

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office JAN 24 1940

Date of writing Report 19 When handed in at Local Office 20. 1. 1940 Port of Glasgow  
 No. in Survey held at Glasgow Date, First Survey 1939 July 7<sup>th</sup> Last Survey 11<sup>th</sup> Jan. 1940  
 Reg. Book. on the Single Screw Steamer "CHARLBURY" (Number of Visits 54)  
 Built at Burntisland By whom built Burntisland SB Co. Ltd. Yard No. 238 Tons Gross Net  
 Engines made at Glasgow By whom made David Rowan & Co. Ltd. Engine No. 1048 When made 1940  
 Boilers made at Glasgow By whom made David Rowan & Co. Ltd. Boiler No. 1048 When made 1940  
 Registered Horse Power Owners Port belonging to  
 Nom. Horse Power as per Rule 458 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted  
 Trade for which Vessel is intended

**ENGINES, &c.**—Description of Engines Triple Expansion Revs. per minute  
 Dia. of Cylinders 22 1/2" - 36" - 65" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 13.24" Crank pin dia. 13 1/4" Crank webs Mid. length breadth 20 1/2" Thickness parallel to axis 8 1/2"  
 as fitted 13 1/4" Mid. length thickness 8 1/2" Thickness around eye-hole 6"  
 Intermediate Shafts, diameter as per Rule 12.61" Thrust shaft, diameter at collars as per Rule 13.24"  
 as fitted 12 5/8" as fitted 13 1/4" (Michell)  
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 14.09"  
 as fitted Is the screw shaft fitted with a continuous liner Yes  
 Bronze Liners, thickness in way of bushes as per Rule 7.26" Thickness between bushes as per Rule 5.45"  
 as fitted 3/4" as fitted 11/16" Is the after end of the liner made watertight in the propeller boss Yes  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner  
 If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft No  
 If so, state type Length of Bearing in Stern Bush next to and supporting propeller 4'-10"  
**Propeller**, dia. 17'-7 1/2" Pitch 17'-3" No. of Blades 4 Material Bronze whether Moveable No Total Developed Surface 113 sq. feet  
**Feed Pumps** worked from the Main Engines, No. none Diameter Stroke Can one be overhauled while the other is at work  
**Bilge Pumps** worked from the Main Engines, No. 2 Diameter 4" Stroke 24" Can one be overhauled while the other is at work Yes  
**Feed Pumps** No. and size 20 7" x 9 1/2" x 21" Pumps connected to the Main Bilge Line No. and size How driven  
**Ballast Pumps**, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size  
 Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room In Pump Room In Holds, &c.

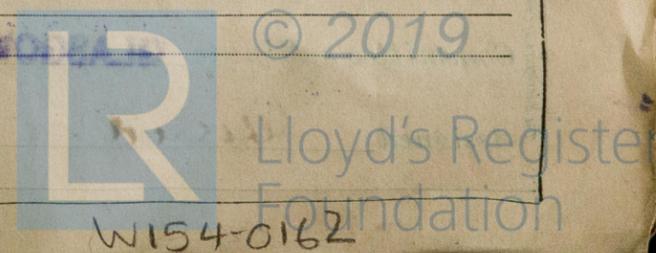
**Main Water Circulating Pump Direct Bilge Suctions**, No. and size Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size  
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes  
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges  
 Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges 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  
 What Pipes pass through the bunkers How are they protected  
 What pipes pass through the deep tanks Have they been tested as per Rule  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times  
 Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

**MAIN BOILERS, &c.**—(Letter for record S) Total Heating Surface of Boilers 6502 ft<sup>2</sup> coal burning: 6912 oil burnt  
 Is Forced Draft fitted Yes MB's only No. and Description of Boilers 2 S.E. 1 Aux. Working Pressure 220 lbs.  
**IS A REPORT ON MAIN BOILERS NOW FORWARDED?** Yes  
**IS A DONKEY BOILER FITTED?** Aux. boiler If so, is a report now forwarded? Yes  
 Is the donkey boiler intended to be used for domestic purposes only  
**PLANS.** Are approved plans forwarded herewith for Shafting Main Boilers Yes Auxiliary Boilers Yes Donkey Boilers  
 (If not state date of approval)  
 Superheaters No General Pumping Arrangements Oil fuel Burning Piping Arrangements

**SPARE GEAR.**  
 Has the spare gear required by the Rules been supplied Yes  
 State the principal additional spare gear supplied One C.I. propeller, 1 propeller shaft

The foregoing is a correct description,  
 For David Rowan & Co. Ltd.  
 Archd. W. Grierson

Manufacturer.



