

# REPORT ON OIL ENGINE MACHINERY.

No. 35304

Received at London Office

Date of writing Report 19... When handed in at Local Office 10 March 1950 Port of Sunderland

No. in Survey held at Newcastle & Sunderland Date, First Survey 5 October 1949 Last Survey 2 March 1950

Reg. Book. Number of Visits 30  
Single on the Triple Screw vessel M.V. FELIPES Tons Gross 2992 Net 1544

Built at Sunderland By whom built John Crown & Sons Yard No. 230 When built 1949

Engines made at Newcastle By whom made R & W Hawthorn Leslie & Co Ltd Engine No. 4064 When made 1949

Donkey Boilers made at Wallsend on Tyne By whom made Wallsend Slipway & Eng Co Ltd Boiler No. 429B When made 1949

Brake Horse Power 1500 Owners Anglo Saxon Petroleum Co Ltd Port belonging to London

Nom. Horse Power as per Rule 321 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes

Trade for which vessel is intended

OIL ENGINES, &c. — Type of Engines See Newcastle Report 106762 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks

Mean Indicated Pressure Span of bearings, adjacent to the crank, measured from inner edge to inner edge Is there a bearing between each crank

Revolutions per minute Flywheel dia. Weight Means of ignition Kind of fuel used

Crank Shaft (Solid forged, Semi built, All built) dia. of journals as per Rule, as fitted Crank pin dia. Crank webs Mid. length breadth, Mid. length thickness, Thickness parallel to axis, Thickness around eyehole

Flywheel Shaft, diameter as per Rule, as fitted Intermediate Shafts, diameter as per Rule, as fitted Thrust Shaft, diameter at collars as per Rule, as fitted

Tube Shaft, diameter as per Rule, as fitted Screw Shaft, diameter as per Rule, as fitted Is the tube screw shaft fitted with a continuous liner

Bronze Liners, thickness in way of bushes as per Rule, as fitted Thickness between bushes as per Rule, as fitted Is the after end of the liner made watertight in the propeller boss

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner 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

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 tube shaft 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

Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Cooling Water Pumps, No. 1 - 8" x 8" x 10" Rotary 80 tons per hr. (S.W. 12nd + 1st) the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No. 1 Rotary 28 tons per hr. Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and size 1 - 8" x 8" x 10" & 1 - 6" x 6" x 6" How driven Steam

Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements

Ballast Pumps, No. and size Power Driven Lubricating Oil Pumps, including spare pump, No. and size 1 - 8" x 8" x 10" M.E. Rotary 60 tons per hr.

Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both main bilge pumps and auxiliary bilge pumps, No. and size:—In machinery spaces 1-PA 3", 1-PE 2", 15-F 2", 2-E.R. Cofferdam 2" each, Cofferdam for deep tank 3"

In holds, &c. Tanker In pump room amid. 2-4" Fore 1-2"

Independent Power Pump Direct Suctions to the engine room bilges, No. and size 1 - S.A. 4" & 1 - P.F. 4"

Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes Are the bilge suction in the machinery spaces 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 Both Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the overboard discharges above or below the deep water line above

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 1 suction to cofferdam 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 yes Is the shaft tunnel watertight Is it fitted with a watertight door worked from

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Main Air Compressors, No. No. of stages diameters stroke driven by

Auxiliary Air Compressors, No. 1 No. of stages 2 diameters stroke driven by steam

Small Auxiliary Air Compressors, No. 1 No. of stages 2 diameters stroke driven by elect motor

What provision is made for first charging the air receivers

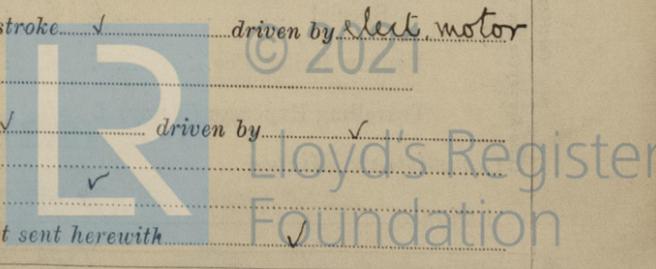
Scavenging Air Pumps, No. diameter stroke driven by

Auxiliary Engines crank shafts, diameter as per Rule, as fitted No. Position

Have the auxiliary engines been constructed under special survey Is a report sent herewith

Handwritten initials and scribbles.

