

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

Date of completion of report 19th February 1942. Port of Hull. No. 51342.
Survey held at Hessle and Hull Date First Survey 18. 10. 40. Last Survey 15th February 1942.

On the (State if Machinery fitted Aft and
if Single, Twin or Triple Screw)

State Type (Full scantling, complete superstructure with or without Tonnage Openings)

State Type of Erections. *Flush Deck.*

TONNAGE under } 228.85
Tonnage Deck... }

CLASS 100 A-1.

State if with freeboard } **No**
as condition of Class }
FEET.

Built at Hessle

Do. of space or spaces
between Tonnage Dk.
and Upper Dk.

Length from fore part of stem to after part of stern } L 105.0 ✓
 post on summer L.W.L. See Sec. 3 (1a) }

Launched 24th September 1941 Yard No. 419.

Total 228.85

Breadth (*greatest moulded*) B 26.5 ✓

Builders *Messrs' Henry Scarr & Co. Ltd.*

Gross Tonnage 245.42

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) } D 13.5 ✓

Owners Ministry of Shipping

Register Tonnage

1st Longitudinal Number (L × D)..... = 1417

Managers ✓
(Where necessary to be entered in Reg. Book.)

Residence London

REGISTERED DIMENSIONS.

Length 106.7

Framing Depth "d," at middle of length. See }
 Sec. 3 (1d) }

Port of Registry ✓

Breadth 26.7

Proportions—Depth to Length—Uppermost continuous deck to top of keel } 7.77

N Surveyed while building, afloat, or in dry dock

Depth 11.6

Do. Long Bridge to top of keel

Building and Afloat.

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	21" ✓		Bracket Floors, Frame	✓
" " from $\frac{3}{4}$ length amidships to Collision bulkhead.....}	22" IN BOILER SPACE ✓		" " Reversed Frame	✓
" " in peaks.....	21" ✓		" " Vertical Struts	✓
SIDE FRAMING.			Centre Girder, depth and thickness amidships	30" - 24" x 44" ✓
Frame Amidships, Angle, E or F	5" x 3" x 30 B.A. ✓ 5" x 3" x 36 B.A. IN BUNKERS AND B.R. ✓		" " top Angles	2½" x 2½" x 38 SINGLE ✓
" " Extends up to	DECK ✓		" " bottom Angles	3" x 3" x 42" SINGLE ✓
Reversed Frame Amidships, Angle	2½" x 2½" x 36 ✓	✓ D.B. 11	Side Girders, No. each side and thickness	✓
" " Extends up to	ACROSS FLOORS ✓		Margin Plate depth (excl. of flange) and thickness	✓
Depth of Framing Girder	5" ✓		" " Vertical Angle to Tank side Bracket abaft ¼ len. from stem	✓
Frames in Uppermost Continuous 'tween Decks, Angle, [or]	/		" " Vertical Angle to Tank side Bracket from forward ¼ len. from stem to Panting Area	✓
" " Second 'tween Decks, Angle, [or]	/		" " Gussets, spacing and scantling abaft ¼ len. from stem	✓
" " Third " " " "	/		" " Gussets, spacing and scantling from forward ¼ len. from stem to Panting Area	✓
" " from ¼ len. for'd. to 15% len. from Stem	/		Tank Side Brackets, height above base line at toe of Frame and thickness	✓
" " in Peaks, Angle or [.....	5" x 3" x 30 B.A. ✓		INNER BOTTOM PLATING.	
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	5/8" - 4½" ✓		Breadth and thickness of Middle Line Strake ..	58" x 42" ✓
State if Frame Joggled	No ✓		Thickness of remainder in Halls	44" ✓
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	TUG. ✓		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?	✓
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	TUG ✓		BEAMS.	
SINGLE BOTTOM.			Uppermost Continuous Deck, amidships	5" x 3" x 32 ✓
Floors, Depth and thickness at mid-line in Halls	17" x 30" - 40" IN B.R. ✓		" " in Way of Bridge, Angle, E or F	4" x 2½" x 30" HALF BEAMS ✓
Height of Brackets at side above base line at toe of frame	✓		" " Spacing	21" AND 22" ✓
Middle Line Keelson, on Floors, Angles, E or F	3½" x 3" x 40 DOUBLE IN BOILER SPACE ✓ 3½" x 3" x 30 FORD. ✓		Second Deck, amidships, Angle, [or]	
" " Through Plate or Intercostal Plate	42" IN BOILER SPACE ✓ 34" CLEAR OF BOILERS ✓		Spacing	
" " Foundation Plate on Floors	12" x 42" EACH SIDE OF CENTRE LINE ✓		Third Deck, amidships, Angle, [or]	
" " Flat Plate Keel Angles	3½" x 3½" x 46" DOUBLE IN BOILER SPACE ✓		Spacing	
Side Keelsons, No. each side	ONE ✓		Fourth Deck, amidships, Angle, [or]	
" " thickness of Intercostal Plate	✓		Spacing	
" " Angles	5" x 4" x 38 FORD OF BOILER SPACE ✓ 5" x 4" x 48 IN BOILER SPACE ✓		Poop Deck, Angle, [or]	
" "			Spacing	
DOUBLE BOTTOM. 25-36 RESERVE FEED TANK			Bridge Deck, Angle, [or]	
Solid Floors, thickness and spacing	36" 21" - 22" SPACING ✓		Spacing	
" " Are Frame and Reversed Frame joggled?	No ✓		Forecastle Deck, Angle, [or]	
Bracket Floors, breadth and thickness at middle line	✓		Spacing	
" " breadth and thickness at margin plate	✓			

