

STEEL STEAMER OR MOTORSHIP.

Received at London Office

State if Report has been sent on the Freeboard of the Vessel No.State if Report is sent on the Machinery of the Vessel Yes.

20 MAY 1953

Date of completion of report 28 May 1953 Port of Leith No. 23229Survey held at Leith Date First Survey 30.4.51 Last Survey 22nd April 1953On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw) Twin Screw motor tug "M.S.C. Rover"State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) ✓ State Type of Erections noneTONNAGE under Tonnage Deck ... 137.05Do. of space or spaces between Tonnage Dk. and Upper Dk. ✓Total 137.05Gross Tonnage 154.18Register Tonnage NILNon-Swung 42.48

REGISTERED DIMENSIONS.

FEET

Length 88.4Breadth 24.2Depth 9.0CLASS 100 A.
FOR RIVER AND HARBOUR
TOWING SERVICES.State if with freeboard as condition of Class NoLength from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) 88.0Breadth (greatest moulded) 24.0Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) 12.01st Longitudinal Number (L x D) ✓2nd Numeral L x (B + D) ✓Framing Depth "d," at middle of length. See Sec. 3 (1d) ✓Proportions—Depth to Length—Uppermost continuous deck to top of keel 7.33Do. Long Bridge to top of keel ✓Draught Moulded ✓Built at LeithLaunched 17.2.53 Yard No. 1116Builders Henry Robb. LtdOwners Manchester Ship Canal CoManagers Ship Canal House
(Where necessary to be entered in Reg. Book)Residence King St. ManchesterPort of Registry ManchesterIf surveyed while building, afloat, 2 in dry dockYes. Undocked 13.4.53.

FRAMES, DOUBLE BOTTOM AND BEAMS.

