

No. 2054

THE BRITISH CORPORATION FOR THE SURVEY
AND
REGISTRY OF SHIPPING.

Report No. *1990* No. in Register Book *3322*

S.S. *"SELKIRK"*

Makers of Engines *Richardsons Westgarth & Co. Ltd.*

Works No. *2655*

Makers of Main Boilers *Richardsons Westgarth & Co. Ltd.*

Works No. *2655*

Makers of Donkey Boiler

Works No.

MACHINERY.

Lloyd's Register
Foundation

14
004852-004860-0114

No.

THE BRITISH CORPORATION FOR THE SURVEY

AND

REGISTRY OF SHIPPING.

Report No. 3 No. in Register Book 3

Received at Head Office

24th June 1929

Surveyor's Report on the New Engines, Boilers, and Auxiliary Machinery of the ^{Single Triple} ~~Steam~~ ^{Screw} ~~Steamer~~ *Steamer*

Official No. 1304 Port of Registry

Registered Owners

Canada Steamship Lines Ltd.

Engines Built by

Richardson Westgarth & Co. Ltd.

at

Battleboro.

Main Boilers Built by

Richardson Westgarth & Co. Ltd.

at

Battleboro.

Donkey

at

Date of Completion

First Visit

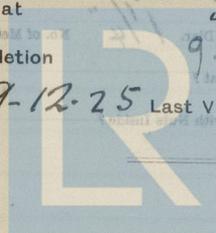
19-12-25

Last Visit

11-9-26

Total Visits

44



Lloyd's Register Foundation

RECIPROCATING ENGINES

Works No. *2656* No. of Sets *1* Description *Triples expansion. S.P. 3 crks.*

No. of Cylinders each Engine *3* No. of Cranks *3*
 Diars. of Cylinders *18"-30"-50"* Stroke *36"*

Cubic feet in each L.P. Cylinder *40.9*
 Are Spring-loaded Relief Valves fitted to Top and Bottom of each Cylr.? *yes*

" " " each Receiver? *yes.*

Type of H.P. Valves, *slide.*

" 1st I.P. "

" 2nd I.P. "

" L.P. "

" Valve Gear *slide Stephenson link.*

" Condenser *Surface.*

Diameter of Piston Rods (plain part) *3 3/4"* Screwed part (bottom of thread) *3.53"*

Material " *S.P.*

Diar. of Connecting Rods (smallest part) *5 1/4"* Material *S.P.*

" Crosshead Gudgeons *5 1/2"* Length of Bearing *8"* Material " *stab.*

No. of Crosshead Bolts (each) *2* Diar. over Thrd. *2 3/4"* Thuds. per inch *6* Material *stab.*

" Crank Pin " *2* " *2 3/4"* " *6* " " *stab.*

" Main Bearings *6* Lengths *10 1/2"*

" Bolts in each *2* Diar. over Thread *3 1/4"* Threads per inch *6* Material *stab.*

" Holding Down Bolts, each Engine *8 1/2"* Diar. *1 1/4"* No. of Metal Checks *8 1/2"*

Are the Engines bolted to the Tank Top or to a Built Seat?

Are the Bolts tapped through the Tank Top and fitted with Nuts Inside?

If not, how are they fitted?

Connecting Rods, Forged by *Darlington Forge & Eng Co. Ltd.*

Piston " "

Crossheads, " "

Connecting Rods, Finished by *R.W. Co. Ltd.*

Piston " "

Crossheads, " "

Date of Harbour Trial

" Trial Trip

Trials run at *St. Lawrence River at Quebec*

Were the Engines tested to full power under Sea-going conditions?

If so, what was the I.H.P.? *no records taken.* Revols. per min.

Pressure in 1st I.P. Receiver, lbs., 2nd I.P., lbs., L.P., lbs., Vacuum, ins.

Speed on Trial *no speed trial.*

If the Conditions on Trial were such that full power records were not obtained give the following estimated data:—

Builders' estimated I.H.P. *1100* Revols. per min. *100*

Estimated Speed *9.5 knots*



© 2020

Lloyd's Register
Foundation

SHAFTING.

