____ Is the screw shaft fitted with a continuous liner the whole length of the stern tube _____

Is the after end of the liner made water tight in the propeller boss _____ If the liner is in more than one length are the joints burned _____

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 _____

If two liners are fitted, is the shaft lapped or protected between the liners _____

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..	£	:	When applied for,
Special	£	:19.....
Donkey Boiler Fee	£	:	When received,
Travelling Expenses (if any) £	:	:19.....

A. McKeand
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute **GLASGOW. 2 - JUL 1902**

Assigned *See accompanying report*