Rpt. 1

STEEL STEAMER ~~OR MOTORSHIP.~~ (TUG)

Received at London Office 14 MAY 1943

State if Report has been sent on the Freeboard of the Vessel yes.

State if Report is sent on the Machinery of the Vessel yes.

Date of completion of report 8th May 1943. Port of Hull No. 5200 H.

Survey held at Selby and Hull. Date First Survey 22nd September 1942. Last Survey 3rd. May 1943.

On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw) Single Screw. Steam Tug "EMPIRE JOAN". Machinery fitted aft.

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) Full Scantling State Type of Erections None.

TONNAGE under Tonnage Deck ...	184.54
Do. of space or spaces between Tonnage Dk. and Upper Dk.	✓
Total	184.54
Gross Tonnage	202.84
Register Tonnage	Nil

REGISTERED DIMENSIONS.

	FEET
Length	95.25
Breadth	25.1
Depth	12.4

CLASS ✠100 A.1. "FOR TOWING SERVICES". State if with freeboard as condition of Class No.

	FEET	
Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a)	L	95.0 ✓
Breadth (greatest moulded)	B	25.0 ✓
Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c)	D	13.0 ✓
1st Longitudinal Number (L × D)	=	1235 ✓
2nd Numeral L × (B + D)	=	3610 ✓
Framing Depth "d," at middle of length. See Sec. 3 (1d)		✓
Proportions—Depth to Length—Uppermost continuous deck to top of keel		7.3 ✓
Do. Long Bridge to top of keel		✓
Draught Moulded		11'6"

Built at Selby.

Launched 8th January 1943 Yard No. 1262.

Builders Cochrane & Sons Ltd

Owners The Ministry War Transport.

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

Residence London.

Port of Registry Goole.

If surveyed while building, afloat, or in dry dock During construction

FRAMES, DOUBLE BOTTOM AND BEAMS.

	Inches in Ship.			Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships		21	✓	
" " from 3/5 length amidships to Collision bulkhead		21	✓	
" " in peaks		21	✓	
SIDE FRAMING.				
Frame Amidships, Angle, ~~L or L~~	5	3	·40	✓
" " Extends up to		UPPER DECK		✓
Reversed Frame Amidships, Angle	2½	2½	·40	✓
" " Extends ~~up to~~		ACROSS FLOORS		✓
Depth of Framing Girder		5		✓
Frames in Uppermost Continuous 'tween Decks, Angle, L or L				
" " **Second 'tween Decks,** Angle, L or L				
" " **Third** " " " " "				
" **from ½ len. for'd. to 15% len. from Stem**				
" **in Peaks,** Angle ~~or L~~	5	3	·40	✓ approved 5x3x·34 on plan
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	3/4"	-	5¼"	✓
State if Frame Joggled		No.		✓
Are the scantlings and arrangements in the **Panting Area** in accordance with the Rules and/or as approved ?		AS APPROVED.		
Are the scantlings and arrangements in way of the **Bottom Forward** in accordance with the Rules and/or as approved ?				
SINGLE BOTTOM.				
Floors, Depth and thickness at mid-line ~~in~~	15"	×	·30"	✓
" ~~Holds~~ " IN BOILER ROOM.	15	×	·40	✓
Height of Brackets at side above base line at toe of frame		✓		
Middle Line Keelson, on Floors, ~~Angles,~~ L or L	12"×4"	×	4"×36 lbs.	✓
" " " Through Plate or Intercostal Plate		✓		
" " " Foundation Plate on Floors		✓		
" " " Flat Plate Keel Angles		✓		
Side Keelsons, No. each side		ONE		✓
" " thickness of Intercostal Plate		✓		
" " Angles IN BOILER ROOM & BUNKER	5	4	·48	✓
DOUBLE BOTTOM.				
Solid Floors, thickness and spacing				
" " Are Frame and Reversed Frame joggled ?				
Bracket Floors, breadth and thickness at middle line				
" " breadth and thickness at margin plate				