Are the Crank Shafts Built or Solid?

built:

No. of Lengths in each

6
9.4"

Angle of Cranks

120°

Diar. by Rule

Actual

10"

In Way of Webs

10 1/2"

" of Crank Pins

10 1/2"

Length between Webs

9 1/16"

Greatest Width of Crank Webs

20"

Thickness

6 1/2"

Least

16"

"

6 1/2"

Diar. of Keys in Crank Webs

2 1/4"

Length

5 1/2"

" Dowels in Crank Pins

Length

Screwed or Plain

No. of Bolts each Coupling

6

Diar. at Mid Length

2 1/2"

Diar. of Pitch Circle

14 1/2"

Greatest Distance from Edge of Main Bearing to Crank Web

1/4"

Type of Thrust Blocks

Koweshae

No. " Rings

5

Diar. of Thrust Shafts at bottom of Collars

10 7/8"

No. of Collars

5

" " Forward Coupling

10"

At Aft Coupling

10"

Diar. of Intermediate Shafting by Rule

Actual

No. of Lengths

No. of Bolts, each Coupling

Diar. at Mid Length

Diar. of Pitch Circle

Diar. of Propeller Shafts by Rule

10.33"

Actual

11"

At Couplings

10"

Are Propeller Shafts fitted with Continuous Brass Liners?

yes.

Diar. over Liners

12 3/8"

Length of After Bearings

3'-8 1/2" + 1'-0 1/2"

Of what Material are the After Bearings composed?

Lignum Vitae.

Are Means provided for lubricating the After Bearings with Oil?

no

" " to prevent Sea Water entering the Stern Tubes?

no

If so, what Type is adopted?

SKETCH OF CRANK SHAFT.

Came as sp City of Kingston

STAMP MARKS ON SHAFTS.

B.C.
 No 1484
 21-4-22
 T.O.S.

B.C.
 No 1484
 21-4-22
 T.O.S.

B.C.
 No 1484
 21-4-22
 T.O.S.

© 2020

Lloyd's Register
Foundation

BOILERS.

Works No. 2655
 No. of Boilers 2 Type Cylindrical multitubular
 Single or Double-ended single.
 No. of Furnaces in each 3
 Type of Furnaces Slighton.
 Date when Plan approved 12-25
 Approved Working Pressure 185-lbs.
 Hydraulic Test Pressure 328
 Date of Hydraulic Test 15-4-26
 " when Safety Valves set 11-9-26
 Pressure at which Valves were set 185 lbs.
 Date of Accumulation Test
 Maximum Pressure under Accumulation Test
 System of Draught natural.
 Can Boilers be worked separately? *Yes*
 Makers of Plates *The Steel Works Scotland Ltd. D. Colville Sons Ltd.*
 Stay Bars *The Steel Works Scotland Ltd. D. Colville Sons Ltd.*
 Rivets *R. B. Co Ltd.*
 Furnaces *Wells Forge Coy.*
 Greatest Internal Diam. of Boilers 13'-3 13/16"
 " " Length " 10'-10 5/16"
 Square Feet of Heating Surface each Boiler 1736 ft.
 " " Grate " " 54.5 ft.
 No. of Safety Valves each Boiler 2 Rule Diam. 2 1/2 Actual 2 3/4
 Are the Safety Valves fitted with Easing Gear? *Yes*
 No. of Pressure Gauges, each Boiler 2 No. of Water Gauges 1
 " Test Cocks " 3 " Salinometer Cocks 1

Water Gauge fitted direct to the Boiler Shell or mounted on fittings?
Are the Water Gauge Fittings fitted direct to the Boiler Shell or connected by Pipes?
Are these Pipes connected to Boilers by Cocks or Valves?
Are Blow-off Cocks or Valves fitted on Boiler Shells?
No. of Stitches of Shell Plating in each Boiler
Plates in each Stave
Thickness of Shell Plates Approved
in Boilers
Are the Rivets Iron or Steel?
Are the Longitudinal Stems fitted with Lap Joints?
Are the Butt Joints Single or Double?
Are the Double Butt Joints of equal width?
Thickness of outside Butt Straps
inside
Are Longitudinal Stems Hand or Machine Riveted?
Are they Single, Double, or Triple Riveted?
No. of Rivets in a Pitch
Diam. of Rivet Holes
No. of Rows of Rivets in Centre Circumferential Stems
Are these Stems Hand or Machine Riveted?
Diam. of Rivet Holes
No. of Rows of Rivets in Front and Circumferential Stems
Are these Stems Hand or Machine Riveted?
Diam. of Rivet Holes
No. of Rows of Rivets in Back End Circumferential Stems
Are these Stems Hand or Machine Riveted?
Diam. of Rivet Holes
No. of Rows of Rivets in Back End Circumferential Stems
Are these Stems Hand or Machine Riveted?
Diam. of Rivet Holes
Dimensions of Compressing Rings