8491

1939 July 7, 12, Aug. 9, 16, 23, 24, Sept. 6, 12, 13, 15, 19, 22, 26, 28 Oct. 3, 4, 10, 11, 16, 24, 25, 27, 30, 31, Nov. 1, 3, 6, 9, 13, 14, 15, 20, 24, 27, 28, 29, 30, Dec. 4, 5, 6, 8, 12, 13, 14, 15, 18, 20, 23, 26, 27, 28, 29

During progress of work in shops - -

Dates of Survey while building

During erection on board vessel - - -

1940 Jan. 9, 11

Total No. of visits 54

Dates of Examination of principal parts—Cylinders 24/11/39 Slides 6/12/39 Covers 24/11/39

Pistons 9/11/39 Piston Rods 29/11/39 Connecting rods 24/11/39

Crank shaft 1/11/39 Thrust shaft 9/11/39 Intermediate shafts 25/10/39

Tube shaft - Screw shaft 8/12/39 Propeller 8/12/39

Stern tube 8/12/39 Engine and boiler seatings - Engines holding down bolts -

Completion of fitting sea connections - Boilers fixed - Engines tried under steam -

Completion of pumping arrangements - Thickness of adjusting washers -

Main boiler safety valves adjusted -

Crank shaft material S.M. Steel Identification Mark 8856 A7B Thrust shaft material S.M. Steel Identification Mark 8856 A7B

Intermediate shafts, material S.M. Steel Identification Marks 8856 A7B Tube shaft, material - Identification Mark -

Screw shaft, material S.M. Steel Identification Mark 8856 A7B Steam Pipes, material Steel Test pressure 660 lb. Date of Test 27/12/39

Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150°F. Yes

Have the requirements of the Rules for the use of oil as fuel been complied with -

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo - If so, have the requirements of the Rules been complied with -

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with -

Is this machinery duplicate of a previous case Yes If so, state name of vessel "DAN-Y-BRYN" G.L.S. R.P.N. 61742

General Remarks (State quality of workmanship, opinions as to class, &c. This machinery has been built under special survey in accordance with the Rules and approved plans, and the materials and workmanship are good. In my opinion, it will be eligible to be classed in the Register Book with read + LMC with date when satisfactorily installed in the vessel and upon completion of trials.

The machinery has been sent to Burntisland and the Leith Surveyors have been advised.

RB  
20/1/40

The amount of Entry Fee ... £ 5 : - : When applied for, 23 JAN 1940

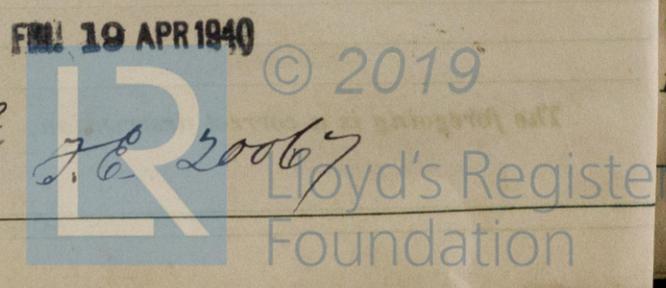
4/5 Special ... £ 74 : 19 :  
1/5 LEITH A/C Donkey Boiler Fee ... £ 18 : 15 : When received, 23-4-1940

Travelling Expenses (if any) £ : :

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 23 JAN 1940

Assigned deferred.



Certificate to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute.