

No. 77652

SAT 15 MAR. 1924

19 When handed in at Local Office

13/3/1924 Port of

NEWCASTLE-ON-TYNE

Newcastle

Date, First Survey 22nd March 1922 Last Survey 4th March 1924

Number of Visits. 116

WELLFIELD

Tons { Gross
| Net

| | | | | | |
|----------------------------------|--|--|-----------------------------------|------------|------|
| Master | Built at Newcastle | By whom built | Thos. Wm. & Co. Ltd. Ward No. 225 | When built | 1924 |
| Engines made at Newcastle | By whom made | North Eastern Marine Eng. Co. Ltd. | Engine No. 2505 | When made | 1924 |
| Donkey Boilers made at Newcastle | By whom made | North Eastern Marine Eng. Co. Ltd. | Boiler No. 2505 | When made | 1924 |
| Brake Horse Power | Owners | North Eastern Petroleum Tank S.S. Co. Ltd. | Port belonging to | Newcastle | |
| Nom. Horse Power as per Rule 456 | Is Refrigerating Machinery fitted for cargo purposes | No. | Is Electric Light fitted | Yes | |

IL ENGINES, &c.—Type of Engines *Marine Diesel 2 or 4 stroke cycle 4 Single or double acting*

Maximum pressure in cylinders *500 lbs* No. of cylinders *6* No. of cranks *6* Diameter of cylinders *560 mm*

Length of stroke *34 1/2" 1000 mm* Revolutions per minute *125* Means of ignition *Compression* Kind of fuel used *2276*

Is there a bearing between each crank *Yes* Span of bearings (Page 92, Section 2, par. 7 of Rules) *770 mm*

Distance between centres of main bearings *1250 mm* Is a flywheel fitted *Yes* Diameter of crank shaft journals as per Rule *345.9 mm*
as fitted *350 mm*

Diameter of crank pins *350 mm* Breadth of crank webs as per Rule *461.2 mm* Thickness of ditto as per Rule *194 mm*
as fitted *710 mm* as fitted *220 mm*

Diameter of flywheel shaft as per Rule *13.65"* Diameter of tunnel shaft as per Rule *9.375"* Diameter of thrust shaft as per Rule *9.84"*
as fitted *350 mm* as fitted *11"* as fitted *11 1/2"*

Diameter of screw shaft as per Rule *10.22"* Is the screw shaft fitted with a continuous liner the whole length of the stern tube *Yes*
as fitted *12 1/4"*

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 *Yes*

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 *Yes*

If two liners are fitted, is the shaft lapped or protected between the liners *Yes* If without liners, is the shaft arranged to run in oil *Yes*

Type of outer gland fitted to stern tube *none* Length of stern bush *4'5"* Diameter of propeller *12'0"*

Pitch of propeller *10'6"* No. of blades *4* State whether moveable *no* Total surface *43* square feet

Method of reversing *Levers - motor* Is a governor or other arrangement fitted to prevent racing of the engine when declutched *Yes* Thickness of cylinder liners *50 mm*

Are the cylinders fitted with safety valves *Yes* Means of lubrication *mechanical* Are the exhaust pipes and silencers water cooled or lagged with *no*

Is the exhaust led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine *Yes*

Exhaust led up funnel *Yes* No. of cooling water pumps *2* Is the sea suction provided with an efficient strainer which can be cleared *Yes*

within the vessel *Yes* No. of bilge pumps fitted to the main engines *Two* Diameter of ditto *90 mm* Stroke *400 mm*

Can one be overhauled while the other is at work *Yes* No. of auxiliary pumps connected to the main bilge lines *One* How driven *Steam*

Sizes of pumps *7" x 8" x 8"* No. and sizes of suctions connected to both main bilge pumps and auxiliary bilge pumps:—In engine room *2-3 1/2"*

and in holds, etc. *none* No. of ballast pumps *One* How driven *Steam* Sizes of pumps *7" x 8" x 8" Duplex*

Is the ballast pump fitted with a direct suction from the engine room bilges *Yes* State size *3 1/2"* Is a separate auxiliary pump suction fitted in *Yes*

Engine Room and size *Yes 6"* Are all the bilge suction pipes fitted with roses *Yes* Are the roses in Engine Room always accessible *Yes*

Are the sluices on Engine Room bulkheads always accessible *none* Are all connections with the sea direct on the skin of the ship *Yes*

Are they valves or cocks *Both* Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates *Yes*