Water Gauge fitted direct to the Boiler Shell or mounted on fittings?
Are the Water Gauge Fittings fitted direct to the Boiler Shell or connected by Pipes?
Are these Pipes connected to Boilers by Cocks or Valves?
Are Blow-off Cocks or Valves fitted on Boiler Shells?
No. of Stitches of Shell Plating in each Boiler
Plates in each Stave
Thickness of Shell Plates Approved
in Boilers
Are the Rivets Iron or Steel?
Are the Longitudinal Stems fitted with Lap Joints?
Are the Butt Joints Single or Double?
Are the Double Butt Joints of equal width?
Thickness of outside Butt Straps
inside
Are Longitudinal Stems Hand or Machine Riveted?
Are they Single, Double, or Triple Riveted?
No. of Rivets in a Pitch
Diam. of Rivet Holes
No. of Rows of Rivets in Centre Circumferential Stems
Are these Stems Hand or Machine Riveted?
Diam. of Rivet Holes
No. of Rows of Rivets in Front and Circumferential Stems
Are these Stems Hand or Machine Riveted?
Diam. of Rivet Holes
No. of Rows of Rivets in Back End Circumferential Stems
Are these Stems Hand or Machine Riveted?
Diam. of Rivet Holes
Dimensions of Compressing Rings



© 2020
 Lloyd's Register
 Foundation

Diar. of Stays Approved $2\frac{1}{4}"$ Threads per Inch 6
 " " in Boilers $2\frac{1}{4}"$ 6
 Material " steel
 Thickness of Front Tube Plates Approved $\frac{1}{8}"$ 6
 " " " " in Boilers $\frac{1}{8}"$
 Pitch of Stay Tubes at Spaces between Stacks of Tubes $14\frac{1}{4}" \times 8\frac{3}{4}"$
 Thickness of Doublings in " " "
 " Stay Tubes at " " " $5\frac{1}{16}" \times 3\frac{1}{8}"$
 Are Stay Tubes fitted with Nuts at Front End? yes.
 Thickness of Back Tube Plates Approved Centre $3\frac{1}{4}"$ wings $2\frac{1}{32}"$
 " " " in Boilers $3\frac{1}{4}"$ $2\frac{1}{32}"$
 Pitch of Stay Tubes in Back Tube Plates $13\frac{1}{2}" \times 8\frac{3}{4}"$
 " Plain " $14\frac{1}{2}" \times 4\frac{3}{8}"$
 Thickness of Stay Tubes $5\frac{1}{16}"$ $3\frac{1}{8}"$ $5\frac{1}{16}"$
 " Plain " steel
 External Diar. of Tubes $3\frac{1}{4}"$
 Material " Iron
 Thickness of Furnace Plates Approved $17\frac{1}{32}"$
 " " " in Boilers $17\frac{1}{32}"$
 Smallest outside Diar. of Furnaces $3\frac{1}{2}" - 3\frac{13}{16}"$
 Length between Tube Plates $7' - 9"$
 Width of Combustion Chambers (Front to Back) $2' - 5\frac{5}{16}"$
 Thickness of " " Tops Approved Centre $2\frac{3}{32}"$ wings $\frac{1}{16}"$
 " " " in Boilers $2\frac{3}{32}"$ $\frac{1}{16}"$
 Pitch of Screwed Stays in C.C. Tops $10\frac{1}{2}" \times 8\frac{5}{8}"$