Handwritten date: 29/3/50



004263-004274-0241

**AIR RECEIVERS:**—Have they been made under survey...  State No. of report or certificate...

Is each receiver, which can be isolated, fitted with a safety valve as per Rule...

Can the internal surfaces of the receivers be examined and cleaned...  Is a drain fitted at the lowest part of each receiver...

**Injection Air Receivers, No.**...  Cubic capacity of each...  Internal diameter...  thickness...

Seamless, lap welded or riveted longitudinal joint...  Material...  Range of tensile strength...  Working pressure...

**Starting Air Receivers, No.**...  Total cubic capacity...  Internal diameter...  thickness...

Seamless, lap welded or riveted longitudinal joint...  Material...  Range of tensile strength...  Working pressure...

**IS A DONKEY BOILER FITTED** *yes* If so, is a report now forwarded... *yes*

Is the donkey boiler intended to be used for domestic purposes only... *no*

**PLANS.** Are approved plans forwarded herewith for shafting...  Receivers...  Separate fuel tanks...

Donkey boilers...  General pumping arrangements...  Pumping arrangements in machinery space... 12-8-48

Oil fuel buring arrangements... 12-8-48

**SPARE GEAR.**

Has the spare gear required by the Rules been supplied...

State the principal additional spare gear supplied...

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building

During progress of work in shops - -	<input checked="" type="checkbox"/>
During erection on board vessel - -	1949 Oct 13, 14, 18, Nov 1, 7, 17, 22 Dec 15 1950 Jan 3, 5, 11, 23, 24, 26 Feb 2, 4, 9, 15, 17, 18, 21, 24, 27
Total No. of visits	25 30

Dates of examination of principal parts—Cylinders...  Covers...  Pistons...  Rods...  Connecting rods...

Crank shaft...  Flywheel shaft...  Thrust shaft...  Intermediate shafts...  Tube shaft...

Screw shaft...  Propeller 18-10-49 Stern tube 14-10-49 Engine seatings 1-11-49 Engine holding down bolts 11-1-50

Completion of fitting sea connections 13-10-49 Completion of pumping arrangements 9-2-50 Engines tried under working conditions 15-2-50

Crank shaft, material...  Identification mark...  Flywheel shaft, material...  Identification mark...

Thrust shaft, material...  Identification mark...  Intermediate shafts, material...  Identification marks...

Tube shaft, material...  Identification mark...  Screw shaft, material...  Identification mark...

Identification marks on air receivers...

Is the flash point of the oil to be used over 150°F... *yes*

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with... *yes*

Description of fire extinguishing apparatus fitted... *Steam smothering and Foamite - 1-10 galls and 6-2 galls containers*

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo... *(Tanker)* 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... *Not desired*

Is this machinery duplicate of a previous case... *no* If so, state name of vessel...

**General Remarks** (State quality of workmanship, opinions as to class, &c. This machinery (for particulars see Newcastle report N° 106762) has been securely fitted on board the vessel and tried under full working conditions with satisfactory results. The donkey boiler has also been securely fixed on board the vessel. Fitted to burn oil fuel (F.P. above 150°F) and safety valves adjusted under steam to working pressure. Section 20 of the rules has been complied with. This machinery is now eligible in my opinion to have notation +LMC 3.50 (oil eng.), T.S.C.L., 1DB 180 lbs D"

The amount of Entry Fee ... £ 40:9:0

Special ... £ √ : : When applied for MAR 10 1950

Donkey Boiler Fee... £ √ : : When received 19

Travelling Expenses (if any) £ √

C. Booker  
 Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

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

Committee's Minute  
 Assigned +LMC 3.50 Oil Eng  
 C.L. DB 180 lb