

REPORT ON OIL ENGINE MACHINERY.

No. 72361

Received at London Office
Date of writing Report 15-12-47 When handed in at Local Office 15-12-47 Port of GLASGOW. 17 DEC 1947
No. in Survey held at GRANGEMOUTH. Date, First Survey 30th July, '47 Last Survey 7th Nov. 19 47
Reg. Book. Single on the Twin Triple Quadruple Screw vessel L.C.T. 796 "BAHR NAGASH"
Tons Gross 397.3 Net 227.9
Built at By whom built Yard No. When built
Engines made at COLCHESTER By whom made DAVEY PAXMAN & CO. LTD. Engine No. 90268/9 When made
Monkey Boilers made at -- By whom made -- Boiler No. When made
Brake Horse Power 345 each Owners SABEAN UTILITY CORPN LTD. Port belonging to ADDIS ABABA.
Nom. Horse Power as per Rule 115 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES
Trade for which vessel is intended COASTAL SERVICE MIDDLE EAST.

ENGINES, &c.—Type of Engines See Ipswich Rpt. No. 115131 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
Indicated Pressure
Position 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
Crankshaft, { Solid forged dia. of journals as per Rule Crank pin dia. Crank Webs Mid. length breadth shrunk Thickness parallel to axis
{ Semi built dia. of journals as fitted as fitted Mid. length thickness Thickness around eyehole
{ All built
Wheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule
as fitted as fitted as fitted
Propeller Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube shaft fitted with a continuous liner? No
as fitted as fitted as fitted 3 1/2" ✓
Bronze 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 None as fitted
Propeller boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner
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
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
No If so, state type -- Length of Bearing in Stern Bush next to and supporting propeller 15" ✓
Propeller, dia. 36" Pitch -- No. of blades 4 Material Mg.Br. whether Moveable No Total Developed Surface -- sq. feet
Method of reversing Engines Rev. Gear. Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes ✓ Means of lubrication
Forced Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with
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 engine
Sling Water Pumps, No. 4 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes ✓
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 1 - 20 T/hr. ✓ 1 - 10 T/hr. ✓
{ How driven Electric Electric
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
Fast Pumps, No. and size 1-20 T/hr. ✓ 1-10 T/hr. ✓ Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 each engine.
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 3 - 3" In Pump Room
Holds, &c. 4 - 2", 1 - 2" each wing tank. 1 - 2" - Steering Compt. 2 - 3" ✓
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 - 3" ✓
All the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes ✓ Are the Bilge Suctions in the Machinery Spaces
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 Valves. ✓
They fixed sufficiently high on the ship's side to be seen without lifting the platform plates Yes ✓ Are the Overboard Discharges above or below the deep water line above. ✓
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
Pipes pass through the bunkers None ✓ How are they protected
Pipes pass through the deep tanks Have they been tested as per Rule
All Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
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
Wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork
Air Compressors, No. None ✓ No. of stages Diameters Stroke Driven by
Auxiliary Air Compressors, No. None ✓ No. of stages Diameters Stroke Driven by
Auxiliary Air Compressors, No. None ✓ No. of stages Diameters Stroke Driven by
Provision is made for first Charging the Air Receivers
Slinging Air Pumps, No. None ✓ Diameter Stroke Driven by
Auxiliary Engines crank shafts, diameter as per Rule 3" Position 1 Centre 9H.P. 1 - Stb'd. 27 H.P.
as fitted
The Auxiliary Engines been constructed under special survey No Is a report sent herewith

AIR RECEIVERS: — Have they been made under survey **None** ✓ 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. **None** ✓ Cubic capacity of each Internal diameter thickness
Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules Actual

Starting Air Receivers, No. **None** ✓ Total cubic capacity Internal diameter thickness
Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules Actual

IS A DONKEY BOILER FITTED? **No** 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 Receivers Separate Fuel Tanks
(If not, state date of approval)

Donkey Boilers General Pumping Arrangements **Yes** Pumping Arrangements in Machinery Space
Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied **Yes** ✓
State the principal additional spare gear supplied **See separate list.**

This foregoing is a correct description and the particulars of the installation as fitted are as approved for torsional vibration characteristics.

The foregoing is a correct description.

Manufacturer.

Dates of Survey while building { During progress of work in shops - -
During erection on board vessel - -
Total No. of visits

| | | | | | |
|---|---------------------|------------------------------------|-------------------------------|----------------------|--|
| Dates of Examination of principal parts—Cylinders | | Covers | Pistons | Rods | Connecting rods |
| Crank shaft | Flywheel shaft | Thrust shaft | Intermediate shafts | Tube shaft | |
| Screw shafts | 23/9/47 | Propeller | 23/9/47 | Stern tube | Engine seatings |
| Engines holding down bolts | | 16/10/47 | | | |
| Completion of filling sea connections | | Completion of pumping arrangements | | 5/11/47 | Engines tried under working conditions |
| 7/11/47 | | | | | |
| 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 | Steel | 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

Description of fire extinguishing apparatus fitted **Portable chemical extinguishers.**
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo **No** ✓

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 **"ADULIS".**

General Remarks (State quality of workmanship, opinions as to class, &c. **The main engines have been securely refitted on board the vessel. The auxiliary machinery has been opened up and examined and placed in good order, and tried under working conditions.**
This machinery is eligible, in my opinion, to be classed with a record L.M.C. 11-47 and notation T.S.

(The Surveyor is requested not to write on or below the space for Committee's Minute.)

| | | | | |
|------------------------------|--------|----------|----------------|--------------------|
| The amount of Entry Fee | .. £ | : | : | When applied for, |
| Special | | £ | 23 : 12 | 16 DEC 1947 |
| Donkey Boiler Fee | | £ | : | When received, |
| Travelling Expenses (if any) | £ | 2 | 6 | 19... |

Committee's Minute

Assigned

GLASGOW 16 DEC 1947

ACCOMPANYING MACHINERY REPORT.

M Dale
Engineer Surveyor to Lloyd's Register of Shipping.
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