	Inches in Ship.			Any Departure from Approved Plans to be Noted.
Bracket Floors, Frame				
" " Reversed Frame				
" " Vertical Struts				
Centre Girder, depth and thickness amidships				
" " top Angles				
" " bottom Angles				
Side Girders, No. each side and thickness				
Margin Plate depth (excl. of flange) and thickness				
" " Vertical Angle to Tank side Bracket abaft ¼ len. from stem				
" " Vertical Angle to Tank side Bracket from forward ¼ len. from stem to Panting Area				
" " Gussets, spacing and scantling abaft ¼ len. from stem				
" " Gussets, spacing and scantling from forward ¼ len. from stem to Panting Area				
Tank Side Brackets, height above base line at toe of Frame and thickness				
INNER BOTTOM PLATING.				
Breadth and thickness of Middle Line Strake				
Thickness of remainder in Holds				
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 ?				
BEAMS.				
Uppermost Continuous Deck, amidships ~~in Wells,~~ Angle, ~~L or L~~	5	3	·30	✓
" " in way of Bridge, Angle, L or L		✓		
Spacing		21		✓
Second Deck, amidships, Angle, L or L				
Spacing				
Third Deck, amidships, Angle, L or L				
Spacing				
Fourth Deck, amidships, Angle, L or L				
Spacing				
Poop Deck, Angle, L or L				
Spacing				
Bridge Deck, Angle, L or L				
Spacing				
Forecastle Deck, Angle, L or L				
Spacing				

(MADE IN ENGLAND.)

PILLARS AND DECKS.

	Inches in Ship.		Any Departure from Approved Plans to be Noted.
PILLARS, No. of Rows	ONE	✓	
in 'tween Decks, Size and Spacing	2½" DIAR.	5'3"	
" " " "	AS APPROVED		
" in Holds	✓		
" " " "	✓		
Centre Line Bulkhead. Stiffeners and Spacing	✓		
Plating, thickness of	✓		
STRINGERS AND DECKS. **Uppermost Continuous Deck.** Stringer Plate, breadth and thickness ~~in Wells~~	57 × ·32	✓	
" " " " in way of Bridge	✓		
" Angle ~~in Wells~~	3 3	·32 ✓	
Thickness of Plating abreast Deck openings ~~in way of Wells~~	·32	– ·30 ✓	
Thickness of Plating abreast Deck openings in way of Bridge	✓		
Thickness of Plating within line of openings...	·30	– ·25 ✓	
If Sheathed, material and thickness	NONE	✓	
Second Deck. Stringer Plate, breadth and thickness in Wells	✓		

	Inches in Ship.	Any Departure from Approved Plans to be Noted.
Stringer Plate, breadth and thickness in way of Bridge		
Thickness of Plating abreast Deck openings in way of Wells		
Thickness of Plating abreast Deck openings in way of Bridge		
Thickness of Plating within line of openings...		
If Sheathed, material and thickness		
Third Deck. Stringer Plate, breadth and thickness		
If Plated, state thickness		
Fourth Deck. Stringer Plate, breadth and thickness		
If Plated, state thickness		
Poop Deck. Stringer Plate, breadth and thickness		
Plating, Sheathing, material and thickness ...		
Bridge Deck. Stringer Plate, breadth and thickness		
Plating, Sheathing, material and thickness		
Forecastle Deck. Stringer Plate, breadth and thickness		
Plating, Sheathing, material and thickness...		

SHELL PLATING.

SCANTLINGS.

STRAKES.	AS IN VESSEL. Amidships. Breadth.	Amidships. Thickness.	Forward. Thickness.	Aft. Thickness.	ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.
	Inches.	Inches.	Inches.	Inches.	
GARBOARD. ~~Flat Plate Keel~~	34 ✓	·34 ✓	·34 ✓	·34 ✓	
" Dblg. (if any)	✓	✓			
Bottom Plating, No. of Strakes 2 "B"	62½	·32 ✓	·30 ✓	·30 ✓	
"C"	52	·32 ✓	·30 ✓	·30 ✓	
Bilge Plating, No. of Strakes 1 "D"	55	·32 ✓	·30 ✓	·30 ✓	
Side Plating, No. of Strakes	✓				
Upper Deck, Sheer-strake ~~in Wells~~ "F"	42 ✓	·38 ✓	·34 ✓	·34 ✓	
Upper Deck, Sheer-strake in Bridge ...	✓				
Strake below Sheer-strake ~~in Wells~~ "E"	49 ✓	34 ✓	·30 ✓	·30 ✓	
Strake below Sheer-strake in Bridge ...	✓				
Poop Side Plating	✓				
Bridge Side Plating	✓				
Forecastle Side Plating	✓				

RIVETING.