| | INCHES IN SHIP. | Any Departure from Approved Plans to be Noted. | | INCHES IN SHIP. | Any Departure from Approved Plans to be Noted. |
|---|--------------------------------|--|--|----------------------|--|
| FRAMES, Spacing amidships..... | <u>21½</u> | <u>✓</u> | Bracket Floors, Frame | <u>✓</u> | |
| " " from ½ length amidships to Collision bulkhead..... | <u>21½</u> | <u>✓</u> | " " Reversed Frame..... | <u>✓</u> | |
| " " in peaks | <u>21½</u> | <u>✓</u> | " " Vertical Struts | <u>✓</u> | |
| SIDE FRAMING. | | | Centre Girder, depth and thickness amidships | <u>✓</u> | |
| Frame Amidships, Angle, <u>E or F</u> | <u>5 x 3 x 40</u> | <u>✓</u> | " " top Angles | <u>✓</u> | |
| " " Extends up to..... | <u>Upper Deck</u> | <u>✓</u> | " " bottom Angles..... | <u>✓</u> | |
| Reversed Frame Amidships, Angle | <u>✓</u> | | Side Girders, No. each side and thickness..... | <u>2 at 50</u> | <u>✓</u> |
| " " Extends up to | <u>✓</u> | | Margin Plate depth (excl. of flange) and thickness | <u>50</u> | <u>✓</u> |
| Depth of Framing Girder..... | <u>5</u> | <u>✓</u> | " " Vertical Angle to Tank side | <u>✓</u> | |
| <u>OF 16, 21, 26 & 30 Frames</u> | <u>6 x 3 x 40 OA</u> | <u>✓</u> | Bracket abaft ¼ len. from stem | <u>✓</u> | |
| WEB Frames in Uppermost Continuous Deck, Angle, <u>E or F</u> | <u>5 x 3 x 40 OA</u> | <u>✓</u> | " " Vertical Angle to Tank side | <u>✓</u> | |
| " " Second 'tween Decks, Angle, <u>E or F</u> | <u>✓</u> | | Bracket from forward ¼ len. from stem to Panting Area | <u>✓</u> | |
| " " Third " " " " " " | <u>✓</u> | | Gussets, spacing and scantling abaft ¼ len. from stem..... | <u>✓</u> | |
| " " from ½ len. for'd. to 15% len. from Stem | <u>5 x 3 x 34 BA</u> | <u>✓</u> | Gussets, spacing and scantling from forward ¼ len. from stem to Panting Area | <u>✓</u> | |
| " " in Peaks, Angle, <u>E or F</u> | <u>5 x 3 x 34</u> | <u>✓</u> | Tank Side Brackets, height above base line at toe of Frame and thickness | <u>✓</u> | |
| Diameter and Spacing of Rivets through Frame and Shell Plating amidships | <u>¾ at 5¼</u> | <u>✓</u> | INNER BOTTOM PLATING, in Engine Room | <u>63½ x 40</u> | <u>✓</u> |
| State if Frame Joggled..... | <u>Yes</u> | <u>✓</u> | Breadth and thickness of Middle Line Strake..... | <u>✓</u> | |
| Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved? | <u>✓</u> | | Thickness of remainder in Holds | <u>✓</u> | |
| Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved? | <u>✓</u> | | Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room? | <u>✓</u> | |
| SINGLE BOTTOM. | | | BEAMS. | <u>"8 x 32"</u> | <u>5 x 3 x 32</u> |
| Floors, Depth and thickness at mid-line in Holds..... | <u>16 x 36 (30 in J. Peak)</u> | <u>✓</u> | Uppermost Continuous Deck, amidships in <u>Wall Angle, E or F</u> | <u>6 x 3 x 30-36</u> | <u>✓</u> |
| Height of Brackets at side above base line at toe of frame..... | <u>✓</u> | | " " in way of Bridge, Angle, <u>E or F</u> | <u>4 x 3 x 32</u> | <u>✓</u> |
| Middle Line Keelson, on Floors, Angle, <u>E or F</u> | <u>9 x 3½ x 3½ x 42</u> | <u>✓</u> | Spacing | <u>21½</u> | <u>✓</u> |
| " " Through Plate or Inter-costal Plate | <u>✓</u> | | Second Deck, amidships, Angle, <u>E or F</u> | <u>✓</u> | |
| " " Foundation Plate on Floors | <u>✓</u> | | Spacing | <u>✓</u> | |
| " " Flat Plate Keel Angles | <u>✓</u> | | Third Deck, amidships, Angle, <u>E or F</u> | <u>✓</u> | |
| Side Keelsons, No. each side..... | <u>✓</u> | | Spacing..... | <u>✓</u> | |
| " " thickness of Inter-costal Plate..... | <u>✓</u> | | Fourth Deck, amidships, Angle, <u>E or F</u> | <u>✓</u> | |
| " " Angles | <u>✓</u> | | Spacing..... | <u>✓</u> | |
| DOUBLE BOTTOM, in Engine Space. | <u>34 for 29-33</u> | <u>✓</u> | Poop Deck, Angle, <u>E or F</u> | <u>✓</u> | |
| Solid Floors, thickness and spacing | <u>40 elsewhere</u> | <u>✓</u> | Spacing..... | <u>✓</u> | |
| " " Are Frame and Reversed Frame joggled? | <u>Yes</u> | <u>✓</u> | Bridge Deck, Angle, <u>E or F</u> | <u>✓</u> | |
| Bracket Floors, breadth and thickness at middle line | <u>✓</u> | | Spacing..... | <u>✓</u> | |
| " " breadth and thickness at margin plate..... | <u>✓</u> | | Forecastle Deck, Angle, <u>E or F</u> | <u>✓</u> | |
| | | | Spacing..... | <u>✓</u> | |

PILLARS AND DECKS.

