

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office  
 Date of writing Report 30<sup>th</sup> March 1934 When handed in at Local Office 3<sup>rd</sup> April 1934 Port of West Hartlepool  
 No. in Survey held at West Hartlepool Date, First Survey 22<sup>nd</sup> September, 1936 Last Survey 25<sup>th</sup> March 1934  
 Reg. Book. Supp. (Number of Visits 60)  
88273 on the Single Screw Steamer "FELLDENE" Tons { Gross 4260  
 Net 2618  
 Built at West Hartlepool By whom built William Gray & Co. Ltd Yard No. 1074 When built 1937  
 Engines made at West Hartlepool By whom made Central Mar. Eng. Works Engine No. 1074 When made 1937  
 Boilers made at West Hartlepool By whom made Central Mar. Eng. Works Boiler No. 1074 When made 1937  
 Registered Horse Power Owners Felldene Shipping Co. Ltd Port belonging to London  
 Nom. Horse Power as per Rule 289 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes  
 Trade for which Vessel is intended Ocean going

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 60  
 Dia. of Cylinders 21", 33½", 58" Length of Stroke 42" No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 11.65 Crank pin dia. 11.75 Crank webs Mid. length breadth 16½" Thickness parallel to axis 7½"  
 as fitted 11.75 Mid. length thickness 7½" Thickness around eye-hole 5½"  
 Intermediate Shafts, diameter as per Rule 11.09 Thrust shaft, diameter at collars as per Rule 11.65  
 as fitted 11.25 as fitted 11.75  
 Tube Shafts, diameter as per Rule 12.57 Screw Shaft, diameter as per Rule 13" Is the tube shaft fitted with a continuous liner yes  
 as fitted 6.8" as fitted 13"  
 Bronze Liners, thickness in way of bushes as per Rule 6.8" Thickness between bushes as per Rule 1½" Is the after end of the liner made watertight in the propeller boss yes  
 as fitted 7.5" as fitted 1½"  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner yes  
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes  
 If two liners are fitted, is the shaft lapped or protected between the liners yes Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft no  
 If so, state type yes Length of Bearing in Stern Bush next to and supporting propeller 54"  
 Propeller, dia. 17'-9" Pitch 16'-6" No. of Blades 4 Material Bronze whether Moveable no Total Developed Surface 94.8 sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 26" Can one be overhauled while the other is at work yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3½" Stroke 26" Can one be overhauled while the other is at work yes  
 Feed Pumps { No. and size 2, 3" x 26" - one, 8" x 6" x 18" Pumps connected to the { No. and size 2, 3½" x 26" - one, 9" x 10½" x 10"  
 How driven Main Engines - Steam Main Bilge Line { How driven Main Engines - Steam  
 Ballast Pumps, No. and size one, 9" x 10½" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size yes  
 Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 4 - 2½"  
 In Pump Room yes In Holds, &c. Fore. 2 - 3½" / 2 - 3"  
Aft. 4 - 3" / 1 - 2½" / 1 - 2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 - 6" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 - 4½"  
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes  
 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 yes  
 Are all 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 level  
 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  
 What Pipes pass through the bunkers none How are they protected yes  
 What pipes pass through the deep tanks yes Have they been tested as per Rule yes  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes  
 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 yes Is the Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from top of engine room

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 4964 sq. ft.  
 Is Forced Draft fitted No No. and Description of Boilers 2, single ended Working Pressure 200 lbs.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes  
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? yes  
 Is the donkey boiler intended to be used for domestic purposes only yes  
 PLANS. Are approved plans forwarded herewith for Shafting yes Main Boilers yes Auxiliary Boilers yes Donkey Boilers yes  
 (If not state date of approval)  
 Superheaters yes General Pumping Arrangements yes Oil fuel Burning Piping Arrangements yes

## SPARE GEAR.

Has the spare gear required by the Rules been supplied yes  
 State the principal additional spare gear supplied

The foregoing is a correct description,  
 FOR THE CENTRAL MARINE ENGINE WORKS,

(W. Gray & Co. Ltd.)

Manufacturer.

GENERAL MANAGER



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Lloyd's Register  
 Foundation

003679-003686-0163



1936 *Apr 22-25-28 Oct 6-9-14-20-22-26 Nov 11-12-25-26 Dec 3-8-15-16-17-23-30-31 1937 Jan 4-6-8-11-12-13-14*  
 During progress of work in shops - - *15-18-20-21-22-25-26-27-28-29 Feb 1-2-3-4-5-8-10-11-12*  
 Dates of Survey while building { During erection on board vessel - - *1937 Feb 15-16-17-18-25-27 Mar 2-3-8-10-12-25*  
 Total No. of visits *60*  
 Dates of Examination of principal parts—Cylinders *13-1-37 17-2-37* Slides *17-2-37* Covers *17-2-37*  
 Pistons *21-1-37* Piston Rods *25-1-37* Connecting rods *8-12-36 30-12-36 11-2-37*  
 Crank shaft *17-12-36 30-12-36 29-1-37 5-2-37* Thrust shaft *21-1-37 5-2-37* Intermediate shafts *12-1-37 11-2-37*  
 Tube shaft *✓* Screw shaft *18-1-37 25-1-37 11-2-37* Propeller *16-2-37*  
 Stern tube *16-2-37* Engine and boiler seatings *25-2-37* Engines holding down bolts *3-2-37*  
 Completion of fitting sea connections *11-2-37*  
 Completion of pumping arrangements *12-3-37* Boilers fixed *3-3-37* Engines tried under steam *12-3-37 25-3-37*  
 Main boiler safety valves adjusted *12-3-37* Thickness of adjusting washers *P. Blr. P+S 5/16 Spt 5/32 S. Blr. P+S 5/16 Spt 5/32*  
 Crank shaft material *Steel* Identification Mark *9021 J.D.* Thrust shaft material *Steel* Identification Mark *9021 J.D.*  
 Intermediate shafts, material *Steel* Identification Marks *9021 J.D.* Tube shaft, material *✓* Identification Mark  
 Screw shaft, material *Steel* Identification Mark *9021 J.D.* Steam Pipes, material *Steel* Test pressure *600 lbs.* Date of Test *18/3/37*  
 Is an installation fitted for burning oil fuel *No.* Is the flash point of the oil to be used over 150°F. *✓*  
 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 *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 *s/s "Jordene" W. Hpl Report No 17566*

General Remarks (State quality of workmanship, opinions as to class, &c.)  
*These Engines & Boilers have been built and installed under Special Survey and in accordance with the approved plans. Upon completion they were examined under working conditions and found satisfactory.*  
*The materials and workmanship have been found good.*  
*It is Recommended that this vessel has record in the Register Book + LMC 3.37. C.L. 2 S.B (Spt).*

Certificate to be sent to  
 The amount of Entry Fee ... £ *4* : *0* :  
 Special ... £ *68* : *9* :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, *6-4-1937*  
 When received, *11-5-1937*  
 Committee's Minute *TUE 13 APR 1937*  
 Assigned *+ LMC 3.37 Spt*  
*CL*

*F. Brooke Smith*  
 Engineer Surveyor to Lloyd's Register of Shipping.