	EDGES. State if joggled? Yes. ✓ Single or Double.	Rivets. Diam.	Rivets. Spacing cr. to cr.	BUTTS. No. of Rows of Rivets.	Rivets. Diam.	Rivets. Spacing cr. to cr.	Strapped or Lapped.
		Inches.	Inches.		Inches.	Inches.	
GARBOARD. ~~Flat Plate Keel~~	DOUBLE ✓	¾ ✓	6 PR. R. ✓	DOUBLE ✓	¾ ✓	2⅝ ✓	STRAPPED. ✓
" Dblg. (if any)	✓			✓			
Bottom Plating, No. of Strakes 2 "B"	SINGLE ✓	¾ ✓	6 PR. R. ✓	DOUBLE ✓	¾ ✓	2⅝ ✓	LAPPED ✓
"C"	"	"	"	" ✓	"	"	" ✓
Bilge Plating, No. of Strakes 1 "D"	"	"	"	" ✓	"	"	" ✓
Side Plating, No. of Strakes	✓			✓			
Upper Deck, Sheer-strake ~~in Wells~~ "F"	DOUBLE ✓	¾ ✓	6 PR. R. ✓	DOUBLE ✓	¾ ✓	2⅝ ✓	STRAPPED. ✓
Upper Deck, Sheer-strake in Bridge ...	✓			✓			
Strake below Sheer-strake ~~in Wells~~ "E"	SINGLE ✓	¾ ✓	6 PR. R. ✓	DOUBLE ✓	¾ ✓	2⅝ ✓	LAPPED. ✓
Strake below Sheer-strake in Bridge ...	✓			✓			
Poop Side Plating	✓			✓			
Bridge Side Plating	✓			✓			
Forecastle Side Plating	✓			✓			

Single approved. See plan

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—

Extending to Upper Deck (Sec. 3 *c*) 3 ✓

" Deck next below ✓

As per Rule 3

	Plating Thickness.	Stiffeners. Vertical. Scantlings.	Stiffeners. Vertical. Spacing.	Stiffeners. Horizontal. Scantlings.	Stiffeners. Horizontal. Spacing.
	Inches.				
~~MIDSHIP~~ BULKH'D, Upper 'tween decks	✓				
" " Second "	✓				
" " Third "	✓				
" " ON FRAME Nº 37 Holds	·34 – ·26 ✓	4×3×·38 – ·30 ✓	24" & 30" ✓		
COLLISION " (in Hold) " 50	·34 – ·30 ✓	5×3×·30 ✓ 4×3×·30 ✓	24 ✓		
AFTER PEAK " " " " 5	·43 – ·30 ✓	4×3×·30 ✓	24 ✓		

FORGINGS AND CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar	ROLLED	7" × 1¼" ✓	✓	
STEM	"	7" × 1¼" ✓	✓	
STERN FRAME Propeller Post	FORGING	5½ × 2½ ✓	T.S. FORSTER & SON. ✓	
STERN FRAME Rudder "	"	5½ × 2½ ✓	"	- ✓
Speed of Vessel	NOT EXC. 12 KNOTS. ✓			
RUDDER—Type	SINGLE PLATE. ✓			
" A × D		104·85 ✓		
" Diam. of head		5 3/4" ✓		
" Mainpiece at top pintle		5 3/4" ✓	T.S. FORSTER & SON	
" " heel		4 1/4" ✓	"	-
" how constructed		FORGED & BUILT. ✓		
" double or single plate		SINGLE ·90 THK. ✓		
" coupling, vertical or horizontal		NONE ✓		

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) OPEN HEARTH PROCESS. ✓

PLATES:- CONSETT IRON CO. LD. APPLEBY-FRODINGHAM STEEL CO. LD. DORMAN, LONG & CO. LD.

SECTIONS:- DORMAN, LONG & CO. LD. APPLEBY-FRODINGHAM STEEL CO. LD.

Has the Steel been tested as required by the Rules? YES. ✓

EQUIPMENT No. ✓ LETTER ✓ ANCHORS.

