

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 23417

Date of writing Report 4th Nov. 1946When handed in at Local Office 8th Nov. 1946

Received at London Office

Port of GREENOCK

No. in Reg. Book.

Survey held at GREENOCK

Date, First Survey 7th Aug. 1945Last Survey 26th OCTOBER 1946

Number of Visits 66

Single
on the Turn
Triple
Quadruple

Screw vessel

"NERITOPSIS" TANKER

Tons
Gross 8200
Net 4700

Built at GLASGOW

By whom built BLYTHSWOOD SHIP CO. LD

Yard No. When built 1946

Engines made at GREENOCK

By whom made JOHN G. KINCAID & CO. LD

Engine No. 4169 When made 1946

Donkey Boilers made at do

By whom made do

Boiler No. 4169 When made 1946

Brake Horse Power 3600

Owners. ANGLO SAXON PETROLEUM CO. LD

Port belonging to LONDON

Nom. Horse Power as per Rule 502

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted YES

Trade for which vessel is intended

OPEN SEA SERVICE

IL ENGINES, &c. — Type of Engines KINCAID'S B.W. under piston supercharge 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 650 lb. Diameter of cylinders 6507 Length of stroke 14007 No. of cylinders 8 No. of cranks 8

Mean Indicated Pressure 135 lb. Span of bearings, adjacent to the crank, measured from inner edge to inner edge 8447

Revolutions per minute 120 Flywheel dia. 22187 Weight 2.19 tons Is there a bearing between each crank Yes

Crank Shaft, Solid forged dia. of journals as per Rule 441 Crank pin dia. 4607 Crank webs Mid. length breadth 7507 Thickness parallel to axis 2677

Flywheel Shaft, diameter as per Rule 441 Intermediate Shafts, diameter as per Rule 21 Thrust Shaft, diameter at collars as per Rule 18 1/4

Tube Shaft, diameter as per Rule 441 Is the (tube) shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 723 Thickness between bushes as per Rule 542 Is the after end of the liner made watertight in the

propeller boss Yes 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 No Is an approved Oil Gland or other appliance fitted at the after

end of tube shaft No If so, state type Length of bearing in Stern Bush next to and supporting propeller 5'0"

Propeller, dia. 15'0" Pitch 12'0" No. of blades 4 Material MB whether moveable No Total developed surface 72 sq. feet

Method of reversing Engines Compounded Air Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of

lubrication Forced Thickness of cylinder liners 407 607 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 Steam, 2 main engines F.W. also 2 Circ. pumps S.W. 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. One Rotary Diameter 32 tons/hr Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and size One 32 tons/hr One 40 tons/hr One 85 tons/hr How driven Main engine Steam Steam (G.S.)

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 None Power Driven Lubricating Oil Pumps, including spare pump, No. and size One 40 tons/hr One 85 tons/hr Duplex

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 Three @ 3 1/2" In pump room

In holds, &c. Independent Power Pump Direct Suctions to the engine room bilges, No. and size Two @ 6"

Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes Yes 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 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

efficiently 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

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

What pipes pass through the deep tanks None 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 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 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. No. of stages diameters stroke driven by

Auxiliary Air Compressors, No. One No. of stages Two diameters 120 cu ft/min stroke driven by Steam

Small Auxiliary Air Compressors, No. One No. of stages Two diameters 90 cu ft/min stroke driven by Diesel engine

What provision is made for first charging the air receivers Steam compressors

Scavenging Air Pumps, No. None diameter stroke driven by

Auxiliary Engines crank shafts, diameter as per Rule No. One 4. Cu. 5 1/2" 4.844 672 8.8.1.1

Have the auxiliary engines been constructed under special survey Yes Position EP platforms

Is a report sent herewith Hullingham Cert 53910

1200-507200-0031

AIR RECEIVERS:—Have they been made under survey...
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...
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... 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...
Donkey boilers... General pumping arrangements... Pumping arrangements in machinery space...
Oil fuel burning arrangements...

SPARE GEAR.
Has the spare gear required by the Rules been supplied...
State the principal additional spare gear supplied...
Spare Screw shaft...
Personal vibration calculation of 12/3/46

The foregoing is a correct description
For JOHN G. KINCAID & CO. LIMITED.
H. M. Gemmell Chief of Technical Staff.
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 shaft... Propeller... Stern tube... Engine seatings... Engine holding down bolts...
Completion of fitting sea connections... Completion of pumping arrangements... Engines tried under working conditions...
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... Air receiver ex Mariposa original markings indelible approved Glasgow letter 30/7/45...
Retested 550 lb 350 lb 10" CNH.

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...
Description of fire extinguishing apparatus fitted...
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo...
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...
General Remarks (State quality of workmanship, opinions as to class, &c.)

This machinery has been constructed under special survey in accordance with the Rules and approved plans. The materials & workmanship are sound & good. The engine & boiler have been effectively installed in the vessel and tested on a sea trial under full working conditions with satisfactory results. This machinery is eligible in my opinion to be classed in the Society's Register book with notation
+ LMC 10-46 & notation Screw shaft CL 2 DBs 180 lb 7" filler for oil fuel
FP above 150°F

The amount of Entry Fee...
Special...
Donkey Boiler Fee...
Air Receiver Exam Test...
Travelling Expenses (if any)...
When applied for...
When received...

Committee's Minute...
Assigned...
GLASGOW 12 NOV 1946
all eng
2 DB 180 lb
Charles J. Hawks
Engineer Surveyor to Lloyd's Register of Shipping
Lloyd's Register Foundation