Report (if any) on Hull of Vessel. No. 1391 Port Glasgow

Port Glasgow Oct. 16th 1876

Details of Main Boilers of the Steam Ship "Rotorua" tons

"Rec'd 19/10/76"

Diameter	13'-7½"		Length	14'-8"	
Thickness of shell plates	18/16"				
Description of riveting of longitudinal joints	Treble riveted		of circumferential joints	Double riveted	
Pitch of rivets	ditto	3¾" × 2¼"	ditto	4½" × 1⅞"	
Diameter of rivets	ditto	1⅛"	ditto	1⅛"	
Lap of plating	ditto	9½"	ditto	5"	
Size of manholes in circular shell		17" × 13"			
How compensated for		By Doubling plate.			
Number of furnaces in boiler		Six (Three in each end)			
Diameter of furnaces		3'-4"	Length of furnaces	6'-0"	
Thickness of furnace plates		9/16"			
Description of joint of furnaces		Double butt Straps fitted			
Whether strengthened with rings		None	Greatest length between rings		
Thickness of combustion chamber plating		9/16"			
Diameter of screw stays to ditto		1⅜"	pitch of stays	8¾" × 8¾"	
End plates, thickness		12/16"			
Diameter of longitudinal stays to end plates		3⅛"	pitch of ditto	18" × 24"	
How stays are secured		By double nuts on Angle iron		(See Sketch other side)	
Diameter of tubes		3"	pitch of tubes	4¼"	
Thickness of tube plates		12/16"			
Stayed by		Tubes ⅜" thick	pitch of stays	12¾" × 12¾"	
Description of steam receiver		None connected to Boiler by neck piece			
Diameter of ditto		4'-9"	length of ditto	8'-0"	
Thickness of plating of ditto		10/16"	ends	14/16"	
Ends, how stayed		Radial Top & Bottom			

James Mollison

Engineer Surveyor to Lloyd's Register of Shipping.

P.T.O.

(1000/4/8/76.)

IRON468-0407

17171 Iron

Formulae for Shell $\frac{31520 \times 2.25 \times 70\%}{161 \times 6.5} = 77$ lbs

Formula for flat plates $\frac{100 \times 64}{67} = 95$ lbs

Formula for Stays $\frac{\sqrt{600} \times .25}{6' \times 40''} = 93$ lbs

Longitudinal Stays 3⅛" dia 2'-3" × 1'-6" pitch = 4477 lbs