

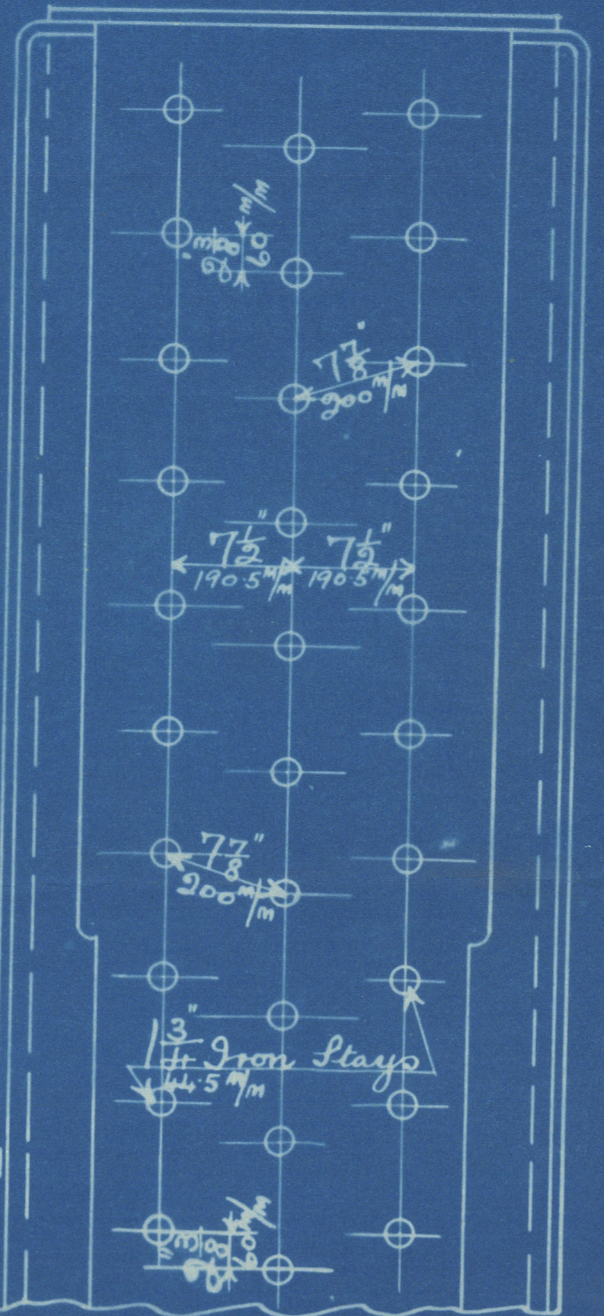
