

REPORT ON BOILERS.

WED. JAN 30 1907

U.S. No. 24658
U. No. 23136

Port of Glasgow

Received at London Office TUES. NOV 27 1906

No. in Survey held at Annan
Reg. Book.

Date, first Survey 24 Aug

Last Survey 16 Nov 1906

(Number of Visits 30)

on the Donkey boiler for S.S. Westhampton

Osbourne Graham & Co.

Gross 1860.19
Net 1162.09
Tons

Master A. W. Lockworthy Built at Sunderland By whom built Osbourne Graham & Co. When built 1904

Engines made at Sunderland By whom made Richardsons Westgarth & Co. when made 1904

Boilers made at Sunderland By whom made Richardsons Westgarth & Co. when made 1904

Registered Horse Power _____ Owners British Maritime Trust Port belonging to West Hartlepool

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

(Letter for record _____) Total Heating Surface of Boilers _____ Is forced draft fitted _____ No. and Description of Boilers _____

Working Pressure _____ Tested by hydraulic pressure to _____ Date of test _____

No. of Certificate _____ 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 _____ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler _____

Smallest distance between boilers or uptakes and bunkers or woodwork _____ 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 _____ 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—No. 4166 Description Cochran Manufacturers of steel Glydebridge Steel

Made at Annan By whom made Cochran & Co. Annan When made 1906 Where fixed Stokehold Working pressure 100 lbs.

tested by hydraulic pressure to 200 Date of test 23/11/06 No. of Certificate 8319 Fire grate area _____ Description of safety valves Direct spring

No. of safety valves Two Area of each 10.7 Pressure to which they are adjusted 100 lbs. If fitted with easing gear yes If steam from main boilers can enter the donkey boiler no

Dia. of donkey boiler 4 ft — Height 14 ft Material of shell plates Steel Thickness 1 1/2" - 1 3/8" Range of tensile strength 27/32

Descrip. of riveting long. seams Double lap Dia. of rivet holes 29/32 Blotches punched or drilled Pitch of rivets 2 3/8"

Lap of plating 1 1/2" Per centage of strength of joint _____ Rivets 690/0 Working pressure of shell by rules 102 lbs. Thickness of shell crown plates 5/32" - 28/32"

Radius of do. 3.6" No. of Stays to do. _____ Dia. of stays _____ Diameter of furnace Top 3 ft Bottom 6 ft Length of furnace 3 ft

Thickness of furnace plates 19/16" Description of joint Solid dished plate Working pressure of furnace by rules 104 lbs. Thickness of furnace crown plates 19/16"

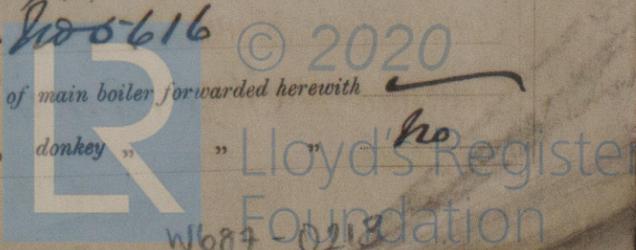
Radius of do. 3 ft Stayed by _____ Diameter of uptake 5" x 2 1/2" Thickness of uptake plates 9/16"

Thickness of water tube plates 19/16" - 28/32"

For COCHRAN & Co., ANNAN, LIMITED.
The foregoing is a correct description,
Harry H. Davies Managing Director, Manufacturer.

Dates of Survey while building: During progress of work in shops - - - 1906 Aug. 24, 29, Sep. 14, Oct. 5, 12, 19, 26, Nov. 2, 9, 16
During erection on board vessel - - -
Total No. of visits 10

Is the approved plan of main boiler forwarded herewith _____
" " " donkey " _____
Drawing No. 5616



W687 0218

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This boiler has been made under survey the materials & workmanship are of good description & the hydraulic test satisfactory.

Boiler secured in position, its safety valves & stop valve examined internally & the safety valve adjusted under steam.

W. J. ...
25/11/07

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...	£ 10 : 2 : 0	When applied for.
Special ...	£ 0 : 0 : 0	19
Donkey Boiler Fee ...	£ 2 : 2 : 0	When received.
Travelling Expenses (if any) £	0 : 0 : 0	14 7 19

James Morrison
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.
Clyde District

Committee's Minute
Assigned Transmit to London.

Glasgow 6 NOV 1908