Diar. of Screwed Stays Approved $2\frac{1}{4}"$ Threads per Inch 6
 " " in Boilers $2\frac{1}{4}"$ 6
 Material " steel
 Thickness of Combustion Chamber Plates Approved $\frac{1}{8}"$ 6
 " " " " in Boilers $\frac{1}{8}"$
 Pitch of Screwed Stays in C.C. Tops $10\frac{1}{2}" \times 8\frac{5}{8}"$
 Diar. " " Approved $2\frac{1}{4}"$ Threads per Inch 6
 " " in Boilers $2\frac{1}{4}"$ 6
 Material " steel
 Thickness of Combustion Chamber Plates Approved $\frac{1}{8}"$ 6
 " " " " in Boilers $\frac{1}{8}"$
 Pitch of Screwed Stays in C.C. Tops $10\frac{1}{2}" \times 8\frac{5}{8}"$
 Diar. " " Approved $2\frac{1}{4}"$ Threads per Inch 6
 " " in Boilers $2\frac{1}{4}"$ 6
 Material " steel
 Are all Screwed Stays fitted with Nuts inside C.C.?
 Thickness of Combustion Chamber Bottoms
 No. of Rivets over each Wing Chamber
 Centre
 Length and Thickness of Rivets
 Material of Rivets
 No. of Stays in each
 No. of Tubes in each
 Size of Lower Standards



© 2020
 Lloyd's Register
 Foundation

Diar. of Screwed Stays Approved $1\frac{3}{4}$ " Threads per Inch 9

" " " in Boilers $1\frac{3}{4}$ "

Material " " *steel*

Thickness of Combustion Chamber Sides Approved *Centre $2\frac{1}{32}$ " wings $\frac{1}{16}$ "*

" " " " in Boilers $2\frac{1}{32}$ " $\frac{1}{16}$ "

Pitch of Screwed Stays in C.O. Sides $8\frac{5}{8}" \times 8"$

Diar. " " Approved $1\frac{3}{4}$ " Threads per Inch 9

" " " in Boilers $1\frac{3}{4}$ " 9

Material " " *steel*

Thickness of Combustion Chamber Backs Approved $\frac{1}{16}"$ $\frac{1}{16}"$

" " " " in Boilers $\frac{1}{16}"$ $\frac{1}{16}"$

Pitch of Screwed Stays in C.O. Backs $10" \times 8"$

Diar. " " Approved $2\frac{1}{8}" 2\frac{1}{8}" 1\frac{3}{4}"$ Threads per Inch 9

" " " in Boilers $2\frac{1}{8}" 2\frac{1}{8}" 1\frac{3}{4}"$ 9

Material " " *steel*

Are all Screwed Stays fitted with Nuts inside C.O.? *Yes.*

Thickness of Combustion Chamber Bottoms $\frac{1}{4}"$

No. of Girders over each Wing Chamber 4

" " " Centre " 2

Depth and Thickness of Girders $8" \times 1\frac{1}{8}"$

Material of Girders *steel*

No. of Stays in each 2

No. of Tubes, each Boiler *Centre $2\frac{1}{32}$ " wings $\frac{1}{16}$ "* 208

Size of Lower Manholes $16" \times 12"$

VERTICAL DONKEY BOILERS

No. of Boilers

Type

Greatest Inp. Diam.

Height of Boiler Crown above Fire Grate

Are Boiler Crowns Flat or Dished?

Internal Radius of Dished Ends

Thickness of Plates

Description of Seams in Boiler Crowns

Diam. of Rivet Holes

Pitch

Height of Ribbed Crowns above Fire Grate

Are Ribbed Crowns Flat or Dished?

Thickness of Plates

Internal Radius of Dished Crowns

Material

Ular

No. of Crown Stays

Internal Diam. of Ribbox at Top

Bottom

Thickness of Plates

No. of Water Tubes

Internal Diam.

Material of Water Tubes

Size of Manhole in Shell

Dimensions of Compensating Ring

Internal Diam. of Ribbox

Internal Surface, each Boiler

SUPERHEATERS

Description of Superheaters

Where situated?

Which Boilers are connected to Superheaters?

Can Superheaters be shut off while Boilers are working?

No. of Safety Valves on each Superheater

Date of Examination

Date when Safety Valves set

Pressure on Valves



© 2020
Lloyd's Register
Foundation

VERTICAL DONKEY BOILERS.

No. of Boilers *1* Type *Vertical*

Greatest Int. Diar. *36"* Height *12'*

Height of Boiler Crown above Fire Grate *12'*

Are Boiler Crowns Flat or Dished? *Flat*

Internal Radius of Dished Ends *18"* Thickness of Plates *3/8"*

Description of Seams in Boiler Crowns *5/8" x 6"*

Diar. of Rivet Holes *1 1/2"* Pitch *2"* Width of Overlap *1/2"*

Height of Firebox Crowns above Fire Grate *9'*

Are Firebox Crowns Flat or Dished? *Flat*

External Radius of Dished Crowns *18"* Thickness of Plates *3/8"*

No. of Crown Stays *4* Diar. *10"* Material *Steel*

External Diar. of Firebox at Top *36"* Bottom *36"* Thickness of Plates *3/8"*

No. of Water Tubes *28* Ext. Diar. *2 1/2"* Thickness *1/4"*

Material of Water Tubes *Steel*

Size of Manhole in Shell *24" x 14" x 1/2"*

Dimensions of Compensating Ring *Steel*

Heating Surface, each Boiler *1000* Grate Surface *1000*

SUPERHEATERS.

