

REPORT ON BOILERS.

No. 20030

Received at London Office **AUG 14 1939**

Date of writing Report 10-8-1939 When handed in at Local Office 11-8-1939 Port of Aberdeen

No. in Reg. Book. Survey held at Aberdeen Date, First Survey _____ Last Survey 4th August 1939

on the Non-propelling bucket dredger "FOREMOST CLAN" (Number of Visits _____) Tons {Gross 314.46 Net 190.04

Master _____ Built at Aberdeen By whom built A. Hall + Co. Ltd Yard No. 664 When built 1939

Engines made at Aberdeen By whom made A. Hall + Co. Ltd Engine No. 360 When made 1935

Boilers made at Glasgow By whom made D. Bowman + Co. Ltd Boiler No. 435 When made 1939

Nominal Horse Power _____ Owners James Lawing + Dredging Co. Ltd Port belonging to London

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY, OR~~ DONKEY.

Manufacturers of Steel See Glasgow Rpt V 6 1247 (Letter for Record _____)

Total Heating Surface of Boilers _____ Is forced draught fitted No Coal or Oil fired Oil

No. and Description of Boilers One single ended Working Pressure 140 lbs

Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Can each boiler be worked separately _____

Area of Firegrate in each Boiler _____ No. and Description of safety valves to each boiler 2 direct spring loaded 2" double ended with life see 26/18/39

Area of each set of valves per boiler {per Rule 10.61 as fitted 14.13" Pressure to which they are adjusted 140 lbs Are they fitted with easing gear Yes

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 18" Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating No tank Is the bottom of the boiler insulated No

Largest internal dia. of boilers _____ Length _____ Shell plates: Material _____ Tensile strength _____

Thickness _____ Are the shell plates welded or flanged _____ Description of riveting: circ. seams {end inter. _____

long. seams _____ Diameter of rivet holes in {circ. seams long. seams _____ Pitch of rivets { _____

Percentage of strength of circ. end seams {plate rivets _____ Percentage of strength of circ. intermediate seam {plate rivets _____

Percentage of strength of longitudinal joint {plate rivets combined _____ Working pressure of shell by Rules _____

Thickness of butt straps {outer inner _____ No. and Description of Furnaces in each Boiler _____

Material _____ Tensile strength _____ Smallest outside diameter _____

Length of plain part {top bottom _____ Thickness of plates {crown bottom _____ Description of longitudinal joint _____

Dimensions of stiffening rings on furnace or c.c. bottom _____ Working pressure of furnace by Rules _____

End plates in steam space: Material _____ Tensile strength _____ Thickness _____ Pitch of stays _____

How are stays secured _____ Working pressure by Rules _____

Tube plates: Material {front back _____ Tensile strength _____ Thickness _____

Mean pitch of stay tubes in nests _____ Pitch across wide water spaces _____ Working pressure {front back _____

Girders to combustion chamber tops: Material _____ Tensile strength _____ Depth and thickness of girder _____

at centre _____ Length as per Rule _____ Distance apart _____ No. and pitch of stays _____

in each _____ Working pressure by Rules _____ Combustion chamber plates: Material _____

Tensile strength _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____

Pitch of stays to ditto: Sides _____ Back _____ Top _____ Are stays fitted with nuts or riveted over _____

Working pressure by Rules _____ Front plate at bottom: Material _____ Tensile strength _____

Thickness _____ Lower back plate: Material _____ Tensile strength _____ Thickness _____

Pitch of stays at wide water space _____ Are stays fitted with nuts or riveted over _____

Working Pressure _____ Main stays: Material _____ Tensile strength _____

Diameter {At body of stay or Over threads _____ No. of threads per inch _____ Area supported by each stay _____

Working pressure by Rules _____ Screw stays: Material _____ Tensile strength _____

Diameter {At turned off part or Over threads _____ No. of threads per inch _____ Area supported by each stay _____



Working pressure by Rules *Are the stays drilled at the outer ends* Margin stays: Diameter { At turned off part, or Over threads. }
 No. of threads per inch *Area supported by each stay* Working pressure by Rules
 Tubes: Material External diameter { Plain Stay } Thickness { } No. of threads per inch
 Pitch of tubes Working pressure by Rules Manhole compensation: Size of opening in shell plate Section of compensating ring No. of rivets and diameter of rivet holes
 Outer row rivet pitch at ends Depth of flange if manhole flanged Steam Dome: Material
 Tensile strength Thickness of shell Description of longitudinal joint
 Diameter of rivet holes Pitch of rivets Percentage of strength of joint { Plate Rivets }
 Internal diameter Working pressure by Rules Thickness of crown No. and diameter of stays
 How connected to shell Inner radius of crown Working pressure by Rules
 of rivets in outer row in dome connection to shell Size of doubling plate under dome Diameter of rivet holes and pitch

Type of Superheater *None* Manufacturers of { Tubes Steel forgings Steel castings }
 Number of elements Material of tubes Internal diameter and thickness of tubes
 Material of headers Tensile strength Thickness Can the superheater be shut off and the boiler be worked separately Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
 Area of each safety valve Are the safety valves fitted with easing gear Working pressure as per Rules Pressure to which the safety valves are adjusted Hydraulic test pressure: tubes forgings and castings and after assembly in place Are drain cocks or valves fitted to free the superheater from water where necessary

FOR ALEXANDER HALL & CO., LTD.

Albion & Thomson
 SECRETARY

The foregoing is a correct description, Manufacturer.

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with
 Dates of Survey { During progress of work in shops - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
 while building { During erection on board vessel - - } Total No. of visits

Is this Boiler a duplicate of a previous case *No* If so, state Vessel's name and Report No. ✓

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been securely fitted on board the vessel. The safety valves have been adjusted under steam as stated. tried for accumulation & found satisfactory. The materials & workmanship are good. The boiler is eligible in my opinion, to be classed in the Register Book - and to have record of D.B.*

See also Glasgow Rpt N: 61244 attached.

Survey Fee £ : ✓ : } When applied for, 10
 Travelling Expenses (if any) £ : : } When received, 10

J. Avey
 Engineer Surveyor to Lloyd's Register of Shipping.

FRI 18 AUG 1939

Committee's Minute
 Assigned *See FE rpt*

