

REPORT ON OIL ENGINE MACHINERY.

No. 94319
23 OCT 1936

Received at London Office

Date of writing Report 19 When handed in at Local Office 21.10.1936 Port of NEWCASTLE-ON-TYNE
No. in Survey held at Newcastle Date, First Survey 11 March Last Survey 21/10/1936
Reg. Book. Number of Visits 39.Single
on the ~~Turn~~ Triple Screw vessel Motor Tanker **SEPIA** Tons { Gross 6214
Net 3620.
Built at **Wallsend, Newcastle** By whom built **Swan Hunter & Wigham Richardson** Yard No. **1519** When built **1936**
Engines made at **Newcastle** By whom made **R.W. Hawthorn, Leslie & Co. Ltd** Engine No. **3879** When made **1936**
Donkey Boilers made at **✓** By whom made **✓** Boiler No. **✓** When made **✓**
Brake Horse Power **2800** Owners **Anglo-Saxon Petroleum Co. Ltd** Port belonging to **LONDON**
Nom. Horse Power as per Rule **377** Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**
Trade for which vessel is intended **Carrying Petroleum in bulk**OIL ENGINES, &c.—Type of Engines **Werkspoor Supercharged** 2 or 4 stroke cycle **4** Single or double acting **Single**Maximum pressure in cylinders **700 lb.** Diameter of cylinders **650 mm** Length of stroke **1400 mm** No. of cylinders **6** No. of cranks **6**
Mean indicated pressure **135 lb. max** Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **844 mm** Is there a bearing between each crank **Yes**
Revolutions per minute **120 max** Flywheel dia. **7' 5 1/2"** Weight **6.8 tons** Means of ignition **Compression** Kind of fuel used **Diesel oil**
Crank Shaft, dia. of journals as per Rule **442 mm** Crank pin dia. **460 mm** Crank Webs Mid. length breadth **870 mm** Thickness parallel to axis **267 mm** Thickness around eye hole **204 mm**
as fitted **460 "** Mid. length thickness **267 "** Thrust Shaft, diameter at collars as per Rule **328 "**
Flywheel Shaft, diameter as per Rule **340 mm** Intermediate Shafts, diameter as fitted **340 "** as fitted **340 "**Tube Shaft, diameter as per Rule **✓** Screw Shaft, diameter as fitted **✓** Is the tube screw shaft fitted with a continuous liner **✓**
Bronze Liners, thickness in way of bushes as per Rule **✓** Thickness between bushes 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 the 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 **Air Servo** Is a governor or other arrangement fitted to prevent racing of the engine **when decelerated** **Yes** Means of lubrication **Forced**Thickness of cylinder liners **55 mm** Are the cylinders fitted with safety valves **Yes** Are the exhaust pipes and silencers water cooled or lagged with non-conducting material **lagged** 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. **4** { 2 Rotary driven by M. Eng. Is the sea suction provided with an efficient strainer which can be cleared within the vessel **✓**
+ 2 Steam StandbyWhat special arrangements are made for dealing with cooling water if discharged into bilges **✓**
Bilge Pumps worked from the Main Engines, No. **two** Diameter **Rotary** Stroke **35 tons** Can one be overhauled while the other is at work **Yes**Pumps connected to the Main Bilge Line { No. and Size **✓** How driven **✓**
Ballast Pumps, No. and size **✓** Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size **1-M.E. driven 45 tons Rotary.**
H-8x8x10" Steam 50 ton.Are two independent means arranged for circulating water through the Oil Cooler **✓** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge In Pump RoomIndependent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **✓** Are the Bilge Suctions in the Machinery SpacesAre all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes **✓** Are the Bilge Suctions 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 **✓**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 **✓**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 **✓**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. **✓** No. of stages **✓** Diameters **✓** Stroke **✓** Driven by **✓**Small Auxiliary Air Compressors, No. **✓** No. of stages **✓** Diameters **✓** Stroke **✓** Driven by **✓**Scavenging Air Pumps, No. **✓** Diameter **✓** Stroke **✓** Driven by **✓**Auxiliary Engines crank shafts, diameter as per Rule **✓** Position **✓**AIR RECEIVERS:—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 **✓**High Pressure Air Receivers, No. **✓** Cubic capacity of each **✓** Internal diameter **✓** thickness **✓**
by Rules **✓** Working pressure **✓** Actual **✓**Seamless, lap welded or riveted longitudinal joint **✓** Material **✓** Range of tensile strength **✓**Starting Air Receivers, No. **✓** Total cubic capacity **✓** Internal diameter **✓** thickness **✓**
by Rules **✓** Working pressure **✓** Actual **✓**Seamless, lap welded or riveted longitudinal joint **✓** Material **✓** Range of tensile strength **✓**

010012-010023-0229

IS A DONKEY BOILER FITTED? ☒

If so, is a report now forwarded? ☒

Is the donkey boiler intended to be used for domestic purposes only? ☒

PLANS. Are approved plans forwarded herewith for Shafting
(If not, state date of approval)

Receivers ☒

Separate Tanks ☒

Donkey Boilers ☒

General Pumping Arrangements ☒

Oil Fuel Burning Arrangements ☒

SPARE GEAR.

Has the spare gear required by the Rules been supplied ☒

State the principal additional spare gear supplied

Yes. ☒
See attached list
(in Envelope with Forging Reports).

The foregoing is a correct description.

R. & W. HAWTHORN, LEO & CO. LIMITED

Manufacturer.

Dates of Survey while building

During progress of work in shops - -
During erection on board vessel - -
Total No. of visits

1936

Mar. 11. 16. 20. 26. Apr. 2. 7. 14. 22. 24. May 4. 8. 11. 13. 15. 19. 28. June 3. 8. 12. 17. 19. 30.

July 3. 8. 9. 10. 15. 16. 21. 24. 28. 31. Aug. 5. 11. 18. 24. Sep. 1. 4. 21.

39.

Dates of Examination of principal parts—Cylinders 3/6/36 11/8/36 Covers 3/6/36 11/8/36 Pistons 24/7/36 11/8/36 Rods 24-7-36 Connecting rods 24-7-36

Crank shaft 8/6/36 Flywheel shaft 21-7-36 Thrust shaft 21-7-36 Intermediate shafts ✓ Tube shaft ✓

Screw shaft ✓ Propeller ✓ Stern tube ✓ Engine seatings ✓ Engines holding down bolts ✓

Completion of fitting sea connections ✓ Completion of pumping arrangements ✓ Engines tried under working conditions ✓

Crank shaft, Material SM Steel Identification Mark 2848 + 2349 GHJ 4-1-36 Flywheel shaft, Material SM Steel Identification Mark 983EB 20-4-36

Thrust shaft, Material " " Identification Mark 2327 GHJ AM 21-7-36 Intermediate shafts, Material ✓ Identification Marks ✓

Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material ✓ Identification Mark ✓

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

Have the requirements of the Rules for oil fuel pipes and tank fittings 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 ☒ If so, state name of vessel Elona Hwc Rft 93417

Mastra " " 93536

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under special survey in accordance with the Rules and approved plans, and the materials and workmanship are good.

The machinery has been satisfactorily installed on board the vessel, tested under working conditions, and the vessel is eligible, in my opinion for record + LMC. 10.36., Oil Eng., CL.

The amount of Entry Fee .. £ 5 : 0 :

Special 4/5th .. £ 65 : 5 :

Donkey Boiler Fee ... £ ✓ :

Travelling Expenses (if any) £ ✓ :

When applied for, 19.10.1936.

When received, 21.10.1936.

A. Watt

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

FRI. 30 OCT 1936



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