| | | INCHES IN SHIP. | Any Departure from Approved Plans to be Noted. | INCHES IN SHIP. | Any Departure from Approved Plans to be Noted. | Number of Certificate. |
|--|----------------------------|-----------------|--|---|--|------------------------|
| PILLARS, No. of Rows | as approved | | | | | |
| " in 'tween Decks, Size and Spacing | | ✓ | | Stringer Plate, breadth and thickness in way of Bridge | ✓ | |
| " " " " " | | ✓ | | Thickness of Plating abreast Deck openings in way of Wells | ✓ | |
| " in Holds " " " | | ✓ | | Thickness of Plating abreast Deck openings in way of Bridge | ✓ | |
| " " " " " | | ✓ | | Thickness of Plating within line of openings | ✓ | |
| Centre Line Bulkhead. Stiffeners and Spacing | | ✓ | | If Sheathed, material and thickness | ✓ | |
| Plating, thickness of | | ✓ | | Third Deck. Stringer Plate, breadth and thickness | ✓ | |
| STRINGERS AND DECKS. Uppermost Continuous Deck. Stringer Plate, breadth and thickness in Wells | 69 x 32 | ✓ | | If Plated, state thickness | ✓ | |
| " " " " in way of Bridge | | ✓ | | Fourth Deck. Stringer Plate, breadth and thickness | ✓ | |
| " Angle in Wells | 3 x 3 x 30 | ✓ | | If Plated, state thickness | ✓ | |
| Thickness of Plating abreast Deck openings in way of Wells | 32 | ✓ | | Poop Deck. Stringer Plate, breadth and thickness | ✓ | |
| Thickness of Plating abreast Deck openings in way of Bridge | ✓ | | | Plating, Sheathing, material and thickness | ✓ | |
| Thickness of Plating within line of openings | 32 | ✓ | | Bridge Deck. Stringer Plate, breadth and thickness | ✓ | |
| If Sheathed, material and thickness | 5 x 2 1/2 O.P. over accom? | ✓ | | Plating, Sheathing, material and thickness | ✓ | |
| Second Deck. Stringer Plate, breadth and thickness in Wells | | ✓ | | Forecastle Deck. Stringer Plate, breadth and thickness | ✓ | |
| | | | | Plating, Sheathing, material and thickness | ✓ | |

SHELL PLATING.

| | | SCANTLINGS. | | | | RIVETING. | | | | | |
|-------------------------------------|---------|---------------|------------|------------|------------|--|-------------------|---------|------------------------|---------|---|
| STRAKES. | | AS IN VESSEL. | | | | ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED. | EDGES. | | | | |
| | | AMIDSHIPS. | | FORWARD. | AFT. | | No. | | BUTTS. | | |
| | | Breadth. | Thickness. | Thickness. | Thickness. | | SINGLE OR DOUBLE. | RIVETS. | No. OF ROWS OF RIVETS. | RIVETS. | STRAPPED OR LAPPED. |
| Flat Plate Keel | | ✓ | ✓ | ✓ | ✓ | | | | | | |
| Garboard A | | 32 1/2 | 3/8 | 3/8 | 3/8 | X Increased locally to 50 at bilging and forefoot. | ✓ | ✓ | ✓ | ✓ | STRAPPED CLE OF OF DB WELDED BUTTS IN O.F. TANKS. |
| " B | | 63 | 3/8 | 3/8 X | 3/8 | | D.R. | 3/4 | 3 | Two | 3/4 2 5/8 |
| Bottom Plating, No. of Strakes | 2 C | 63 | 3/8 | 3/8 | 3/8 X | | D.R. | 3/4 | 3 | Two | 3/4 2 5/8 |
| Bilge Plating, No. of Strakes | 1 D | 63 | 3/8 | 3/8 | 3/8 | | D.R. | 3/4 | 3 | Two | 3/4 2 5/8 |
| Side Plating, No. of Strakes | SHEER E | 66 | 40 | 40 | 40 | | D.R. | 3/4 | 3 | Two | 3/4 2 5/8 |
| Upper Deck, Sheer-strake in Wells | | | | ✓ | | | | | | | STRAPPED |
| Upper Deck, Sheer-strake in Bridge | | | | ✓ | | | | | | | STRAPPED |
| Strake below Sheer-strake in Wells | | | | ✓ | | | | | | | STRAPPED |
| Strake below Sheer-strake in Bridge | | | | ✓ | | | | | | | STRAPPED |
| Poop Side Plating | | | ✓ | | | | | | | | |
| Bridge Side Plating | | | ✓ | | | | | | | | |
| Forecastle Side Plating | | | ✓ | | | | | | | | |

