

## REPORT ON MACHINERY.

No. 35675

Date of writing Report

When made at Local Office

Received at London Office

THU. 30 DEC. 1915

No. in Survey held at  
Reg. Book.

Port of Glasgow

Date, First Survey

24/3/14

Last Survey

18/12/1919

(Number of Visits)

105

Master

Built at Port Glasgow

By whom built

Wm Hamilton &amp; Co (1915)

Tons

Gross

Net

When built

1915-

Engines made at

Glasgow

By whom made

D. Rowan &amp; Co

No 616/17

when made

1915-

Boilers made at

Glasgow

By whom made

D. Rowan &amp; Co

No 616/17

when made

1915-

Registered Horse Power

Owners

Federal S.N. Co. Ltd

Port belonging to

Nom. Horse Power as per Section 28

1100

not for Reg. Bk.

Is Refrigerating Machinery fitted for cargo purposes

Yes

Is Electric Light fitted

Yes

Engines, &amp;c. — Description of Engines

Twin screw General Purpose

No. of Cylinders

No. of Cranks

No. of Cylinders

HP 19" LP 39"

Gear Ratio 17.24:1

Length of Stroke

Revs. per minute

110

Dia. of Screw shaft

Material of screw shafts

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

Yes

Is the after end of the liner made water tight

Is the propeller boss

Yes

If the liner is in more than one length are the joints burned length

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

liners are fitted, is the shaft lapped or protected between the liners

Dia. of Tunnel shaft as per rule 132

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

To. of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

To. of Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

To. of Donkey Engines

SIZES OF PUMPS

No. and size of Suctions connected to both Bilge and Donkey pumps

In Holds, &amp;c.

To. of Bilge Injections

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room &amp; size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship

Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the Discharge Pipes above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

Are the Blow Off Cocks fitted with a spigot and brass covering plate

That pipes are carried through the bunkers

How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Dates of examination of completion of fitting of Sea Connections

of Stern Tube

Screw shaft and Propeller

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from top platform

Boilers, &amp;c. — (Letter for record)

Manufacturers of Steel

David Colville &amp; Son Ltd

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

In 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

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

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Percentages of strength of longitudinal joint

Working pressure of shell by rules

Size of manhole in shell

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

Bottom

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space

Material of stays

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Working pressures by rules

Girders to Chamber tops: Material

Depth and

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

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivets

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

Distances 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

Lloyd's Register

GLS134-0022



If so, is a report now forwarded?

*The foregoing is a correct description,*

for David Rowan C. J. Manufacturer.

Dates of Survey while building	During progress of work in shops - -	1914. Mar. 26. Apr. 23. May 16. 18. June 1. 26. July 9. 28. 29. Aug. 12. 5. Sept. 2. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Oct. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Nov. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Dec. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31.
	During erection on board vessel - - -	5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Jan. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Feb. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Mar. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Apr. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. May 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Jun. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Jul. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Aug. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Sep. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Oct. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Nov. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. Dec. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31.
	Total No. of visits	105
		Is the approved plan of main boiler forwarded herewith.

Is an installation fitted for burning oil fuel No

Have the requirements of Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case \_\_\_\_\_ If so, state name of vessel. No 1

**General Remarks** (State quality of workmanship, opinions as to class, &c. *These engines and boilers have*

been built under special survey, the materials and workmanship are of good description they have been well fitted on board and tried under strain.

In my opinion This machinery is eligible to have notice  
of F.L.M.C. 92-15 (in red) in the Register Book

It is submitted that  
this vessel is eligible for  
THE BBOORD. + LMC 12. 15. F.D.

4 Steam Turbines geared to 2 Screw Shaf'ts.

55B. GS 357. HS 14940. (5)

The amount of Entry Fee	...	£ 3	:	:	When applied for,
Special	...	£ <del>68</del> 18	:	:	29/12/1915
Donkey Boiler Fee	...	£ 72 10	:	:	When received,
Travelling Expenses (if any)	£	See b/s. ltr 30/12/15.	:	:	4/1/1916

Committee's Minute GLASGOW 29 DEC. 1915

Assigned + L.M.C. 12/15

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping pres



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Foundation