

# REPORT ON OIL ENGINE MACHINERY.

No 22028.  
14 OCT 1942

Received at London Office

of writing Report **6<sup>th</sup> OCT. 1942** When handed in at Local Office **12<sup>th</sup> OCT. 1942** Port of **GREENOCK**  
 in Survey held at **GREENOCK** Date, First Survey **5<sup>th</sup> SEPTEMBER 1941** Last Survey **1<sup>st</sup> OCTOBER 1942**  
 Book. Number of Visits **44**  
 on the **Single** Screw vessel **"NASSA"** Tons: Gross **3100** Net **4750**  
 at **GLASGOW** By whom built **BLYTHSWOOD SHIP<sup>g</sup> CO L<sup>td</sup>** Yard No. **68** When built **1942**  
 lines made at **GREENOCK** By whom made **JOHN G. KINCAID, CO L<sup>td</sup>** Engine No. **15137** When made **1942**  
 key Boilers made at **GREENOCK** By whom made **JOHN G. KINCAID, CO L<sup>td</sup>** Boiler No. **15137** When made **1942**  
 ke Horse Power **3000 max 3000 norm** Owners **ANGLO SAXON PETROLEUM CO L<sup>td</sup>** Port belonging to **LONDON**  
 Horse Power as per Rule **502** Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**  
 for which vessel is intended **GREEN GOING OIL TANKER**

**ENGINES, &c.** Type of Engine **KINCAID'S B.W. under piston super charge 2 or 4 stroke cycle 4** Single or double acting **SINGLE**  
 in pressure in cylinders **600 lbs/sq in** Diameter of cylinders **25 3/8** Length of stroke **55 1/8** No. of cylinders **8** No. of cranks **8**  
 indicated Pressure **118 lbs/sq in** bearings, adjacent to the Crank, measured from inner edge to inner edge **844 7/8** Is there a bearing between each crank **Yes**  
 ons per minute **114 RPM** Flywheel dia. **2218 7/8** Weight **2.19 tons** Means of ignition **Compression** Kind of fuel used **Diesel Oil**  
 Solid forged dia. of journals **as per Rule** Crank pin dia. **460 7/8** Crank Webs Mid. length breadth **750 7/8** Thickness parallel to axis **290 7/8**  
 Semi built dia. of journals **as fitted** **460 7/8** Mid. length thickness **267 7/8** Thickness around eye-hole **245 7/8**  
 All built **as fitted**  
 el 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**  
 shaft, diameter as per Rule **as fitted** Screw Shaft, diameter as per Rule **as fitted** Is the shaft fitted with a continuous liner **Yes**  
 Liners, thickness in way of bushes as per Rule **.731** Thickness between bushes as per Rule **.546** Is the after end of the liner made watertight in the boss **Yes**  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner **Yes**  
 ner 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 **Yes**  
 liners are fitted, is the shaft lapped or protected between the liners **Yes** Is an approved Oil Gland or other appliance fitted at the after end of the tube **Yes**  
 No If so, state type **Yes** Length of Bearing in Stern Bush next to and supporting propeller **5'-0"**  
 er, dia. **15'-0"** Pitch **12'-0"** No. of blades **4** Material **M.B.** whether Moveable **No** Total Developed Surface **72** sq. feet  
 of reversing Engines **Comp. air** Is a governor or other arrangement fitted to prevent racing of the engine when declutched **Yes** Means of lubrication **Oil**  
 ed Thickness of cylinder liners **40 7/8** Are the cylinders fitted with safety valves **Yes** Are the exhaust pipes and silencers water cooled or lagged with **lagged**  
 acting 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 **Yes**  
 g Water Pumps, No. **Two** Is the sea suction provided with an efficient strainer which can be cleared within the vessel **Yes**  
 pumps worked from the Main Engines, No. **Two** Diameter **Rotary** Stroke **32** Can one be overhauled while the other is at work **Yes**  
 connected to the Main Bilge Line { No. and Size **One 32 ton** **One 40 ton** **One 85 ton**  
 How driven **Main engine** **Steam** **Steam**  
 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 **Yes**  
 nents **Yes**  
 t Pumps, No. and size **One 85 ton** Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size **One steam 8x8x10**  
 independent means arranged for circulating water through the Oil Cooler **Yes** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge **Yes**  
 No. and size:—In Machinery Spaces **3 @ 3 1/2"** In Pump Room **Yes**  
 s, &c. **Yes**  
 ndent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **Two @ 6"**  
 the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes **Yes** Are the Bilge Suctions in the Machinery Spaces **Yes**  
 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 **Yes**  
 fired 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 **Below**  
 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**  
 pes pass through the bunkers **None** How are they protected **Yes**  
 pes pass through the deep tanks **Yes** Have they been tested as per Rule **Yes**  
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times **Yes**  
 rrangement 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 **Yes**  
 ment to another **Yes** Is the Shaft Tunnel watertight **None** Is it fitted with a watertight door **Yes** worked from **Yes**  
 ool vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork **Yes**

**Air Compressors, No. One** No. of stages **Two** Diameters **120 cu ft/hr** Stroke **15** Driven by **Steam**  
**Auxiliary Air Compressors, No. One** No. of stages **Two** Diameters **90 cu ft/hr** Stroke **15** Driven by **Diesel engine**  
**Auxiliary Air Compressors, No. One** No. of stages **Two** Diameters **90 cu ft/hr** Stroke **15** Driven by **Diesel engine**  
 provision is made for first Charging the Air Receivers **Steam compressor**  
 nging Air Pumps, No. **One** Diameter **15** Stroke **15** Driven by **Steam**  
 iary Engines crank shafts, diameter as per Rule **See attached Certificate** No. **Two** Position **Engine Platform**  
 as fitted **not received**  
 the Auxiliary Engines been constructed under special survey **Yes** Is a report sent herewith **Yes**