PILLARS AND DECKS.
PILLARS, No. of Rows.
in 'tween Decks, Size and Spacing.
in Holds
Centre Line Bulkhead.
Stringers and Spacing.
Plating, thickness of.
STRINGERS AND DECKS.
Uppermost Continuous Deck.
Stringer Plate, breadth and thickness in Wells.
in way of Bridge
Angle in Wells.
Thickness of Plating abreast Deck openings.
Thickness of Plating abreast Deck openings in way of Bridge.
Thickness of Plating within line of openings.
If Sheathed, material and thickness.
Second Deck.
Stringer Plate, breadth and thickness in Wells.

SHELL PLATING.
SCANTLINGS.
AS IN VESSEL.
ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.
STRAKES.
AMIDSHIPS. FORWARD. AFT.
Breadth. Thickness. Thickness. Thickness.
Inches. Inches. Inches. Inches.
FLAT PLATE KEEL
DBLG. (if any)
BOTTOM PLATING, No. of Strakes.
BILGE PLATING, No. of Strakes.
SIDE PLATING, No. of Strakes.
UPPER DECK, Sheer-strake in Bridge.
UPPER DECK, Sheer-strake in Wells.
STRAKE BELOW SHEER-strake in Bridge.
STRAKE BELOW SHEER-strake in Wells.
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).
Deck next below.
As per Rule.
STIFFENERS.
VERTICAL. HORIZONTAL.
Scantlings. Spacing. Scantlings. Spacing.
MIDSHIP BULKHEAD, Upper 'tween decks.
Second.
Third.
Holds.
COLLISION.
AFTER PEAK.
Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture).
STEEL.
PLATES:- APPLEY-FRODINGHAM STEEL CO. LD.
SECTIONS:- DORMAN, LONG, & CO. LD. APPLEY-FRODINGHAM STEEL CO. LD.
Has the Steel been tested as required by the Rules?

EQUIPMENT NO. LETTER ANCHORS.
Number of Certificate. Anchors. WEIGHT, EX. STOCK. WEIGHT OF STOCK. TEST, PER CERTIFICATE.
26557 1st Bower 6 7 21 STOCKLESS 8 15 0 0
26558 2nd 6 2 0 8 15 0 0
Collective weight. 12 3 21 12 1/2

CHAIN CABLES. HAWSERS AND WARPS.
Number of Certificate. Length and size supplied. Test per Certificate. WEIGHT OF CHAIN CABLE. Length and size per Table 53. Description. Makers of Cables. Where and when tested, and Superintendent. Material. Length and size supplied. Breaking Test of Steel Wire. Length and size per Table 53.
1154318 28 3/8 1 18 27 16.0.5 46 90 1 STUDD LINK NOT STATED NETHERTON 30/9/41 J.A. RELF. TOWLINE 60 6 60 6
115480 A 30 1 18 27 16.2.17 105 0 24/10/41 HAWSERS & WARPS 60 6 60 6
115482 45 3/4 1 18 27 25.0.17 24 11/141 60 4 1/2 60 4 1/2
115483 45 3/4 1 18 27 25.0.23