WATERTIGHT BULKHEADS.

| | |
|--|-------|
| Total No. of W.T. BULKHEADS in Vessel— | |
| Extending to Upper Deck (Sec. 3 c) | THREE |
| " Deck next below | ✓ |
| As per Rule | THREE |

FORGINGS AND CASTINGS.

| | Casting or Forging. | Scantlings. | Maker's Name. | Any Departure from Approved Plans to be Noted. |
|---|---------------------|--|---------------|--|
| KEEL, Bar | rolled Steel | 7 x 1 1/8 | | |
| STEM | Bar | 7 x 1 1/8 | | |
| STERN FRAME | Brackets & Bolts | Propeller 6" dia mild steel bar with 6 x 1 1/4 flat welded on fore side. | | |
| Speed of Vessel | | 11 1/2 knots | | |
| RUDDER—Type | Ordinary | | | |
| " A x D | 63 x 75 | | | |
| " UPPER STOCK | Forging | 4 3/4 dia | | |
| " Diam. of head | " | 5 1/4 | J.S. Forster | |
| " Mainpiece at top pintle | " | 4 3/4 | S. S. Forster | |
| " " heel | " | 3 1/2 | Sunderland | |
| " how constructed | Riveted | | | |
| " double or single plate coupling, vertical or horizontal | Single | 6 bolts fitted 1 3/8 dia | | |

| | Plating Thickness. | STIFFENERS. | | | |
|-------------------------------------|--------------------|-------------|------------------|-------------|----------|
| | | VERTICAL. | | HORIZONTAL. | |
| | | Scantlings. | Spacing. | Scantlings. | Spacing. |
| MIDSHIP BULKH'D, Upper 'tween decks | | | | | |
| " " Second | | | | | |
| " " Third | | | | | |
| " " Holds | 2 x 34 | 30 | 4 x 3 x 5/16 | 28 | |
| COLLISION " (in Hold) | 2 x 40 x 43 | 30 | 4 x 3 1/2 x 3/16 | 24 | |
| AFTER PEAK " | 2 x 6-9 | 30 | 4 x 2 1/2 x 3/16 | 2 1/2 | |

| | |
|--------|--|
| STEEL. | Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) |
| | South Durham Steel & Iron Co. Dorman Long & Co. Ltd. Appleby Frodingham |
| | Spinningrove Iron & Steel Co. Ltd |
| | Has the Steel been tested as required by the Rules? Yes |

Req. 1. No. 2161
 Key R266
 for Mest
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[illegible]

86.42

the Upper

This ship has been built under Special Survey and in conformity with the Society's Rules & Regulations and Secretary's letters. The scantlings and arrangements are as given in the Report and as shown and amended on the approved plans now forwarded. All modifications or additions to the original approved arrangements, made during construction have been indicated on the plans and have been approved as being in accordance with, or by standards equivalent to the Rule Requirements. The plans of hullship section etc., & Profile etc., showing the ship as built, forwarded herewith, have been checked and found in order. The material and workmanship are good. The double bottom tanks, fore & aft peaks, deep tank & cofferdam, bulkheads, decks, bilge & ballast pumping appts., have been tested in accordance with Rule Requirements & found satisfactory. The steering gear has been tested under working conditions satisfactorily. Oil fuel, F. P. above 150°F., is carried in the engine room double bottom tanks for the use of the engines.

The amount of Entry Fee..... £ ☒ : } Fees applied for,
8/5/1953.
Special Survey Fee..... £ 47 : - : - } Received by me,
Travelling Expenses, if any £ ☒ : } 19

I am of opinion the Vessel should be Classed **+ 100 A.**
For River + Harbour Towing Services
J. B. Somerville
Signature
Surveyor to Lloyd's Register of Shipping.