Description of Superheaters *Vertical*

No. of Superheaters over each Wing (Number) *4*

Where situated? *On top of boiler*

Which Boilers are connected to Superheaters? *1 & 2*

Can Superheaters be shut off while Boilers are working? *Yes*

No. of Safety Valves on each Superheater *2* Diar. *2"*

Are " " fitted with Easing Gear? *Yes*

Date of Hydraulic Test *2/16/10* Test Pressure *160*

Date when Safety Valves set *2/16/10* Pressure on Valves *160*

MAIN STEAM PIPES.

No. of Lengths *1*

Material *Steel*

Heated, Welded or Seamless *Welded*

Internal Diar. *36"*

Thickness *3/8"*

How are Flanges secured? *By nuts & washers*

Date of Hydraulic Test *2/16/10*

Test Pressure *160*

No. of Lengths *1*

Material *Steel*

Heated, Welded or Seamless *Welded*

Internal Diar. *36"*

Thickness *3/8"*

How are Flanges secured? *By nuts & washers*

Date of Hydraulic Test *2/16/10*

Test Pressure *160*

No. of Lengths *1*

Material *Steel*

Heated, Welded or Seamless *Welded*

Internal Diar. *36"*

Thickness *3/8"*

How are Flanges secured? *By nuts & washers*

Date of Hydraulic Test *2/16/10*

Test Pressure *160*



© 2020

Lloyd's Register
Foundation

MAIN STEAM PIPES.

No. of Lengths

Material

Brazed, Welded or Seamless

Internal Diam.

Thickness

How are Flanges secured?

Date of Hydraulic Test

Test Pressure

2
Copper
Seamless
4 1/2"
5 wt.
Brazed
9-76
370 lb.

No. of Lengths

Material

Brazed, Welded or Seamless

Internal Diam.

Thickness

How are Flanges secured?

Date of Hydraulic Test

Test Pressure

SUPERHEATERS

No. of Lengths

Material

Brazed, Welded or Seamless

Internal Diam.

Thickness

How are Flanges secured?

Date of Hydraulic Test

Test Pressure

STEAM EVAPORATORS

Ballast pump 9" x 10" diameter
General steam pump 8" x 10" diameter
Cylinder, pump 8" x 10" diameter

FEED WATER HEATERS

185 lb. Test Pressure
Date of Test 10-14-02
Type 1
No. 1

FEED WATER FILTERS

Working Pressure
Test Pressure
Date of Test



© 2020

Lloyd's Register
Foundation

EVAPORATORS.

No.	Type	Tons per Day
Makers		
Working Pressure	Test Pressure	Date of Test
Date of Test of Safety Valves under Steam		

FEED WATER HEATERS.

No.	Type	
1	Low steam Surface Feed Heats.	
Makers R. W. Co. Ltd.		
Working Pressure	Test Pressure	Date of Test
185 lbs.	432 lbs.	15-4-26

FEED WATER FILTERS.

No.	Type	Size
Makers		
Working Pressure	Test Pressure	Date of Test

LIST OF DONKEY PUMPS.

Ballast pump. 9" x 10" x 10" Henry Watson Co.
 General Service pump. 8" x 5" x 8" Thos. Lamont.
 Sanitary pump. 4" x 2 3/4" x 5" Thos. Lamont.



© 2020

Lloyd's Register
Foundation

REPORT TO BE FILLED OUT BY THE

No. of Lights	Time required to obtain this result	Time as to how long	Time as to how long	COMPARISON
---------------	-------------------------------------	---------------------	---------------------	------------

--	--	--	--	--

No. of Motors, Cylinders, with Nameplate	No. of Circuits
--	-----------------

Particulars of Motors in connection with Machinery that are connected with the whole system or with any part of it

--	--

--	--

--	--

--	--

--	--

--	--

--	--

--	--

--	--

--	--

--	--

ELECTRIC LIGHTING.