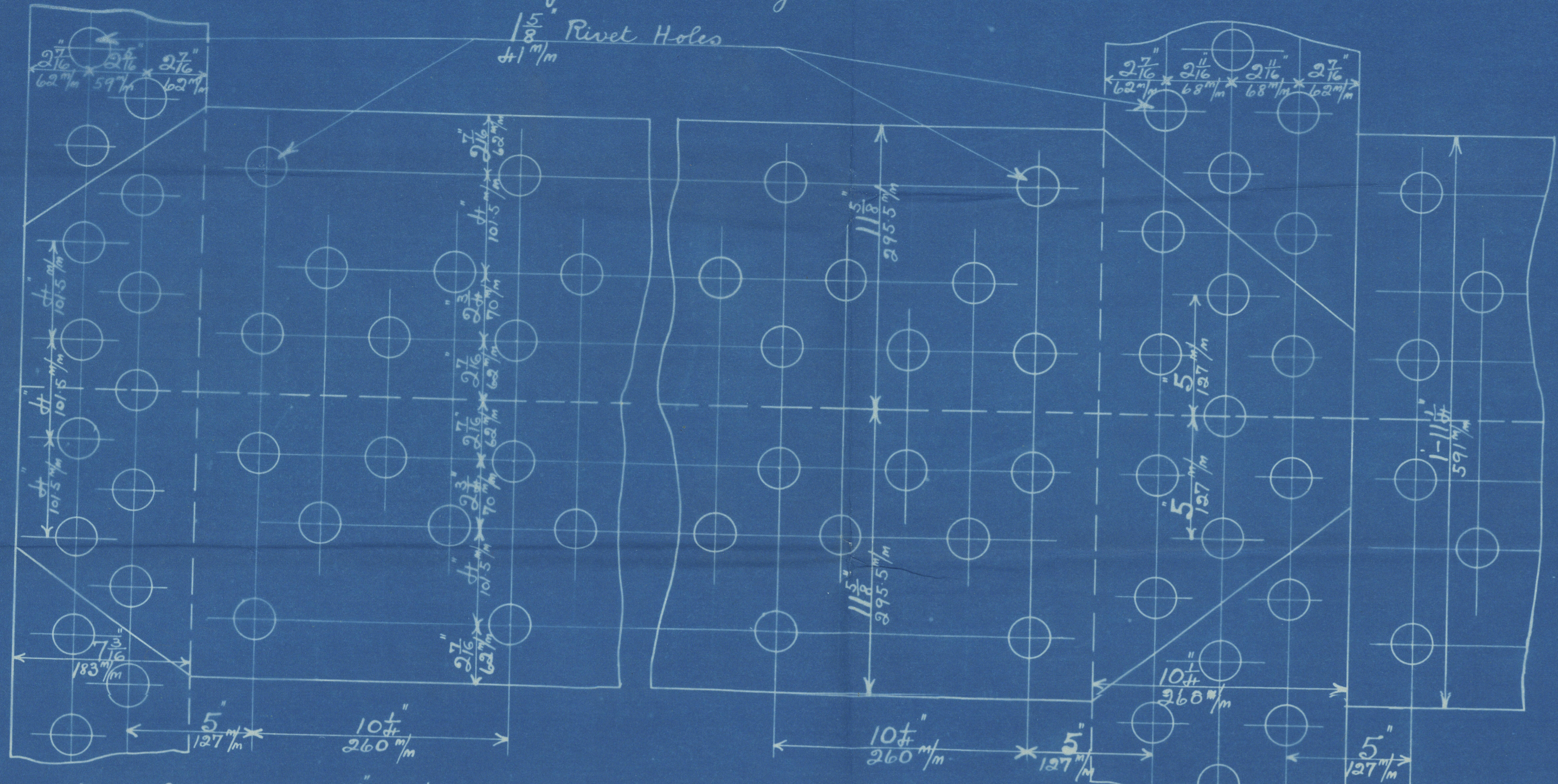
# PALLION ENGINE WORKS

