

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

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of writing Report 12-1-1940 When handed in at Local Office 12-1-1940 Port of Leith  
 in Survey held at Burntisland Date, First Survey 24-10-39 Last Survey 10-1-1940  
 Book 163 on the S.S. "IAN-Y-BRYN." (Number of Visits ELEVEN)  
 at Burntisland By whom built Burntisland S.B. Co. Ltd. Yard No. 239 Tons { Gross 5116.64  
 Net 3034.33  
 When built 1940  
 Engines made at Glasgow By whom made J. Rowan & Co. Ltd. Engine No. 1049 When made 1939  
 Boilers made at Glasgow By whom made J. Rowan & Co. Ltd. Boiler No. 1049 When made 1939  
 Registered Horse Power \_\_\_\_\_ Owners Brynmore Steamship Co. Ltd. Port belonging to London  
 Horse Power as per Rule 458 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 for which Vessel is intended \_\_\_\_\_

## ENGINES, &c.—Description of Engines

Revs. per minute 82 (LIGHT SHIP)

No. of Cylinders \_\_\_\_\_ Length of Stroke \_\_\_\_\_ No. of Cranks \_\_\_\_\_  
 Diameter of Journals as per Rule \_\_\_\_\_ Crank pin dia. \_\_\_\_\_ Crank webs Mid. length breadth \_\_\_\_\_ Thickness parallel to axis \_\_\_\_\_  
 as fitted \_\_\_\_\_ Mid. length thickness \_\_\_\_\_ shrunk \_\_\_\_\_ Thickness around eye-hole \_\_\_\_\_  
 Intermediate Shafts, diameter as per Rule \_\_\_\_\_ Thrust shaft, diameter at collars as per Rule \_\_\_\_\_  
 as fitted \_\_\_\_\_ as fitted \_\_\_\_\_  
 Shafts, diameter as per Rule \_\_\_\_\_ Screw Shaft, diameter as per Rule \_\_\_\_\_ Is the { tube } shaft fitted with a continuous liner {  
 as fitted \_\_\_\_\_ as fitted \_\_\_\_\_ screw }  
 Liners, thickness in way of bushes as per Rule \_\_\_\_\_ Thickness between bushes as per Rule \_\_\_\_\_ Is the after end of the liner made watertight in the  
 as fitted \_\_\_\_\_ as fitted \_\_\_\_\_  
 If the liner is in more than one length the junctions made by fusion through the whole thickness of the liner \_\_\_\_\_  
 Liner does not fit tightly at the part between the bearings in the tube in the space charged with a plastic material insoluble in water and non-corrosive \_\_\_\_\_  
 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  
 If so, state type \_\_\_\_\_ Length of Bearing in Stern Bush next to and supporting propeller \_\_\_\_\_  
 Propeller, dia. \_\_\_\_\_ Pitch \_\_\_\_\_ No. of Blades \_\_\_\_\_ Material \_\_\_\_\_ whether Moveable \_\_\_\_\_ Total Developed Surface \_\_\_\_\_ sq. feet  
 Pumps worked from the Main Engines, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
 Pumps worked from the Main Engines, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
 How driven \_\_\_\_\_  
 Main Bilge Line { No. and size 2 on Main Engines } 1 Ballast \_\_\_\_\_  
 { How driven \_\_\_\_\_ } Steam \_\_\_\_\_  
 Lubricating Oil Pumps, including Spare Pump, No. and size \_\_\_\_\_  
 Oil Cooler \_\_\_\_\_  
 Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Pumps;—In Engine and Boiler Room 2 PORT, 1 STAR at 3" dia. 1 STAR at 5" dia. 1 oily bilge suction STAR at 2 1/2" dia.  
 In Holds, &c. N° 1 HOLD, 1 PORT, 1 STAR 3" DIA. N° 2 HOLD, 1 PORT, 1 STAR 3 1/2" DIA.  
1, 1 PORT, 1 STAR 2 1/2" DIA. N° 4 HOLD, 1 PORT, 1 STAR 3 1/2" DIA. 2, 1 PORT, 1 STAR 3" DIA. N° 5 HOLD, 1 PORT, 1 STAR 3" DIA. HOLD WELL SUCTION 2 1/2" DIA.  
TUNNEL WELL SUCTION 2 1/2" DIA.  
 Water Circulating Pump Direct Bilge Suctions, No. and size one @ 8" dia. Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 size one @ 5" dia. Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes.  
 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 Yes.  
 Sea Connections fitted direct on the skin of the ship Yes. Are they fitted with Valves or Cocks Both.  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes. Are the Overboard Discharges above or below the deep water line MAIN DISCHARGE BELOW, OTHERS ABOVE.  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes. Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes.  
 How are they protected Wood ceiling.  
 Pipes pass through the bunkers Bilge suction. Have they been tested as per Rule \_\_\_\_\_  
 Pipes pass through the deep tanks \_\_\_\_\_  
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes.  
 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 Yes. Is the Shaft Tunnel watertight Yes. Is it fitted with a watertight door Yes. worked from engine room top platform.

