

# REPORT ON MACHINERY.

SAT. 8 JUL 1899

Port of Glasgow

Received at London Office

No. in Survey held at Glasgow

Date, first Survey H. May Last Survey 3 June 1899

(Number of Visits 5)

Reg. Book.

122 on the

S. S. OLIVE.

Tons { Gross 102  
Net 47

Master

Built at Odense

By whom built H. L. Hansen

When built 1874

Engines made at Kiel

By whom made Gebruder Howaldt.

when made 1874

Boilers made at Glasgow

By whom made Muir & Houston

when made 1899.

Registered Horse Power 30

Owners W. G. J. Pollexfen & Co.

Port belonging to Sligo

Nom. Horse Power as per Section 28

Is Electric Light fitted

**ENGINES, &c.—Description of Engines**

No. of Cylinders \_\_\_\_\_ No. of Cranks \_\_\_\_\_

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 \_\_\_\_\_ Diameter of Crank shaft journals \_\_\_\_\_ Diameter of Crank pin \_\_\_\_\_ Size of Crank webs \_\_\_\_\_ as fitted \_\_\_\_\_

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 \_\_\_\_\_ Are they Valves or Cocks \_\_\_\_\_

Are 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 \_\_\_\_\_

Are 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 \_\_\_\_\_

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 \_\_\_\_\_ 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 600 sq. ft. Is forced draft fitted no.

No. and Description of Boilers one single ended Working Pressure 75 lbs Tested by hydraulic pressure to 150 lbs

Date of test 3/6/99 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  Mean diameter of boilers 8" 3"

Length 9.6' Material of shell plates steel Thickness 1/2" Description of riveting: circum. seams double long. seams treble

Diameter of rivet holes in long. seams 15/16" Pitch of rivets 5" Lap of plates, or width of butt straps 8"

Per centages of strength of longitudinal joint \_\_\_\_\_ Working pressure of shell by rules 82 lbs Size of manhole in shell 16" x 12"

Size of compensating ring McNeill's No. and Description of Furnaces in each boiler one plain Material steel Outside diameter 42"

Length of plain part \_\_\_\_\_ Thickness of plates \_\_\_\_\_ Description of longitudinal joint welded No. of strengthening rings

Working pressure of furnace by the rules 81 lbs Combustion chamber plates: Material steel Thickness: Sides 1/2" Back 7/16" Top 7/16" Bottom 1/2"

Pitch of stays to ditto: Sides 9 1/2" x 8" Back 8" x 8" Top 7 1/2" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 92 lbs

Material of stays steel Area at smallest part .96" Area supported by each stay 64" Working pressure by rules 170 lbs End plates in steam space: \_\_\_\_\_

Material steel Thickness 5/8" Pitch of stays 15 x 13 How are stays secured nuts Working pressure by rules 94 lbs Material of stays steel

Area at smallest part 2.03" Area supported by each stay 195 sq. in. Working pressure by rules 104 lbs Material of Front plates at bottom steel

Thickness 5/8" Material of Lower back plate steel Thickness 5/8" Greatest pitch of stays 8" x 8" Working pressure of plate by rules 211 lbs

Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates steel Thickness: Front 5/8" Back 5/8" Mean pitch of stays 9"

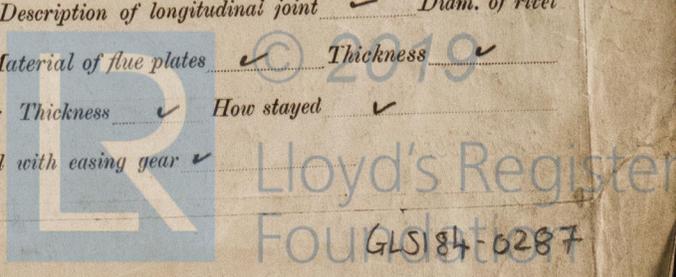
Pitch across wide water spaces 13 1/2" Working pressures by rules 76 lbs Girders to Chamber tops: Material iron Depth and thickness of girder at centre 5" x 2" - 1/2" Length as per rule 24" Distance apart 7 1/2" Number and pitch of Stays in each 2 - 8"

Working pressure by rules 78 lbs Superheater or Steam chest; how connected to boiler none 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



17157 gls

DONKEY BOILER— Description *None.*

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 can 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,

*Main Amstron Limited* Manufacturer.  
*Jas Stewart Esq*

Dates of Survey while building } During progress of work in shops - - } 1899: - May. 11. 16. June. 1. 2. 3  
 } During erection on board vessel - - }  
 Total No. of visits 5

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

ENGINES—Length of stern bush \_\_\_\_\_ Diameter of crank shaft journals \_\_\_\_\_ as per rule \_\_\_\_\_ Diameter of thrust shaft under collars \_\_\_\_\_

BOILERS—Range of tensile strength *27 to 32* Are they welded or flanged *neither* DONKEY BOILERS—No.  Range of tensile strength \_\_\_\_\_

Is the approved plan of main boiler forwarded herewith *Yes*. Is the approved plan of donkey boiler forwarded herewith

*This Boiler has been constructed under Special Survey & the material & workmanship are of good quality. Vessel & machinery not classed.*

*This Boiler has been constructed under special survey, but as it does not appear to be intended for a classed vessel, it is submitted that no further action need be taken*

*Rick Jls 59*

*J.W. Denimock*  
*8/7/99*

The amount of Entry Fee.. £ : : When applied for,  
 Special .. .. £ 2 : 2 : { *7/7/99* *18.99*  
 Donkey Boiler Fee .. .. £ : : {  
 Travelling Expenses (if any) £ : : { *1.9.99* *18.99*

*J.W. Denimock*  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

Assigned

*not for Council (unclassed)*



Lloyd's Register Foundation

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