## BOILERS 4-OFF

TRACING N° 6223

31/7/12

Plan of Shell Riveting



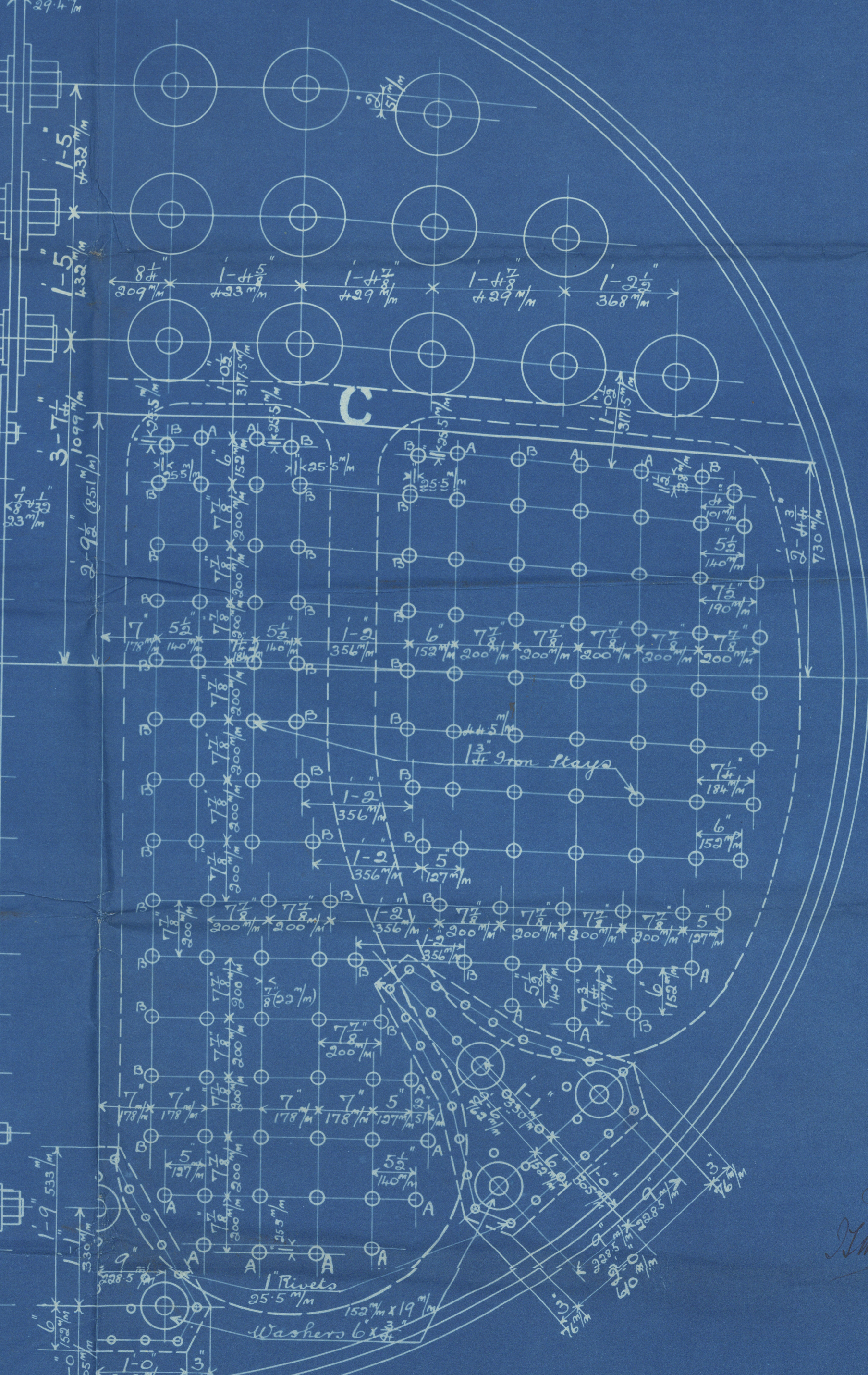
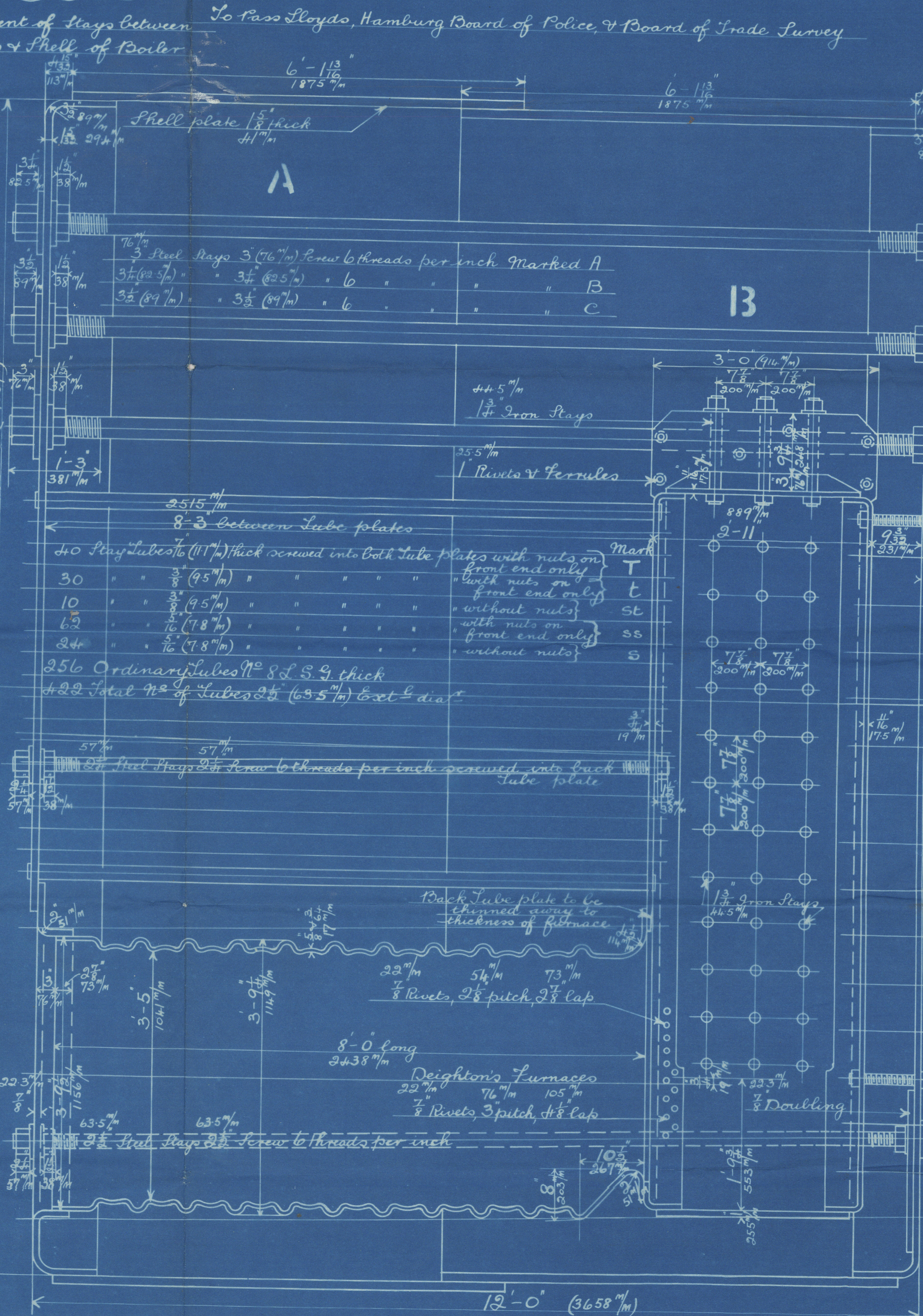
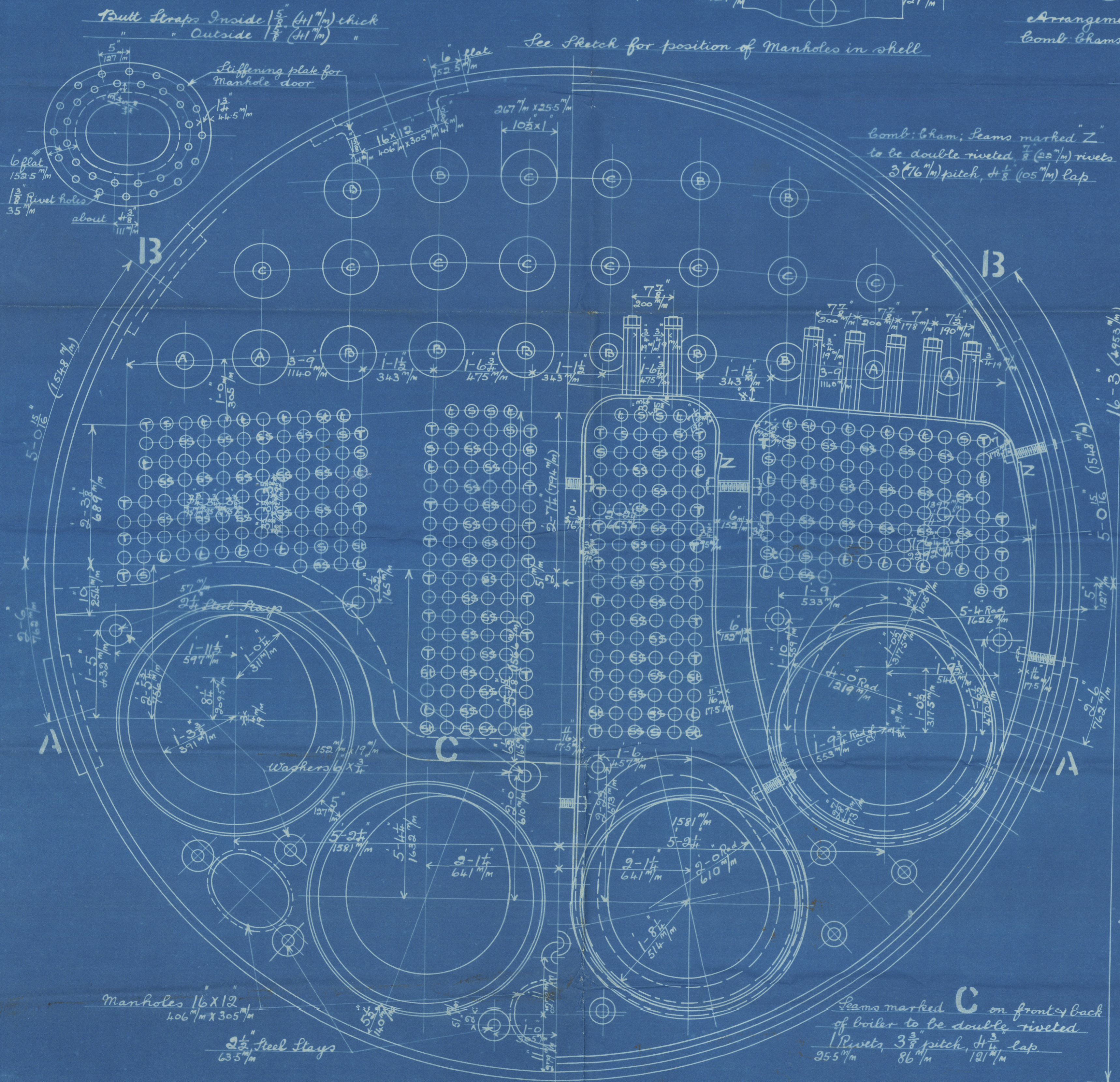
Longitudinal Seams		Proyds BOT
Sectional Area of Plate between Rivet Holes	84.14	84.14
" " Rivets	92.6	84.56
Circumferential Seams (Ends)		
Sectional Area of plate between Rivet Holes	59.37	59.37
" " Rivets	54.24	46.23
Circumferential Seam (Centre)		
Sectional Area of plate between Rivet Holes	67.5	67.5
" " Rivets	65.09	55.47
Tensile Strength of Material		