Installation Fitted by

Davis Shipbuilding Repairing Co. Ltd.

No. and Description of Dynamos

1 compound wound

Makers of Dynamos

General Electric Co.

Capacity

Amperes, at

Volts.

Revolvs. per Min.

Current Alternating or Continuous

Single or Double Wire System

Position of Dynamos

„ Main Switch Board

No. of Circuits to which Switches are provided on Main Switch Board

Particulars of these Circuits:—

Circuit.	Number of Lights.	Candle Power.	Current Required. Amps.	Size of Conductor.	Current Density.	Conductivity of Conductor.	Insulation Resistance per Mile.
----------	-------------------	---------------	-------------------------	--------------------	------------------	----------------------------	---------------------------------

Saw as per S. Winnick



© 2020

Lloyd's Register Foundation

Total No. of Lights No. of Motors driving Fans, &c. No. of Heaters

Current required for Motors and Heaters

Positions of Auxiliary Switch Boards, with No. of Switches on each

Boiler Room
Engine Room
Ward Room
Ward Room

Installation fitted by
 No. and Description of Dynamos
 Make of Dynamos
 Capacity
 Ampere at
 Revs. per Min.
 Current Alternating or Continuous
 Single or Double Wire System
 Location of Dynamos
 Main Switch Board
 No. of Circuits to which switches are provided on Main Switch Board
 Particulars of these Circuits—

Circuit	Number of Lights	Capacity	Location of Conductors	Current	Conductivity of Conductors	Insulation
---------	------------------	----------	------------------------	---------	----------------------------	------------

Are Out-outs fitted as follows?—

On Main Switch Board, to Cables of Main Circuits

On Aux. " " each Auxiliary Circuit

Wherever a Cable is reduced in size

To each Lamp Circuit

To both Flow and Return Wires of all Circuits when the Double-Wire System is adopted

Are the Fuses of Standard Sizes?

Are all Switches and Cut-outs constructed of Non-inflammable Material?

Are they placed so as to be always and easily accessible?

Smallest Single Wire used, No. S.W.G., Largest, No. S.W.G.

How are Conductors in Engine and Boiler Spaces protected?

" Saloons, State Rooms, &c., " ?

What special protection is provided in the following cases?—

- (1) Conductors exposed to Heat or Damp
- (2) " passing through Bunkers or Cargo Spaces
- (3) " " Deck Beams or Bulkheads

Same as Winipeg
Same as
Ward Room
Ward Room
Ward Room

Are all Joints in Cables properly soldered and thoroughly Insulated so that the efficiency of the Cables

is not impaired?

Are all Joints in accessible positions, none being made in Bunkers or Cargo Spaces?

Are all Hull Connections for Single-Wire Systems made with Screws of large Surface?

Are the Dynamos, Motors, Main and Branch Cables, so placed that the Compasses are not injuriously

affected by them?

Have Tests been made to prove that this condition has been satisfactorily fulfilled?

Has the Insulation Resistance over the whole system been tested?

What does the Resistance amount to?

Ohms.

Is the Installation supplied with a Voltmeter?

" " " an Ampere Meter?

Date of Trial of complete Installation

11. 9. 76

Duration of Trial

6 hours
Yes

Have all the requirements of Section 42 been satisfactorily carried out?

It is submitted that this Report be approved.

Approved by the Committee for the Examination of the Construction of Engines and Boilers, so far as can be seen, sound and

approved by the Committee for the Examination of the Construction of Engines and Boilers, so far as can be seen, sound and

Approved by the Committee for the Examination of the Construction of Engines and Boilers, so far as can be seen, sound and



© 2020

Lloyd's Register Foundation

GENERAL CONSTRUCTION

H.S. 3400
 118
 H.S. 3400
 118

H.S. 3400
 118

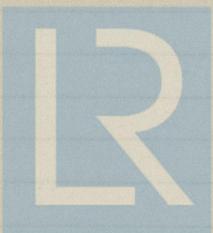
Expenses	
Testing fee	
Total	

30.00
 30.00

It is certified that this Report is approved.

Approved by the Committee for the Class of M.E.'s on this date

[Handwritten signatures and names]



© 2020
 Lloyd's Register
 Foundation



© 2020

Lloyd's Register
Foundation



© 2020

Lloyd's Register
Foundation