

No. 115567

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

24 SEP 1947

Received at London Office 24 SEP 1947

Report No. 19 When handed in at Local Office 24 SEP 1947 Port of LONDON

Survey held at LONDON Date, First Survey 4-9-47 Last Survey 17-9-1947 (Number of Visits 7)

on the S.S. "BENVRACKIE" (EX "SAMMAFFRIC") Tons Gross 7210 Net 4395

BALTIMORE, U.S.A. By whom built BETHLEHEM FAIRFIELD SHIPYARD INC. Yard No. When built MARCH 1944

Made at HAMILTON, OHIO, U.S.A. By whom made GENERAL MACHY CORP Engine No. 7840 When made 1944

Made at NEW YORK By whom made COMBUSTION ENG. CORP. Boiler No. TWO When made 1944

Horse Power 2500 Owners BEN LINE STEAMERS LTD. Port belonging to LEITH

Power as per Rule Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

Which vessel is intended MN=668

&c.—Description of Engine RECIPROCATING ENGINE Revs. per minute 76

Dimensions 24 1/2" x 37" x 70" Length of Stroke 48" No. of Cylinders THREE No. of Cranks THREE

dia. of journals as per Rule 14" as fitted 14 1/4" Crank pin dia. 14 1/4" Crank webs Mid. length breadth Thickness parallel to axis 9 1/2" L.P. 9" H.P. & I.P. 7 1/2" PINS 7 3/8" JOURNALS

Shafts, diameter as per Rule 13.33" as fitted 13 1/2" Thrust shaft, diameter at collars as per Rule 14" as fitted 14 1/4"

Screw Shaft, diameter as per Rule as fitted Is the tube screw shaft fitted with a continuous liner

Thickness in way of bushes as per Rule as fitted Thickness between bushes as fitted Is the after end of the liner made watertight in the

If the liner is in more than one length are the junctions made by fusion through the whole thickness of 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

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

If so, state type Length of Bearing in Stern Bush next to and supporting propeller

Pitch 18-6" No. of Blades 4 Material Bronze whether Moveable No Total Developed Surface 117 sq. feet

worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

worked from the Main Engines, No. TWO Diameter 4 1/2" Stroke 26" Can one be overhauled while the other is at work

and size TWO 12" x 8" x 24" Pumps connected to the Main Bilge Line No. and size TWO 10" x 11" x 12" How driven STEAM DUPLEX WORTHINGTON

driven WORTHINGTON VERTICAL STEAM Lubricating Oil Pumps, including Spare Pump, No. and size

dependent means arranged for circulating water through the Oil Cooler Suctions, connected both to Main Bilge Pumps and Auxiliary

In Engine and Boiler Room 6 1" @ 3" ER Pumps @ 3" ER Steam @ 1 1/3" Steam Recs.

In Holds, &c. N°1, 2 @ 3" N°2, 2 @ 3" N°3, 2 @ 3" N°4, 2 @ 3"

3" TUNNEL FOR 3" AFT 2 1/2" (2 @ 1 1/2" N°1 P.S. + N°2 P.S. 1 @ 1 1/2" each + N°3 P.S. 1 @ 5" each through

Circulating Pump Direct Bilge Suctions, No. and size ONE - 12" Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges, 2 - 5" ER Pumps AFT. Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes N° DRAINWELLS PERF. PLATES.

Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES

Connections fitted direct on the skin of the ship YES Are they fitted with Valves or Cocks VALVES

led sufficiently high on the ship's side to be seen without lifting the stokehold plates YES Are the Overboard Discharges above or below the deep water line BELOW

is 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

pass through the bunkers NONE How are they protected

pass through the deep tanks SUCTION PIPES TO BILGE OF TANK Have they been tested as per Rule YES

Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times YES

ement 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 to another YES Is the Shaft Tunnel watertight YES Is it fitted with a watertight door YES worked from ENGINE ROOM PLATFORM.