Shell Plates & Butt Straps not less than 3 1/2 tons per sq. in. (50 Kg./sq. in.) & not more than 3.5 tons per sq. in. (55 Kg./sq. in.)		
B.C. Girder & Manhole door plate	28.5	(44.88)
Comb. Cham. & End plates	26	(40.94)
Longitudinal Flays	28	(44.1)
Screwed Flays (Iron)	22.2	(35.0)
Rivets	27	(42.5)

Working Pressure 220 lbs per sq. in. (15.47 Atms)  
 Test " 440 " (30.94 " )  
 All holes in shell to be drilled in place after bending  
 Hydraulic Riveting where possible

Heating Surface	
Tubes	2324.8 sq. ft.
Combustion Chambers	274.9 "
Lunettes	213.47 "
Tube plates	90.1 "
Total	2903.27 "
Steam Capacity 542 ft³	

Boilers to be fitted with gear for burning liquid fuel

WILKINSON & SONS LTD  
 ENGINEERS  
 SUNDERLAND  
 SHIPBUILDERS & ENGINEERS



CONTRACT N° 457  
 459

SUNDERLAND

W<sup>m</sup> DOXFORD & SONS L

(4) BOILERS N<sup>o</sup> 457

W.P. = 220 LB per sq"

N<sup>o</sup> DOXFORD & SONS W.P. 220 N<sup>o</sup> 457

Mark on boilers:—

N<sup>o</sup> 3159

LLOYD'S TEST

440 LBS

16-10-1913

L.C.D.



S.S. "San Jeronimo"

Slu Rpt No 26010



N.N. "Southern Express"

W127-0191



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