

REPORT ON OIL ENGINE MACHINERY.

No. 6027

4 - OCT 1926

Received at London Office

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Writing Report 31/8/26 19 When handed in at Local Office 1/9 1926 Port of Hongkong
 Date, First Survey May 5th 1926 Last Survey Aug 30th 1926
 Number of Visits 26
 Tons { Gross 221.19
 Net 114.19
 Survey held at Hongkong
 on the ~~Triple~~ Single Screw vessels "ALOHA"
 Built at Hongkong By whom built HK & W. Dock Co. Yard No. 628 When built 8 - 1926
 By whom made A.B. Atlas Diesel Engine No. 50027 When made 1919
 Boilers made at Stockholm By whom made - Boiler No. - When made -
 key Boilers made at None
 Owners The North Negroes Sugar Co. Ltd Port belonging to Manila, P.I.
 ke Horse Power 160 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No
 n. Horse Power as per Rule 74

ENGINES, &c. Type of Engines Marine Polar Diesel (Type P-41) 2 or 4 stroke cycle 2 Single or double acting Single
 Maximum pressure in cylinders 450 lbs. No. of cylinders 4 No. of cranks 4 Diameter of cylinders 260 m/m.
 Length of stroke 370 m/m Revolutions per minute 250 Means of ignition Compression (injecting) Kind of fuel used Fuel oil
 Is there a bearing between each crank Yes Span of bearings (Page 92, Section 2, par. 7 of Rules) 365 m/m
 Distance between centres of main bearings 515 m/m Is a flywheel fitted Yes Diameter of crank shaft journals as per Rule 156 m/m
 as fitted 160 m/m
 Diameter of crank pins 160 m/m Breadth of crank webs as per Rule 208 m/m as fitted 213 m/m Thickness of ditto as per Rule 87.3 m/m
 as fitted 88 m/m
 Diameter of flywheel shaft as per Rule 156 m/m as fitted 160 m/m Diameter of tunnel shaft as per Rule 4.1 inches as fitted 5 inches
 Diameter of screw shaft as per Rule 4.6 inches as fitted 5 1/2 inches Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes
 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 joints burned -
 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 - If without liners, is the shaft arranged to run in oil -
 Type of outer gland fitted to stern tube None Length of stern bush 24" Diameter of propeller 5' 0" square feet
 Pitch of propeller 4' 0" No. of blades 3 state whether moveable fixed Total surface 8 ft
 Method of reversing Manoeuvring Engine Is a governor or other arrangement fitted to prevent racing of the engine when detached Yes Thickness of cylinder liners -
 Are the cylinders fitted with safety valves Yes Means of lubrication Forced, with sight feed 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 -
 Exhaust led up the funnel No. of cooling water pumps 2 Is the sea suction provided with an efficient strainer which can be cleared
 within the vessel Yes No. of bilge pumps fitted to the main engines one Diameter of ditto 120 m/m Stroke 60 m/m
 Can one be overhauled while the other is at work - No. of auxiliary pumps connected to the main bilge lines one How driven Auxil. Motor
 Sizes of pumps 6" Centrifugal No. and sizes of suction connected to both main bilge pumps and auxiliary bilge pumps: - In engine room 1-2" Sizes of pumps 6" Centrifugal
 and in holds, etc. 1-2 1/2" hold No. of ballast pumps one How driven Auxil. Motor Is a separate auxiliary pump suction fitted in
 Is the ballast pump fitted with a direct suction from the engine room bilges Yes State size 3 1/2" Are the roses in Engine Room always accessible Yes
 Engine Room and size Yes - 2 1/2" Are all the bilge suction pipes fitted with roses Yes Are all connections with the sea direct on the skin of the ship Yes
 Are the sluices on Engine Room bulkheads always accessible None Are they fired sufficiently high on the ship's side to be seen without lifting the floor plates Yes
 Are they valves or cocks Valves Are they each fitted with a discharge valve always accessible on the plating of the vessel Yes
 Are the discharge pipes above or below the deep water line above Are the bilge suction pipes, cocks and valves arranged so as to prevent any
 Are all pipes, cocks, valves and pumps in connection with the machinery accessible at all times Yes Is it fitted with a watertight door -
 communication between the sea and the bilges Yes Is the screw shaft tunnel watertight None
 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 -
 No. of main air compressors 2 No. of stages 2 Diameters 65 x 200 m/m Stroke 300 m/m Driven by Main Engines
 No. of auxiliary air compressors 1 No. of stages 2 Diameters 30 x 80 m/m Stroke 80 m/m Driven by Belt from Auxil.
 No. of small auxiliary air compressors can also be driven by hand wheel Driven by motor
 No. of scavenging air pumps 2 (Combined Scavenging) Diameter 398 m/m Stroke 300 m/m Driven by Main Engines
 Diameter of auxiliary Diesel Engine crank shafts as per Rule Hot bulb motor 5-B.H.P. 350 m/m Driven by
 as fitted 225 Litres
 Internal diameter 240 m/m Cubic capacity of each 25

AIR RECEIVERS: - No. of high pressure air receivers 2 Range of tensile strength See Note
 material Steel Seamless, lap welded or riveted longitudinal joint See Note Internal diameter 649 m/m
 thickness See Note working pressure by Rules No. of starting air receivers one
 Total cubic capacity 635 Litres Material Steel Working pressure by rules Is each receiver, which can be isolated,
 Range of tensile strength See Note thickness See Note What means are provided for cleaning their
 fitted with a safety valve as per Rule Yes Can the internal surfaces of the receivers be examined Yes
 inner surfaces Doors & Manholes, steam from Is there a drain arrangement fitted at the lowest part of each receiver Yes
 outside source can be connected.