Are the discharge pipes above or below the deep water line *below* Are they each fitted with a discharge valve always accessible on the plating of the vessel *Yes*

Are all pipes, cocks, valves and pumps in connection with the machinery accessible at all times *Yes* Are the bilge suction pipes, cocks and valves arranged so as to prevent any *Yes*

communication between the sea and the bilges *Yes* Is the screw shaft tunnel watertight *none* Is it fitted with a watertight door *Yes*

worked from *Yes* If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork *Yes*

No. of main air compressors *Two* No. of stages *3* Diameters *90 mm 280 mm 450 mm* Stroke *400 mm* Driven by *Revers M.E.*

No. of auxiliary air compressors *Two* No. of stages *3* Diameters *Stroke* Driven by *Steam*

No. of small auxiliary air compressors *none* No. of stages *Stroke* Driven by *Stroke*

No. of scavenging air pumps *none* Diameter *Stroke* Driven by *Stroke*

Diameter of auxiliary Diesel Engine crank shafts as per Rule *none* Are the air compressors and their coolers made so as to be easy of access *Yes*
as fitted

IR RECEIVERS:—No. of high pressure air receivers *Two* Internal diameter *15 3/4"* Cubic capacity of each *8 1/4 cft*

material *Steel* Seamless, lap welded or riveted longitudinal joint *Seamless* Range of tensile strength *28/32 Tons*

thickness *5/8"* working pressure by Rules *1095 lbs* No. of starting air receivers *Two* Internal diameter *6 1/2 3/8"*

Total cubic capacity *1400 cft* Material *Steel* Seamless, lap welded or riveted longitudinal joint *Yes*

Range of tensile strength *28/32 Tons* thickness *2 1/32"* Working pressure by rules *303 lbs* Is each receiver, which can be isolated *Yes*

fitted with a safety valve as per Rule *Yes* Can the internal surfaces of the receivers be examined *Yes* What means are provided for cleaning the *Yes*

inner surfaces *Steam* Is there a drain arrangement fitted at the lowest part of each receiver *Yes*

Is each receiver, which can be isolated,
What means are provided for cleaning their
part of each receiver. Yes ✓

IS A DONKEY BOILER FITTED? *Yes*

If so, is a report now forwarded? *Yes*

HYDRAULIC TESTS:—

| DESCRIPTION. | DATE OF TEST. | WORKING PRESSURE. | TEST PRESSURE. | STAMPED. | REMARKS. |
|----------------------------|--------------------|-------------------|----------------|-------------|----------|
| ENGINE CYLINDERS | 24.5.23 to 5.7.23 | 500 | 1065 lbs | R.L.A. | |
| COVERS | 11.7.23 to 26.7.23 | 15 | 30 | R.L.A. M.R. | |
| JACKETS | 11.7.23 to 26.7.23 | 15 | 30 | R.L.A. M.R. | |
| PISTON WATER PASSAGES | 14.8.23 to 24.8.23 | 5 | 30 | M.R. | |
| MAIN COMPRESSORS—1st STAGE | 13.7.23 to 17.7.23 | 55 | 210 | R.L.A. | |
| 2nd | 13.6.23 to 7.9.23 | 240 | 640 | R.L.A. M.R. | |
| 3rd | 13.6.23 to 10.9.23 | 900 | 1880 | R.L.A. M.R. | |
| AIR RECEIVERS—STARTING | 12.7.23 to 27.8.23 | 900 | 2000 | R.L.A. M.R. | |
| INJECTION | 27.8.23 | 900 | 2000 | M.R. | |
| AIR PIPES | 1.10.23 to 8.10.23 | 900 | 2000 | M.R. | |
| FUEL PIPES | 1.10.23 to 8.10.23 | 900 | 2000 | M.R. | |
| FUEL PUMPS | 30.7.23 | 900 | 2000 | M.R. | |
| SILENCER | | 5 | | | |
| WATER JACKET | | nil | | | |
| SEPARATE FUEL TANKS | | 25ft head | | | |

PLANS. Are approved plans forwarded herewith for shafting
(If not, state date of approval)

Yes

Receivers

Yes

Separate Tanks

Yes

SPARE GEAR In accordance with the Rule requirements and with additions in excess of requirements
please see appended lists.

The foregoing is a correct description.

THE NORTH EASTERN MARINE ENGINEERING CO., LTD.