State whether the Vessel has been built under Special Survey **YES**

Certificate to be sent to **Lith** } Date of issue **8/6/53**
Manchester }
GLASGOW } **19 MAY 1953** **JNR.**
Committee's Minute

Character assigned **For River + Harbour Towing Services**
H. 53. Lth
+ 100 A -

CLASSIFICATION
CERTIFICATES WRITTEN

+ L.M.C. H. 53. Oil Engines
with torsional endorsement.

Lloyd's Register of Shipping
011628-011635-03613

GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

Sister Ships M.S.C. Onset, M.S.C. Onward, M.S.C. Panther, M.S.C. Rama, M.S.C. Quany, M.S.C. Ranger. With Report nos. 22087, 22116, 22478, 22580, 22957, 23000 and 23163 respectively.

The following plans and certificates are forwarded herewith.

- | Plans | Certificates |
|--------------------------------|--------------------------------|
| 1. Midship section as fitted. | 1. Rudder Head main piece |
| 2. Framing Profile | 2. Stem bracket boss forgings. |
| 3. Deck Plan | |
| 4. General Arrangement | |

The working plans were forwarded with the F.E. report for the M.S.C. Ranger.

PARTICULARS OF ELECTRIC WELDING (if employed) Harboard butts amidships, shaft bossing, port shell seams aft, double bottom floors to tank top, tank intercostals to tank top and shell, tank top plating, engine girders to shell and tank top, auxiliary engine seats, fabricated stern frame and other items of minor structural importance.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book
+ 100A. River and Harbour Towing Services.
Oil engines, bar keel, part electrically welded

RADAR Equipment (State if fitted) none fitted
State Type or Pattern No. ✓
State } Maker ✓
Name } and/or ✓
of } Supplier ✓

Particulars of Drop Test of Cast Steel Anchors, viz.:—
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower
2nd "
3rd "

none approved.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ✓ ft., R.Q.D. ✓ ft., Bridge ✓ ft., Forecastle ✓ ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated.

Official No. 185811. Signal Letters ✓ Extreme Breadth over Belting 25.4 Over-all Length 94.3' (Circ. 1611) (Circ. 1703)

No. and Material of Decks. One Deck. Steel.

Parts of Bottom of Vessel coated with cement or approved composition Bottom fore and aft peaks and spaces over Deep tank and cofferdam, Engine room below level
Particulars of composition (if fitted) and of approval of floor plating coated with Bituminous Solution, Enamel.

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Tanks (if tested) are to be included.)

| Where Fitted. | Length. | Water Capacity. | Where Fitted. | Length. | Water Capacity. |
|---|-----------|-----------------|---|---------|-----------------|
| Double bottom, aft, | Feet. | Tons. | Fore peak tank, | Feet. | Tons. |
| Double bottom, under Engines and Boilers, | ✓ | | After peak tank, | 15.25 | 18.1 |
| Double bottom, if under Engines only, OIL FUEL. | 35.83 | | Deep tank, aft, | 12.50 | 10.0 |
| Double bottom, if under Boilers only, | ✓ | | Deep tank, forward, | 7.17 | 11.8 |
| Double bottom, forward, | ✓ | | Other tanks, if fitted, 6.0. Nos 34-36 | 3.59 | 6.0 |
| Total length (if continuous) and Capacity | 35.83 | | (If necessary furnish further information by sketch.) | | |
| O.F. capacity 6.0. Nos. | 3.0 Tons. | | | | |

Order for Special Survey No. 2161.

Date 16.6.50.

Dates of Surveys held while building

1951. April 30

1952. Feb. 5 Mar 4, 20, 26, April 11, 22, 25, May 15, 28, 30, June 13, 18, Aug 11, 12, 13, 15, 19, 26, Oct. 3, 8, 14, 15, 24.

1953. Feb. 17, April 9, 10, 14, 22

Total No. of Visits 29.