

REPORT ON BOILERS.

No. 68006

Received at London Office

27 JAN 1944 21 DEC 1944

5e. *Empire Dynasty at NEM 2/11/44*

Port of **GLASGOW.**

When handed in at Local Office **24. 1. 44**

Survey held at **ANNAN** Date, First Survey **27th Aug. 1943** Last Survey **21st January 19 44**

g. Book. **9's EMPIRE DYNASTY** (Number of Visits **Ten**)

on the **Sunderland** By whom built **J.L. THOMPSON & Co LTD Caledon Shipbuilding Co. Ltd.** Yard No. **631, 407** Tons { Gross Net

When built **1944-11.**

Boilers made at **ANNAN** By whom made **Cochran & Co. (Annan) Ltd** Boiler No. **15733** When made **1944**

Port belonging to

VERTICAL DONKEY BOILER— No. **One** Description **Cochran** Manufacturers of steel **Colvilles Ltd.**

made at **Annan** By whom made **Cochran & Co. (Annan) Ltd.** When made **1944** Where fixed **Oil** Working pressure **105 lbs.**

tested by hydraulic pressure to **208** Date of test **21.1.44** No. of Certificate **2163** Fire grate area **Fired** Description of safety valves **ordinary**

of safety valves **2** Area of each **4.9 sq. inch.** Pressure to which they are adjusted **105 lbs.** If fitted with easing gear **yes** If steam from main boilers can

er the donkey boiler **No.** Diameter of donkey boiler **6'6"** Length **16'3"** Material of shell plates **S** Thickness **15/32"** **19/32"**

ange of tensile strength **28-32 tons** Description of riveting long seams **D.R. Lap** Diameter of rivet holes **27/32"** Whether punched or

illed drilled **Pitch of rivets 2.66"** **2 11/16"** **2 27/32"** Lap of plating **4 1/4"** Per centage of strength of joint Rivets **68.9** Working pressure of shell by

es **109.9** Thickness of shell crown plates **13/32"** **7/8"** Radius of do. **3'3"** No. of stays to do. **-** Diameter of stays **-** Diameter of

nace—Top **-** Bottom **5'6"** Length of furnace **-** Thickness of furnace side plates **1/8"** Description of joint **seamless** Working

ssure of furnace by rules **125** Thickness of Ogee ring **7/8"** Working pressure of Ogee ring by rules **109** Thickness of furnace

on plates **1/8"** Radius of do. **2'9"** Stayed by **hemisphere** Diameter of uptake **15" x 23"** Thickness of uptake

tes **9/16"** Thickness of tube plates front **27/32"** back **23/32"** Mean pitch of stay tubes in nest **11.54"** Pitch in outer vertical rows **8"**

meter of tube holes FRONT stay **2 11/16"** BACK stay **2 1/2"** Working pressure of tube plates by rules **F106, B107** Tubes: Material **S**

ternal diameter stay **2 1/2"** Thickness stay **11/32"** No. of threads per inch **9** Pitch of tubes **4" x 39/16"**

orking pressure by rules **175** Manhole compensation; Size of opening in shell plate **21" x 17"** Section of compensating

7 1/2" x 1" No. of rivets and diameter of rivet holes **40 @ 27/32"** Outer row pitch at ends **4 1/2"**

The foregoing is a correct description, *GM*

Lakax FOR COCHRAN & CO., ANNAN, LTD. Manufacturer

During progress of work in shops- **1943:- Aug, 27, Sep, 24, 30, Oct, 21, Nov, 4, 18, Dec.** Drawing No. **28542 A,**

During erection on board vessel - **9, 31. 1944: Jan, 14, 21.**

Total No. of visits **Ten.** Is the approved plan of boiler forwarded herewith **No.**

Retained for duplicate cases.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

The workmanship and materials are good.

The boiler has been constructed under special survey, to the order of Messrs. Richardson Westgarth & Co., Ltd. for their Contract No. 2744

The Boiler will be sent to Hartlepool to be fitted on board.

This Vertical Cochran Donkey Boiler has been efficiently fitted on board the 9's Empire Dynasty and is situated on Port side in main Engine Room. The SV's were adjusted under steam on 5th Oct 1944 to 105 lbs/p. The Ring thicknesses are Ford Valve 9/16, aft Valve 1/2". The Boiler was satisfactorily tested under steam

Awatt
Newcastle on Tyne
26/11/44

Survey Fee ... £ 4 : 4 : + When applied for *Nov 4/4* 19.....

Travelling Expenses (if any) £ : : When received 19.....

Committee's Minute **GLASGOW 25 JAN 1945** *5 JAN 1945*

Assigned *Deferred - // See FE machy rph.*

L.C. Davis
Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

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