

JMB

**REPORT ON BOILERS.**

No. 48585

14 NOV 1928

Received at London Office

of writing Report	10 When handed in at Local Office	10 Port of
No. in Survey held at	<u>Annan</u>	Date, First Survey Sept 28 Last Survey 6th Oct. 1928
'Book.	<u>188</u> on the <u>BOILER No. 11029. Baldwin screw Motor Vessel "SANTA INEZ."</u> Yard No. 552.	(Number of Visits 6 Gross 5538.40 Tons 3371.14 Net 3371.14)
ster	Built at <u>Copenhagen</u> By whom built <u>Messrs. Bunnister &amp; Wain Copenhagen</u>	When built 1929
sters made at	<u>Annan</u> By whom made <u>Messrs. Cochran &amp; Co. Annan Ltd.</u>	When made 1928
mers	<u>Grace Steamship Company Incorporated. (Nor Grace &amp; Co.)</u>	Port belonging to <u>New York. U.S.A.</u>

VERTICAL DONKEY BOILER—	No.	Description	Manufacturers of steel
made at <u>Annan</u>	<u>One</u>	<u>Vertical</u>	<u>S. Colville &amp; Sons</u>
By whom made <u>Cochran &amp; Co. Annan</u>		When made 1928	Where fixed in <u>machinery space</u>
tested by hydraulic pressure to <u>200 lbs</u>		Date of test <u>6-11-28</u>	Working pressure <u>100 lbs</u>
Area of safety valves <u>Two</u>		No. of Certificate <u>18097</u>	Fire grate area <u>11<sup>3</sup>/<sub>4</sub>"</u>
Area of each <u>1' 76 7/8"</u>		Description of safety valves <u>Enclosed Spring</u>	
Area of tensile strength <u>28.32</u>		Pressure to which they are adjusted <u>80 lbs</u>	If fitted with easing gear Yes
Diameter of donkey boiler <u>4' 9"</u>		Material of shell plates <u>Steel</u>	Thickness <u>3/8", 7/16", 3/8"</u>
Length <u>12' 6"</u>		Diameter of rivet holes <u>2 3/32"</u>	Whether punched or drilled
Material of tensile strength <u>28.32</u>		Pitch of rivets <u>2 3/16", 2 3/33", 2 3/29</u>	Rivets <u>76.4</u>
Pitch of rivets <u>2 3/16", 2 3/33", 2 3/29</u>		Lap of plating <u>3 3/4"</u>	Working pressure of shell by plates <u>69.1</u>
Thickness of shell crown plates <u>9/16"</u>		Per centage of strength of joint <u>90%</u>	
Radius of do. <u>4' 9"</u>		No. of stays to do. <u>✓</u>	Diameter of stays <u>✓</u>
Radius of do. <u>4' 9"</u>		Description of joint <u>S.R. Lap.</u>	Diameter of furnace
Thickness of furnace Top <u>3' 10 1/4"</u>		Working pressure of furnace by rules <u>147.5 lbs</u>	Working pressure by rules <u>✓</u>
Bottom <u>4' 3"</u>		Thickness of Ogee ring <u>✓</u>	Thickness of furnace
Length of furnace <u>4' 6"</u>		Working pressure of Ogee ring by rules <u>✓</u>	Thickness of furnace
Thickness of furnace side plates <u>5/8"</u>		Working pressure of Ogee ring by rules <u>✓</u>	Thickness of furnace
Radius of do. <u>2' 0"</u>		Stayed by <u>Hemispher</u>	Thickness of uptake
Radius of do. <u>2' 0"</u>		Diameter of uptake <u>11" x 16 3/4"</u>	Thickness of uptake
Thickness of tube plates <u>front 3/4", back 5/8"</u>		Mean pitch of stay tubes in nest <u>9 1/2"</u>	
Diameter of tube holes FRONT <u>stay 2 1/16", plain 2 9/16"</u>		Pitch in outer vertical rows <u>7.32"</u>	
Diameter of tube holes BACK <u>stay 2 1/2", plain 2 1/2"</u>		Working pressure of tube plates by rules <u>F. 105.1 lbs</u>	Tubes: Material <u>Wootton</u>
External diameter <u>stay 2 1/2", plain 2 1/2"</u>		No. of threads per inch <u>9</u>	Pitch of tubes <u>3 5/8" x 3.661"</u>
Thickness <u>stay 7/32", plain 11 4/5 G.</u>		Manhole compensation: Size of opening in shell plate <u>16" x 12"</u>	Section of compensating ring
Working pressure by rules <u>125 lbs</u>		No. of rivets and diameter of rivet holes <u>32 off. 2 3/32"</u>	
Working pressure by rules <u>5" x 17/32"</u>		Outer row pitch at ends <u>48"</u>	

The foregoing is a correct description,

For COCHRAN & CO. ANNAN, LIMITED Manufacturer,  
J. H. Woodham

Dates Survey while building	During progress of work in shops -	<u>1928 Sept 28. Oct 4. 12. 16. 23 1929</u>	Drawing No. <u>16583</u>
	During erection on board vessel	<u>Jan. 7. 18. 30. Feb. 9. 18. 21. 22. 26. March 4. 6. 14. 18. 25. 28.</u>	<u>Approved</u>
	Total No. of visits	<u>6</u>	Is the approved plan of boiler forwarded herewith <u>Yes</u>

15/11/28

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) This boiler has been built under survey in accordance with the rules and approved plan. The materials and workmanship are good. This boiler is to the order Messrs. Bunnister & Wain Copenhagen, and intended for their ship No 552.

This donkey boiler has been fitted on board the above vessel and connected complete to our entire satisfaction. —

Two Wier's patent feed pumps 4" x 6" x 8" have been fitted for feeding purpose to the boiler. —

*and Subsidiaries*  
*SURVEYORS TO LLOYD'S*  
*REGISTER OF SHIPPING*  
*COPENHAGEN*

Survey Fee ... £ 4 : 4 : 0

When applied for

19

Travelling Expenses (if any) £ : : :

When received

19

**MONTHLY ACCOUNT***A. Campbell*  
Engineer Surveyor to Lloyd's Register of Shipping.JUE 7 MAY 1929  
See Ch. I. 8 aplLloyd's Register Foundation  
1942

Committee's Minute GLASGOW 13 NOV 1928

Assigned TRANSMIT TO LONDON

007412 - 007421 - 0140