Steering Gear, Type (Power or hand) HAND AND STEAM STEERING GEAR BY DUNKIN & CO. LTD. Alternative Means of Steering TILLER AND BLOCKS AND TACKLE.
Steering Chains (Size and Test) 7/8 DIA TEST 9/8 TONS Windlass HORIZONTAL STEAM BY EMERSON WALKER LTD. Boats 2. WOOD LIFEBOATS, UNDER WELIN DAVITS BOATS 17'0" x 6'0" x 2'35"
Ceiling in Holds, thickness and material. Cargo Batts, thickness, material and spacing.
Cargo Hatchways. (Upper Deck) 2 COAL HATCHES ON CASING TOP Thickness of Hatches STEEL HINGED COVERS.
Size of Hatchways No. 1 (Fwd.) No. 2 No. 3 No. 4 No. 5 No. 6
Number of Shifting Beams and/or Fore and Afters NONE.
Builder's Signature

GENERAL DECLARATION. It should be stated (a) whether the vessel (if not a motorship) is fitted for the carriage and burning of oil used as fuel. No.
(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo. No.
The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point (where required to be inserted in the Notation).
The vessel has been built in accordance with the approved plans and specification, and in conformity with the Rules for the class contemplated.
The materials and workmanship are good.
The fore and aft peak tanks, the reserve feed tank, and of fresh water tank have been tested to Rule requirements and found satisfactory.
Decks, casing, w.t. Bulkheads, steering gear and windlass have been tested and found satisfactory.

FEES APPLIED FOR.
The amount of Entry Fee. 2 10 0
SUPERVISION OF SPECIFICATION 6 2 6
Special Survey Fee. 2 4 0
FREEBOARD FEE. 4 0 0
Travelling Expenses. 2 5 3
23 FEB 1942
I am of opinion the Vessel should be Classed 100. A.1.
FOR TOWING SERVICES "SEAEDING"
Signature: J. McDonald
Surveyor to Lloyd's Register of Shipping.
Committee's Minute
Character assigned: For Towing Services
Date of issue: 5/5/42
FRL 27 MAR 1942
Lloyd's Register Foundation

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.)

The approved plans are being retained for reference in dealing with sister vessels, copies of these are in the Docking Office.

Empire Birch

This vessel is a sister-ship to the same builders yard No 418 - Hull Rpt. No 51472.

PARTICULARS OF ELECTRIC WELDING (if employed)

Cabin flat deck & aft welded, Reserve feed tank top welded to shell. Fresh Water tank top welded to shell. Stern frame & Rudder welded. all in accordance with approved plans.

Approved electrodes employed on this work.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book.

100 A.1. "FOR TOWING SERVICES."

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	3. 3. 21	J.D. 2939	29/5/40.
	2nd "	4. 0. 7.	J.D. 2894	18/5/40.
	3rd "	✓		

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. ✓ Signal Letters ✓ Extreme Breadth over Belting (Circ. 1611) 26-9 5/8 No belting fitted Over-all Length (Circ. 1703) 113-4 1/5
No. and Material of Decks 1 DK (STEEL)
Parts of Bottom of Vessel coated with cement or approved composition CEMENT IN FORE AND AFT PEAK TANKS. AND FRESH WATER TANKS, ALSO UNDER BOILER & IN WAY OF OPEN FLOORS ELSEWHERE.
Particulars of composition (if fitted) and of approval ✓

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. Feet.	Water Capacity. Tons.	Where Fitted.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,			Fore peak tank,	9'0"	18
Double bottom, under Engines and Boilers,			After peak tank,	8'9" + 6'6" COUNTER	23
Double bottom, if under Engines only,			Deep tank, aft, FRESH WATER TANK FORD DTF	3'5"	6
Double bottom, if under Boilers only,			Deep tank, forward, RESERVE FEED TANK DB across deck	19'58"	21
Double bottom, forward,			Other tanks, if fitted,	✓	✓
Total length (if continuous) and Capacity			(If necessary, furnish further information by sketch.)	✓	✓

Order for Special Survey No 1223.

Date 2. 8. 40.

Dates of Surveys held while building

1940. Oct 30. Nov. 7. 13. 20. 26. Dec. 5. 12. 18. 1941. Jan. 1. 8. 31. Feb. 18. 25. Mar. 24. 25. 28. Apr. 2. 7. 9. 10. 12. 23. 25. 30. May 5. 7. 12. 16. 20. 22. 28. June 4. 11. 25. 28. July 1. 9. 14. 22. 29. 25. 29. 30. Aug. 7. 9. 13. 19. 21. Sept. 1. 5. 9. 10. 11. 15. 19. 20. 23. 25. 30. Oct. 3. 6. 9. 10. 14. 16. 20. 21. 23. 24. 29. 30. 31. Nov. 3. 6. 10. 12. 14. 21. 26. 28. Dec. 3. 6. 1942. Jan. 6. 8. 12. 16. 19. 20. Jan 26. Feb. 2. 13.

Total No. of Visits 92.