

REPORT ON BOILERS.

Hpl. No. 12839

Port of West Hartlepool

Received at London Office JAN. 17 MAY 1906

No. in Survey held at West Hartlepool
Reg. Book.

Date, first Survey 17th Nov. 1905

Last Survey 9th Feb. 1906

(Number of Visits 38)

101 Tons on the Steam Trawler

Cries

Tons } Gross 250
Net 103

Master James

Built at Grimsby

By whom built Cochrane & Sons

When built 1906

Engines made at Grimsby

By whom made Central Marine & Wat.

when made 1906

Boilers made at West Hartlepool

By whom made Central Marine & Wat.

when made 1906

Registered Horse Power 96

Owners Grimsby North Sea & F.C. Ltd Port belonging to Grimsby

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Co.

(Letter for record S) Total Heating Surface of Boilers 13194 sq ft Is forced draft fitted No. and Description of Boilers one Cyral boiler Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 9/2/06

No. of Certificate 3037 Can each boiler be worked separately Area of fire grate in each boiler 34.7 sq ft No. and Description of safety valves to each boiler 2 Spring loaded Area of each valve 3.98 sq ft Pressure to which they are adjusted 180 lb

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 9" Mean dia. of boilers 12'6" Length 10'0"

Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 27/20 Are the shell plates welded or flanged both

Descrip. of riveting: cir. seams - long. seams all chip steel Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 7 1/2"

Lap of plates or width of butt straps 16 5/8" Per centages of strength of longitudinal joint rivets 86.0% plate 85.7% Working pressure of shell by rules 186 lb

Size of manhole in shell 16" x 12" Size of compensating ring 32" x 28" x 1 1/2" No. and Description of Furnaces in each boiler Two chain

Material Steel Outside diameter 48" Length of plain part 70" Thickness of plates 1 1/4" crown 1 1/4" bottom 1 1/4"

Description of longitudinal joint welded No. of strengthening rings - Working pressure of furnace by the rules 180 lb Combustion chamber plates: Material Steel Thickness: Sides 2 1/2" Back 2 1/2" Top 2 1/2" Bottom 1 3/4" Pitch of stays to ditto: Sides 9 1/4" x 1 1/4" Back 9" x 1 1/4"

Top 9 1/4" x 1 1/4" If stays are fitted with nuts or riveted heads none Working pressure by rules 180 lb Material of stays Steel Diameter at smallest part 1 3/8" Area supported by each stay 9 1/4" x 1 1/4" Working pressure by rules 239 lb End plates in steam space: Material Steel Thickness 1 1/4"

Pitch of stays 17 1/4" x 1 1/4" How are stays secured all nut Working pressure by rules 180 lb Material of stays Steel Diameter at smallest part 2 29/32"

Area supported by each stay 17 1/4" x 1 1/4" Working pressure by rules 214 lb Material of Front plates at bottom Steel Thickness 1" Material of Lower back plate Steel Thickness 1 5/16" Greatest pitch of stays 14" Working pressure of plate by rules 180 lb Diameter of tubes 3 1/2"

Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 1" Back 1 3/16" Mean pitch of stays 9" Pitch across wide water spaces 1 1/4" Working pressures by rules 189 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9" x 1 1/2" Length as per rule 31 5/8" Distance apart 8 1/4" Number and pitch of Stays in each two 9 1/4"

Working pressure by rules 207 lb 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. - Description - Manufacturers of steel -

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 -

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 - Plates - Working pressure of shell by rules - 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 - Working pressure of furnace by rules - Thickness of furnace crown plates -

Stays - Diameter of uptake - Thickness of uptake plates - Thickness of water tubes -

FOR THE CENTRAL MARINE ENGINE WORKS, (W. Gray & Co. Ltd.)

The foregoing is a correct description, Mr. C. Borrowman Manufacturer.

Dates of Survey while building 1905. Nov. 17. 21. 28. 29. 30. Dec. 4. 8. 11. 12. 14. 18. 19. 20. 21. 22. 29. 1906. Jan. 3. 4. 5. 8. 9. 10. 11. 12. 15. 16. 17. 22. 24. 26. 29. 30. 31. Feb. 1. 6. 7. 8. 9.

Total No. of visits 38 Is the approved plan of main boiler forwarded herewith No

" " " donkey " " Foundation

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

This Main Boiler has been constructed under Special Survey in accordance with the approved Photo Print tested by hydraulic pressure to 350 lbs and found tight and sound.

It has now been forwarded to Simey where it will be placed on board a new Steam Tractor building to the order of The Simey and North Sea Steam Trawling Co.

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	£	3	16	22. 2. 06
Donkey Boiler Fee ...	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:	13/3/06

James Stone
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI, 18 MAY 1906

Assigned *See Minute on Gen. Rpt.*

No. 41524