BOILERS, &c.—(Letter for record \_\_\_\_\_) Total Heating Surface of Boilers \_\_\_\_\_  
 Which Boilers are fitted with Forced Draft \_\_\_\_\_ Which Boilers are fitted with Superheaters \_\_\_\_\_  
 Working Pressure \_\_\_\_\_  
 REPORT ON MAIN BOILERS NOW FORWARDED? \_\_\_\_\_  
 DONKEY BOILER FITTED? See Glasgow Pt. No. 61742 If so, is a report now forwarded? \_\_\_\_\_  
 donkey boiler be used for domestic purposes only \_\_\_\_\_

Are approved plans forwarded herewith for Shafting \_\_\_\_\_ Main Boilers \_\_\_\_\_ Auxiliary Boilers \_\_\_\_\_ Donkey Boilers \_\_\_\_\_  
 (If not state date of approval) \_\_\_\_\_  
 General Pumping Arrangements \_\_\_\_\_ Oil fuel Burning Piping Arrangements \_\_\_\_\_

## SPARE GEAR.

Is spare gear required by the Rules been supplied Yes.  
 principal additional spare gear supplied one c.i. propeller. One screw shaft.

The foregoing is a correct description.

Manufacturer.



004405-004410-0125

During progress of work in shops - -  
 Dates of Survey while building  
 During erection on board vessel - - - 24/10/39, 1/11/39, 8/11/39, 10/11/39, 20/11/39, 23/11/39, 4/12/39, 11/12/39, 18/12/39, 25/12/39, 10/1/40.  
 Total No. of visits eleven.

Dates of Examination of principal parts—Cylinders Slides Covers  
 Pistons Piston Rods Connecting rods  
 Crank shaft Thrust shaft Intermediate shafts  
 Tube shaft Screw shaft *in place* 10/11/39 Propeller *in place* 10/11/39  
 Stern tube *in place* 8/11/39 Engine and boiler seatings 10/11/39 Engines holding down bolts 11/12/39  
 Completion of fitting sea connections 8/11/39  
 Completion of pumping arrangements 25/12/39 Boilers fixed 11/12/39 Engines tried under steam 10-1-40  
 Main boiler safety valves adjusted 25/12/39 Thickness of adjusting washers PORT MAIN. P=3/8" S=1/8" SUP=3/8" STARBOARD. P=3/8" FULL. S=1/8" SUP=3/8"  
 AUX. BOILER. P=3/8" S=1/8" SUP=3/8"  
 Crank shaft material Identification Mark Thrust shaft material Identification Mark  
 Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark  
 Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test  
 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 *Yes.*  
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *No.* 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 *"CEFN-Y-BRYN"*

**General Remarks** (State quality of workmanship, opinions as to class, &c. This machinery - Glasgow Report No 6174 has been efficiently fitted on board, the materials and workmanship being sound and good. On completion, the safety valves were adjusted to 220 lbs/sq and the Main and Auxile machinery were tried under working conditions at sea and found satisfactory. This machinery in my opinion, is in a safe working condition and eligible to be classed in the Register Book with the notation of L.M.C. 1-40, T.S.C.L., F.I. Fitted for oil fuel, 1-40, F.P. above 150°F.

Certificate to be sent to  
 The amount of Entry Fee ... £  
 Special *1/2 L.M.C.* ... £ *18:15:0*  
 Donkey Boiler Fee ... £ -  
 Travelling Expenses (if any) £ *1:13:3*  
 When applied for, 12-1-1940.  
 When received, 23/1/1940.  
 See also RPT 61742  
 collected by Glasgow & credited to debit.  
 Committee's Minute TUE. 23 JAN 1940  
 Assigned + Amble 1.40  
 2 S.B. (Sgt) J.D. Cf.  
 1 Aux S.B. Intt. for oil fuel 1.40  
 J.J. Campbell  
 Engineer Surveyor to Lloyd's Register of Shipping  
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