

21 OCT 1931

# REPORT ON AIR RESERVOIRS BOILERS.

No. 10.530

Received at London Office 22 DEC 1930

Writing Report 19 When handed in at Local Office 20<sup>th</sup> Dec. 1930 Port of Belfast

Survey held at Belfast Date, First Survey 8<sup>th</sup> October Last Survey 18<sup>th</sup> Dec. 1930

Book (Number of Visits 9) Gross 8375 Tons Net 4948

on the M V "CLIONA"

at Glasgow By whom built Harland & Wolff Ltd Yard No. 908G When built 1931

at Glasgow By whom made Ditto Engine No. 908 When made 1931

at Belfast By whom made Harland Wolff Ltd. Boiler No. 908G When made 1930

rs Anglo Saxon Petroleum Coy Ltd Port belonging to London

## SMALL DONKEY BOILER

at Belfast By whom made Harland Wolff Ltd. Boiler No. 908G When made 1930 Where fixed

Manufacturers of Steel A. Colville & Co. Ltd.

Capacity 350 CUBIC FEET EACH  forced draught fitted  Coal or Oil fired

Description of Boilers 4 CYLINDRICAL BUILT STEEL Working pressure 356 LBS. Q"

hydraulic pressure to TWO 712 LBS. Q" Date of test 4th Nov. 1930

to TWO 585 LBS. Q" Date of test 18th Dec. 1930 Name of Certificate

Firegrate in each Boiler No. and Description of safety valves to each boiler

each set of valves per boiler { per rule Pressure to which they are adjusted Are they fitted with easing gear

as fitted

other steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers

work Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated Largest internal dia. of boiler 5' 10<sup>5</sup>/<sub>16</sub>" V LENGTH 14' 3" V Height

Material STEEL V Tensile strength 28-32 TONS Q" V Thickness 1" V

shell plates welded or flanged No V Description of riveting: circ. seams { end } DOUBLE V long. seams TREBLE V

inter. {

rivet holes in { circ. seams 1<sup>5</sup>/<sub>16</sub>" V Pitch of rivets { 3.29" V plate 60.1 of Longitudinal joint { plate 85.4

long. seams 1<sup>1</sup>/<sub>16</sub>" V { 7<sup>1</sup>/<sub>16</sub>" V rivets 67.5 of rivets 33.7

combined 89.6

pressure of shell by rules 371 LBS. Q" Thickness of butt straps { outer 2<sup>5</sup>/<sub>32</sub>" V inner 2<sup>9</sup>/<sub>32</sub>" V

rown: Whether complete hemisphere, dished partial spherical, or flat YES V Material STEEL V

strength 26-30 TONS Q" Thickness 1<sup>7</sup>/<sub>16</sub>" V 1<sup>9</sup>/<sub>16</sub>" V Radius 48" V Working pressure by rules 360 LBS. Q"

tion of Furnace: Plain, spherical, or dished crown 1<sup>5</sup>/<sub>32</sub>" V 1<sup>9</sup>/<sub>32</sub>" V Material Tensile strength

External diameter { top Length as per rule Working pressure by rules

bottom

of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

er of stays over thread Radius of spherical or dished furnace crown Working pressure by rule

ess of Ogee Ring Diameter as per rule { D Working pressure by rule

a.

stion Chamber: Material Tensile strength Thickness of top plate

if dished Working pressure by rule Thickness of back plate Diameter if circular

as per rule Pitch of stays Are stays fitted with nuts or riveted over

er of stays over thread Working pressure of back plate by rules

Plates: Material { front Tensile strength Thickness Mean pitch of stay tubes in nests

back

prising shell, Dia. as per rule { front Pitch in outer vertical rows { Dia. of tube holes FRONT { stay BACK { stay

back { plain

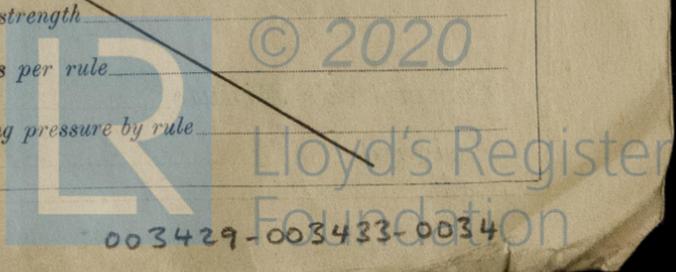
ch alternate tube in outer vertical rows a stay tube Working pressure by rules { front

back

lers to combustion chamber tops: Material Tensile strength

th and thickness of girder at centre Length as per rule

tance apart No. and pitch of stays in each Working pressure by rule



**Crown 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 \_\_\_\_\_

**Tubes:** Material \_\_\_\_\_ External diameter { plain..... Thickness { .....  
stay.....

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 \_\_\_\_\_

**Uptake:** External diameter \_\_\_\_\_ Thickness of uptake plate \_\_\_\_\_

**Cross Tubes:** No. \_\_\_\_\_ External diameters { ..... Thickness of plates \_\_\_\_\_

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with \_\_\_\_\_

The foregoing is a correct description,

Manufactured by \_\_\_\_\_

Dates of Survey while building { During progress of work in shops - - } <sup>1932</sup> Oct 8, 14, 29 Nov. 4, 20, 24, 28 Dec 6, 18. Is the approved plan of boiler forwarded herewith (If not state date of approval.)

{ During erection on board vessel - - } Total No. of visits 9

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

These air receivers were constructed under special survey. The materials and the workmanship are sound and good. In accordance with the specification two of the receivers were tested by hydraulic pressure to 712 lbs. The other two were tested to 585 lbs with the approval of the owners. They are being despatched to Glasgow.

NO. 38  
LLOYD'S TEST  
712 LBS.  
W.P. 356 LBS.  
R.L.A. 4.11.30

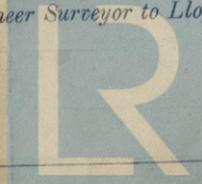
NO. 38  
LLOYD'S TEST  
585 LBS.  
W.P. 356 LBS.  
R.L.A. 18.12.30

Survey Fee ... .. £ 16 : 16 : } When applied for, 20<sup>th</sup> Dec. 19 30  
Travelling Expenses (if any) £ : : } When received, 22<sup>nd</sup> Jan 19 31 (Low Ltd)

*R. Lee James*

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 20 OCT 1931**  
Assigned *See Glasgow Report No. 51840.*



Lloyd's Register  
Foundation

Rpt. 13.

REF

Date of writing

No. in Su  
Reg. Book.

39711 on

Built at

Owners THE

Electric Lig

Is the Vessel

System of

Pressure of s

Direct or Al

If alternating

Has the Auto

Generators.

are they over

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series with ea

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Position of

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Switch

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