Manufacturer.

| | | | | | | | | | | | | | | |
|---|---|---|--|---------|---------|--|------------|---------|---------------------------------------|---------|--------|---------------------------|-----------------|--------|
| Dates of Survey while building | During progress of work in shops - | 1923 Mar. 22, 30, Apr. 11, 17, May 29, July 12, 18, Dec. 28, Jan. 3, 17, 23, Feb. 13, 20, 22, 26, 28, Mar. 6, 8, 13, 14, 22, 26, Apr. 6, 9, 10, 24, May 16, 23, 24, 28, 29, 30, 31, June 4, 5, 7, 11, 12, 13, 14, July 3, 4, 5, 9, 12, 13, 16, 17, 24, 26, 27, 30, 31, Aug. 1, 3, 9, 10, 13, 14, 22, 23, 24, 29, 30, Sep. 4, 5, 6, 7, 11, 14, 18, 20, 25, Oct. 1, 5, 8, 10, 15, 16, 17, 22, 24, 25, 26, 29, Nov. 1, 5, 7, 8, 9, 14, 15, 20, 27, 28, 29, Dec. 11, 18, 20, 21, 1924 Jan. 3, 10, 11, 15, 24, 31, Feb. 4, 5, 7, 11, 14, 18, 20, 21, 24, 25, 28, 29, Mar. 3, 4, 11, 14, 18, 20, 21, 24, 25, 28, 29, Apr. 1, 3, 10, 11, 15, 24, 31, May 1, 5, 8, 11, 14, 18, 20, 21, 24, 25, 28, 29, Jun. 1, 5, 8, 11, 14, 18, 20, 21, 24, 25, 28, 29, Jul. 1, 5, 8, 11, 14, 18, 20, 21, 24, 25, 28, 29, Aug. 1, 5, 8, 11, 14, 18, 20, 21, 24, 25, 28, 29, Sep. 1, 5, 8, 11, 14, 18, 20, 21, 24, 25, 28, 29, Oct. 1, 5, 8, 11, 14, 18, 20, 21, 24, 25, 28, 29, Nov. 1, 5, 8, 11, 14, 18, 20, 21, 24, 25, 28, 29, Dec. 1, 5, 8, 11, 14, 18, 20, 21, 24, 25, 28, 29 | | | | | | | | | | | | |
| | During erection on board vessel - - | Mar. 3, 4 | | | | | | | | | | | | |
| | Total No. of visits | 116. | | | | | | | | | | | | |
| | Dates of Examination of principal parts—Cylinders | 24.5.23 to 5.7.23 | | Covers | 22.8.23 | | Pistons | 31.7.23 | | Rods | 1.8.23 | | Connecting rods | 2.7.23 |
| Crank shaft | 3.7.23 | | Thrust shaft | 22.2.23 | | Tunnel shafts | 8.3.23 | | Screw shaft | 9.5.23 | | Propeller | 16.9.23 | |
| Engines holding down bolts | 24.1.24 | | Completion of pumping arrangements | 8.2.24 | | Engines tried under working conditions | 8.2.24 | | Completion of fitting sea connections | 23.8.23 | | Stern tube | 23.8.23 | |
| Material of crank shaft | S.M. Steel | | Identification Mark on Do. | 6188N. | | Material of thrust shaft | S.M. Steel | | Identification Mark on Do. | 6474N. | | Material of tunnel shafts | S.M. Steel | |
| Material of tunnel shafts | S.M. Steel | | Identification Marks on Do. | 6494N. | | Material of screw shafts | S.M. Steel | | Identification Marks on Do. | 6494N. | | Material of screw shafts | S.M. Steel | |
| Is the flash point of the oil to be used over 150° F. | No. | | 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 machinery of this vessel has been constructed under special survey. The workmanship and materials are sound and good. The main engines were tested out in the shops and after being efficiently installed on the vessel were again tried out at mooring trials and sea trials with satisfactory results. The auxiliary machinery was satisfactorily tried out. The safety valves of the Donkey Boiler were adjusted under steam. In our opinion the vessel is eligible for notation in the Society's Register Book of L.M.C. 3.24 C.L.

| | |
|------------------------------|-----------|
| The amount of Entry Fee | £ 4 : - |
| Special | £ 93 : 8 |
| Donkey Boiler Fee | £ 15 : 16 |
| Travelling Expenses (if any) | £ : |

When applied for

14 MAR 1924

When received

29.3.24

Committee's Minute

Assigned

FRI. 21 MAR. 1924

L.M.C. 3.24
oil engines
C.L.

CERTIFICATE WRITER

W. H. Hume & Francis Dixon
Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
Foundation