PLATES, &c.—(Letter for record) Total Heating Surface of Boilers 10233 (4852 and 264.5 sq. ft. spl. each boiler)

are fitted with Forced Draft BOTH Which Boilers are fitted with Superheaters BOTH

Description of Boilers TWO WATER TUBE BABCOCK TYPE DESIGN Working Pressure 250 lbs/psi

REPORT ON MAIN BOILERS NOW FORWARDED? YES

DONKEY BOILER FITTED? No. If so, is a report now forwarded?

any boiler be used for other than domestic purposes

Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers (If not state date of approval)

General Pumping Arrangements SPARE GEAR. Oil fuel Burning Piping Arrangements.

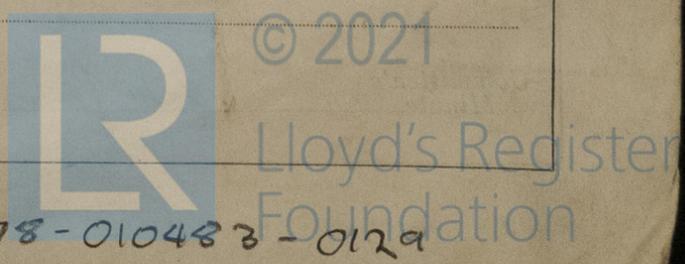
gear required by the Rules been supplied Yes with exception of Spare Propeller, Spare Impeller Shaft.

additional spare gear supplied for main circulating pump, main engine bilge pump valves seals and one valve led for main feed check for one boiler. These deficiencies, representative states, will be made good at first opportunity.

Spaces to bring up to Rule height

foregoing is a correct description.

Manufacturer.



010478-010483-0129

During progress of work in shops - - - LONDON

Dates of Survey while building

During erection on board vessel - - -

Total No. of visits

Dates of Examination of principal parts - Cylinders 4.9.47 Slides 4.9.47 Covers 4.9.47

Pistons 5.9.47 Piston Rods 5.9.47 Connecting rods 5.9.47

Crank shaft 4.9.47 Thrust shaft 4.9.47 Intermediate shafts 4.9.47

Tube shaft Screw shaft Propeller

Stern tube Engine and boiler seatings 12.9.47 Engines holding down bolts 12.9.47

Completion of fitting sea connections

Completion of pumping arrangements Boilers fixed Engines tried under steam

Main boiler safety valves adjusted 17-9-47 Thickness of adjusting washers ✓

Crank shaft material STEEL Identification Mark SEE BELOW Thrust shaft material STEEL Identification Mark

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark

Screw shaft, material Identification Mark CR20 SET#165 CWP.Y3579E-75192-9699-1 AB22 11-22-43 Steam Pipes, material Test pressure 375 lb/ps.i Date of Test 3

Is an installation fitted for burning oil fuel YES ✓ Is the flash point of the oil to be used over 150° F. ✓ YES

Have the requirements of the Rules for the use of oil as fuel been complied with ?

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo YES - EDIBLE OIL 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.)

crankshaft identification marks:- JOURNALS:- No.1 ALCO H2526-55159 19959-16 AB352 10-43. No.2 & No.3 ALCO S926 AB352 11-43. No.4 ALCO H2106 S790 AB352 1-21-43 No.5, ALCO H3439 S4704 10-43 No.6. ALCO S5240 10-43 Forward WEBS HP. 270210 2503 7040 AB352 OS 10-15-43 MP 270240 2557 7297 A 11-9-43 LP. 270312 3564 5964 AB352 OS 10-18-43. AFT WEBS HP. 270210 3251 3219 AB352 MP. 7-10-4 216K 3724 S-AB169 WLT 11-16-43. LP. 270270 3528 1754 AB352 OS 10-13-43. PINS HP. ALCO H43341 S9945 19958-16 AB352 11-43. MP. ALCO H3387 S2137 19958-16 A LP. ALCO H43341 S9539 19958-16 AB352 11-43.

Certificate to be sent to

|                              |       |   |   |                   |
|------------------------------|-------|---|---|-------------------|
| The amount of Entry Fee      | ... £ | : | : | When applied for, |
| Special                      | ... £ | : | : | 19.               |
| Donkey Boiler Fee            | ... £ | : | : | When received,    |
| Travelling Expenses (if any) | £     | : | : | 19.               |

Wm Robinson  
Engineer Surveyor to Lloyd's Register

Date: Fri. 3 OCT 1947

Committee's Minute: Defered

LMC 9.47 Subject

F.D. 2 WT13 25016 (Spl 23016)

