

## REPORT ON OIL ENGINE MACHINERY.

No 34597

19 DEC 1946

Received at London Office

DEC 1946

Date of writing Report

When handed in at Local Office

17 Dec 1946 Port of

Sunderland

No. in Survey held at  
Reg. Book.

Date, First Survey

Feb 22

Last Survey

Dec 12 1946

Number of Visits

59

Single  
on the ~~Twin~~  
Triple  
Screw vessel" BRITISH HOLLYTons Gross 8582  
Net 4919

Built at

Sunderland

By whom built

Sir J. Lamb &amp; Sons Ld.

Yard No.

440

When built

1946

Engines made at

Sunderland

By whom made

Wm. Beaford &amp; Sons Ld.

Engine No.

256

When made

1946

Donkey Boilers made at

Stockton

By whom made

Stockton Chem. Eng. &amp; Ry. Works

Boiler No.

6935/6

When made

1946

Brake Horse Power

3100

Owners

British Tanker Co. Ld.

Port belonging to

London

Nom. Horse Power as per Rule

684

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

Yes.

Trade for which vessel is intended

Tanker.

91716

OIL ENGINES, &c. Type of Engines Opposed piston airless injection 2 or 4 stroke cycle 2 Single or double acting SingleMaximum pressure in cylinders 640 lbs 235/8 600 lbs Length of stroke upper 980 mm 4 4 (3 throats)Mean Indicated Pressure 85 lbs Diameter of cylinders 600 mm 886 mm Lower 1340 mm No. of cranks Between each 3 throatsSpan of bearings, adjacent to the Crank, measured from inner edge to inner edge 1640 mm F. 1.33 tons Compression Is there a bearing between each crankRevolutions per minute 105 Flywheel dia. 2450 mm Weight A. 3.26 tons Means of ignition Compression Kind of fuel usedCrank Shaft, Solid forged dia. of journals as per Rule 431 mm Crank pin dia. 450 mm Mid. length breadth 650 mm Thickness parallel to axis 255 mmFlywheel Shaft, diameter as per Rule 431 mm Intermediate Shafts, diameter as per Rule 450 mm Thrust Shaft, diameter at collars as per Rule 431 mmTube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule 450 mm Is the tube shaft fitted with a continuous liner YesBronze Liners, thickness in way of bushes as per Rule 22 mm Thickness between bushes as per Rule 14 mm Is the after end of the liner made watertight in thepropeller boss Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner one length

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 No Is an approved Oil Gland or other appliance fitted at the after end of the tubeshaft Yes Length of Bearing in Stern Bush next to and supporting propeller 5'-8"Propeller, dia. 16'-3" Pitch 11'-9" No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 93 sq. feetMethod of reversing Engines Hand lever Is a governor or other arrangement fitted to prevent racing of the engine when disengaged Yes Means of lubricationand forced 25 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged withnon-conducting material Yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engineCooling Water Pumps, No. one engine driven Is the sea suction provided with an efficient strainer which can be cleared within the vessel (F.W. Cooling)Bilge Pumps worked from the Main Engines, No. none Diameter - Stroke - Can one be overhauled while the other is at work -Pumps connected to the Main Bilge Line { No. and Size 2 @ 4" x 8" x 8" (Leuphy) & Ballast Pumps How driven SteamIs 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 pumpingarrangements - Ballast Pumps, No. and size one engine driven 110 mm x 510 mmAre two independent means arranged for circulating water through the Oil Cooler Yes one steam driven 8" x 4" x 18"Pumps, No. and size:—In Machinery Spaces 2 @ 3 1/2" in E.R. 1-6" hull suction Suctions, connected to both Main Bilge Pumps and Auxiliary Bilgein Holds, &c. (Tanker) 10 8" (Ballast) 1-6" (C.S.) & 1-4" main Eng. Cooling water pumpIndependent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 10 8" (Ballast) 1-6" (C.S.) & 1-4" main Eng. CoolingAre all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spacesand from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YesAre all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks BothAre they fixed sufficiently high on the ship's side to be seen without lifting the platform ladders Yes Are the Overboard Discharges above or below the deep water line BelowAre 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 YesThat pipes pass through the bunkers none How are they protected -That pipes pass through the deep tanks none Have they been tested as per Rule YesAre 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 (Tanker) Is the Shaft Tunnel watertight none 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. Two No. of stages Three Diameters 12 3/4-3, 12 3/4-10 1/2-3- Stroke 4- Driven by Steam EngineAuxiliary Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -Small Auxiliary Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -That provision is made for first Charging the Air Receivers (Steam driven Compressors) Driven by Lowest fromScavenging Air Pumps, No. Two Diameter 1510 mm Stroke 510 mm Driven by Main EngineAuxiliary Engines crank shafts, diameter as per Rule No. - Position -Have the Auxiliary Engines been constructed under special survey - Is a report sent herewith -