005695-005708-0030

IS A DONKEY BOILER FITTED? *No*If so, is a report now forwarded? ☒

HYDRAULIC TESTS:—

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	—	—	—	LLOYD'S TEST	—
„ „ COVERS	24-6-26	—	30 lbs.	30 lbs.	Good
„ „ JACKETS.....	24-6-26	—	„ „	„ „	„
„ PISTON WATER PASSAGES.....	—	—	—	—	—
MAIN COMPRESSORS—1st STAGE.....	—	—	—	—	—
„ 2nd „	—	—	—	—	—
„ 3rd „	—	—	—	—	—
AIR RECEIVERS—STARTING	24-6-26	13 kg/cm ²	26 kg/cm ²	LLOYD'S TEST 26 kg/cm ²	Good
„ INJECTION	24-6-26	70 kg/cm ²	140 kg/cm ²	WP 13 kg/cm ² 140 kg/cm ²	Good
AIR PIPES	17-8-26	- do -	2000 lbs	WP 70 kg/cm ²	Good
FUEL PIPES	17-8-26	- do -	- do -	- do -	Good
FUEL PUMPS	—	—	—	—	—
SILENCER	—	—	—	—	—
„ WATER JACKET	—	—	—	—	—
SEPARATE FUEL TANKS	29/7/26	maximum 3 ft head.	8 ft head	LLOYD'S TEST 8 ft head.	Good

PLANS. Are approved plans forwarded herewith for shafting *Inter. & Tail Shafts* *15.6.20/5/26* Receivers *See Note* Separate Tanks *16/7/26, 1.10.26*
(If not, state date of approval)

SPARE GEAR *See attached list.*

The foregoing is a correct description.

R. H. Dunn
Manufacturer.

Dates of Survey while building { During progress of work in shops - May 5, 10, 12, 17, June 2, 5, 18, 19, 22, 24, July 2, 8, 14, 16, 23, 26, 27, 29, 31, 1926.
During erection on board vessel - Aug. 2, 7, 12, 17, 23, 26, 30, 1926.
Total No. of visits 26

Dates of Examination of principal parts—Cylinders 24/6/26 Covers 24/6/26 Pistons 19/6/26 Rods — Connecting rods 19/6/26
Crank shaft 19/6/26 Thrust shaft 19/6/26 Tunnel shafts 31/7/26 Screw shaft 23/7/26 Propeller 23/7/26 Stern tube 16/7/26 Engine seatings 5/6/26
Engines holding down bolts 12/8/26 Completion of pumping arrangements 26/8/26 Engines tried under working conditions 26/8/26
Completion of fitting sea connections 27/7/26 Stern tube 23/7/26 Screw shaft and propeller 27/7/26
Material of crank shaft *Steel* Identification Mark on Do. *LLOYD'S N° 2180 & 2181* Material of thrust shaft *Steel* Identification Mark on Do. *LLOYD'S 1917 N° 1250 S.H.M.*
Material of tunnel shafts *Steel* Identification Marks on Do. *LLOYD'S N° 270 T.S.M. 31-7-26* Material of screw shafts *Steel* Identification Marks on Do. *LLOYD'S N° 270 T.S.M. 23/7/26*
Is the flash point of the oil to be used over 150° F. *Yes*

Is this machinery duplicate of a previous case? *No.* If so, state name of vessel *—*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The materials have been tested by the Surveyors to this Society & the workmanship is good. Prior to machinery being installed in the vessel, it was opened up & all working parts examined & found satisfactory. Air receivers, cylinder water jackets & water passages of cylinder covers etc. were tested in accordance with the rules (See London letter to Stockholm Surveyor dated 2nd March 1926) & found satisfactory. The machinery has been installed in accordance with the rules & it is recommended that the vessel be classed with Lloyd's Machinery Certificate & the record of L.M.C. 8-26 be made in the Register Book.*

NOTE:—The makers state that the plans for the shafting of this type of engine, also for air receivers, have been approved by the London Office. Full power trials were run over measured course. Speed of Vessel 8 knots @ 250 revs. lowest revs. for manoeuvring purposes 145 per min. Astern revs. 240 per min. *W. Morrison*
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 43-00 : When applied for, Aug. 31st 1926
Special SURVEY ... £ 314-00 :
Donkey Boiler Fee ... £ 79-00 : When received, 29.9.26
Fitting on Board ... £ 45-00 :
Travelling Expenses (if any) ...
TUES. 12 OCT 1926

Committee's Minute

Assigned

+ Lmc 8.26
Oil Engines cl

CERTIFICATE WRITTEN

Lloyd's Register
Foundation