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 Registrar  
 005082-005088-0162

**AIR RECEIVERS:** — Have they been made under survey... *Yes* ✓ State No. of Report or Certificate...  
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule... *Yes* ✓  
 Can the internal surfaces of the receivers be examined and cleaned... *Yes* ✓ Is a drain fitted at the lowest part of each receiver... *Yes* ✓  
**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 by Rules... *✓*  
**Starting Air Receivers, No.** *One* Total cubic capacity... *500 cu ft* Internal diameter... *6'-0 3/16"* thickness... *3/32*  
 Seamless, lap welded or riveted longitudinal joint... Material... *S* Range of tensile strength... *28/32 ton* Working pressure by Rules... *36 ton*  
 Actual... *35 ton*

**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... *27-1-41* Receivers... *31-1-41* Separate Fuel Tanks... *✓*  
 (If not, state date of approval)  
 Donkey Boiler... *27-1-41* General Pumping Arrangements... Pumping Arrangements in Machinery Space... *22-4-41*  
 Oil Fuel Burning Arrangements... *31-5-42*

**SPARE GEAR.**

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

*See separate list*

The foregoing is a correct description for JOHN G. KINGAID & CO. LIMITED.  
*McCart* Director. Manufacturer.

Dates of Survey while building... (1941) SEPT. 5-9-10-15-22-23 OCT. 3-22-23-28-30-31 NOV. 6-7-10-13-17-20-24-27 DEC. 3-4-5-10-12-15-17-19-24-26-30  
 During erection on board vessel... FEB. 6-16-18 MAR. 2-9 APRIL 6 MAY 13-20-21-28 JUNE 3-4-8-10-12-15-17-25-30 JULY 20-21-22-27-29  
 Total No. of visits... *44*

Dates of Examination of principal parts—Cylinders... *17-12-41-5-42* Covers... *17-12-42-5-42* Pistons... *24-12-41* Rods... *13-5-42* Connecting rods... *13-5-42*  
 Crank shaft... *13-5-42* Flywheel shaft... *✓* Thrust shaft... *13-5-42* Intermediate shafts... *13-5-42* Tube shaft... *✓*  
 Screw shaft... *7-11-41* Propeller... *13-5-42* Stern tube... *7-11-41* Engine seatings... *3-6-42* Engines holding down bolts... *22-7-41*  
 Completion of fitting sea connections... *26-5-42 (9LS)* Completion of pumping arrangements... *29-9-42* Engines tried under working conditions... *29-9-41*  
 Crank shaft, Material... *S.* Identification Mark... *LP 10580 CNH* Flywheel shaft, Material... *✓* Identification Mark... *✓*  
 Thrust shaft, Material... *S.* Identification Mark... *LP 10580 CNH* Intermediate shafts, Material... *S* Identification Marks... *LP 10580*  
 Tube shaft, Material... *✓* Identification Mark... *✓* Screw shaft, Material... *S.* Identification Mark... *LP 10580*  
 Identification Marks on Air Receivers... *LL0405*  
*N° 1811*  
*584 LL*  
*NP. 356*  
*CNH. 7-11-41*

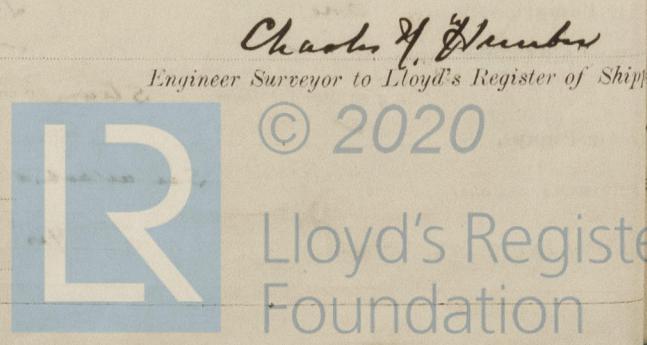
Is the flash point of the oil to be used over 150° F... *Yes* ✓  
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with... *Yes* ✓  
 Description of fire extinguishing apparatus fitted... *Steam in ER & BR.* ✓  
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo... *Oil Tanker* ✓ If so, have the requirements of the Rules been complied with... *Yes* ✓  
 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 engine & boiler has been built under special survey in accordance with the Rules & approved plans. The materials & workmanship and the have been effectively installed in the vessel & tested under working conditions on a short sea trial.*  
*This machinery is eligible in my opinion to be classed in the Society's Register Book with Record*  
*+ LMC 10-42 & Notation: Screw shaft CL. One DB 180 lbs)*

*Survey certificate for this engine being common to K143 to follow will be forwarded on completion of that engine.*

The amount of Entry Fee	£ 6 : 0	When applied for,
Special	£ 100 : 3	12 <sup>th</sup> OCT. 1942
Donkey Boiler Fee	£ 23 : 6	When received,
AIR RECEIVER	4 : 4	
Travelling Expenses (if any)	£ :	19

Committee's Minute **GLASGOW 13 OCT 1942**  
 Assigned *-1- LMC 10.42*  
*DB 180 lb.*



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