

# REPORT ON MACHINERY.

NO. 11 301  
29

Port of Grimock

MON. 14 OCT 1895

No. in Survey held at Port Glasgow Date, first Survey 1<sup>st</sup> May Last Survey 21<sup>st</sup> May 1895  
Reg. Book.

on the Screw Steamer "Langbank"

Master \_\_\_\_\_ Built at Port Glasgow By whom built Russell & Co. When built 1895

Engines made at Glasgow By whom made Dunsmuir & Jackson when made 1895

Boilers made at do By whom made do when made 1895

Registered Horse Power \_\_\_\_\_ Owners G. M. Stewarts (Young) Port belonging to Liverpool

Nom. Horse Power as per Section 28 \_\_\_\_\_

**ENGINES, &c.—** Description of Engines \_\_\_\_\_ No. of Cylinders \_\_\_\_\_  
Diameter of Cylinders \_\_\_\_\_ Length of Stroke \_\_\_\_\_ Revolutions per minute \_\_\_\_\_ Diameter of Screw shaft \_\_\_\_\_ as per rule \_\_\_\_\_ as fitted \_\_\_\_\_  
Diameter of Tunnel shaft \_\_\_\_\_ as per rule \_\_\_\_\_ as fitted \_\_\_\_\_ Diameter of Crank shaft journals \_\_\_\_\_ Diameter of Crank pin \_\_\_\_\_ Size of Crank webs \_\_\_\_\_  
Diameter of screw \_\_\_\_\_ Pitch of screw \_\_\_\_\_ No. of blades \_\_\_\_\_ State whether moveable \_\_\_\_\_ Total surface \_\_\_\_\_  
No. of Feed pumps \_\_\_\_\_ Diameter of ditto \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
No. of Bilge pumps \_\_\_\_\_ Diameter of ditto \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
No. of Donkey Engines \_\_\_\_\_ Sizes of Pumps \_\_\_\_\_ No. and size of Suctions connected to both Bilge and Donkey pumps \_\_\_\_\_  
In Engine Room \_\_\_\_\_ In Holds, &c. \_\_\_\_\_

No. of bilge injections \_\_\_\_\_ sizes \_\_\_\_\_ Connected to condenser, or to circulating pump \_\_\_\_\_ Is a separate donkey suction fitted in Engine room & size \_\_\_\_\_  
Are 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 \_\_\_\_\_  
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 \_\_\_\_\_  
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 \_\_\_\_\_ How are they protected \_\_\_\_\_  
Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times \_\_\_\_\_  
Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges \_\_\_\_\_  
When were stern tube, propeller, screw shaft, and all connections examined in dry dock in 1895 before launching Is the screw shaft tunnel watertight \_\_\_\_\_  
Is it fitted with a watertight door \_\_\_\_\_ worked from \_\_\_\_\_

**BOILERS, &c.—** (Letter for record \_\_\_\_\_) Total Heating Surface of Boilers \_\_\_\_\_  
No. and Description of Boilers \_\_\_\_\_ Working Pressure \_\_\_\_\_ Tested by hydraulic pressure to \_\_\_\_\_  
Date of test \_\_\_\_\_ Can each boiler be worked separately \_\_\_\_\_ Area of fire grate in each boiler \_\_\_\_\_ No. and Description of safety valves to \_\_\_\_\_  
each boiler \_\_\_\_\_ Area of each valve \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ Are they fitted \_\_\_\_\_  
with easing gear \_\_\_\_\_ Smallest distance between boilers or uptakes and bunkers or woodwork \_\_\_\_\_ Mean diameter of boilers \_\_\_\_\_  
Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_ Description of riveting: circum. 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 \_\_\_\_\_ 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 \_\_\_\_\_

GRIK 332-0078

Lloyd's Register  
Foundation



Donkey Boiler Description  
Made at By whom made When made Where fixed  
Working pressure tested by hydraulic pressure to No. of Certificate Fire 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 enter the donkey boiler  
Diameter of donkey boiler Length Material of shell plates Thickness  
Description of riveting long seams Diameter 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,  
Manufacturer.

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

Examined Stern frame bon tubes for tube & Stern tube fasten place. screw shaft shipped and propeller securely fastened on shaft end, and sea connections satisfactorily fitted on hull.  
The above mentioned parts of Machinery are now in good and efficient condition, and the vessel has been towed to Glasgow to Engines & Boilers fitted on board.

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

Certificate (if required) to be sent to

The amount of Entry Fee. . . . .	£	:	:	When applied for,
Special . . . . .	£	:	:	18
Donkey Boiler Fee . . . . .	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:	18

A. C. Meron  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping  
Greenwich District.

FRI. 18 OCT 1895

FRI. 1 NOV 1895

Committee's Minute

Assigned