Number of Certificate.	Anchors.	Weight, Ex. Stock. Cwts.	qrs.	lbs.	Weight of Stock. Cwts.	qrs.	lbs.	Test, per Certificate. Tons.	cwts.	qrs.	lbs.	Weight Required by Table 53. Cwts.	Description of Anchor.	Makers.	Where and when tested, and Superintendent.
55662	1st Bower ...	6	1	14	Stockless			8	12	2	0 ✓	6 ✓	Britannia (Cast Steel head)	Richard	C. Heath 19-12-62 W.V. Howman ✓
55664	2nd ,, ...	5	2	0 ✓	"			7	16	1	0 ✓	5¼ ✓	" " "	Sykes Son	" " 19-12-62 " ✓
	3rd ,, ...														
	Collective weight	11	3	14								11¼			
✓	Stream		✓												

CHAIN CABLES. HAWSERS AND WARPS.

Number of Certificate.	Length and size supplied. Length. Fathoms	Diam. Ins.	Test per Certificate. Statutory. Tons.	Breaking. Tons.	Weight of Chain Cable. Supplied. Cwts. qrs. lbs.	Per Rule. Cwts.	Length and Size per Table 53. Length. Fathoms	Diam. Ins.	Description.	Makers of Cables.	Where and when tested, and Superintendent.
66043	45 ✓	15/16 ✓	15 8/10 ✓	23 7/10 ✓	20-2-10 ✓		90	15/16	Stud	Richard	C. Heath 27-10-62 W.V. Howman
66044	45 ✓	15/16 ✓	15 8/10 ✓	23 7/10 ✓	20-1-22 ✓				link	Sykes Son	" 27-10-62 "
		Cir.						Cir.			
Iron Stream Chain or Steel Wire	✓						✓				

Material.	Length and Size supplied. Length. Fathoms	Cir. Ins.	Breaking Test of Steel Wire. Tons.	Length and Size per Table 53. Length. Fathoms	Cir. Ins.
Towline ...					
Hawsers & Warps	60 ✓	5½ ✓		60 ✓	5½ ✓
	60 ✓	4 ✓		60 ✓	4 ✓
"					
"					

Steering Gear, Type (Power ~~or hand~~) STEAM - DONKIN & CO. LD. ✓ **Alternative Means of Steering** TILLER WITH BLOCKS & TACKLE. ✓

Steering Chains (Size and Test) 7/8" DIAR - 9 1/8 TONS. ✓ **Windlass** STEAM - EMERSON, WALKER LTD. ✓ **Boats** 2 LIFEBOATS 16'0" × 6'0" × 2'-4½"

Ceiling in Holds, thickness and material GRATINGS ON FLOOR OF HOLD. - 1½" ✓ **Cargo Battens,** thickness, material and spacing ✓

~~Cargo~~ **Hatchways.**—(Upper Deck) STEEL PLATES & ANGLES. ✓ **Thickness of Hatches** 3" ✓

Size of Hatchways ~~No. 1 (Fwd.)~~ TO HOLD AFT. 3'9" × 3'6" **No. 2** ✓ **No. 3** ✓ **No. 4** ✓ **No. 5** ✓ **No. 6** ✓

Number of **Shifting Beams** and/or **Fore** and **Afters** NONE.

FOR COCHRANE & SONS. LTD

Builder's Signature V. Gracy DIRECTOR

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).*

This vessel has been built in accordance with the approved plans, the Secretary's letters of various dates, the specification, and in general conformity with the Rules for the class contemplated. ✓

The materials and workmanship are good. ✓

Fore & after peaks and bilge feed tank tested to rule requirements and found in order. ✓

Decks, casings, watertight bulkheads & shell hose tested and found in order. ✓

Windlass steering arrangements tried under working conditions and found in order. ✓

A freeboard has been assigned, the marks verified & cut in on the vessels sides. ✓

The amount of Entry Fee ..... £ 2 : 0 : 0
FREEBOARD FEE ✓ £ 4-0-0
Special Survey Fee ..... £ 20 : 6 : 0
SUPERVISION OF SPECIFICATION ✓ £ 5-2-0
Travelling Expenses, ~~if any~~ ..... £ 3 : 4 6

Fees applied for, 13 MAY 1943 19

Received by me, 19

(*Special notations, where part of class, to be stated.*)

I am of opinion the Vessel should be Classed ✠ 100 A.1. "FOR TOWING SERVICES".

State whether the Vessel has been built under Special Survey Yes.

Signature J. Muckard
Surveyor to Lloyd's Register of Shipping.

Certificate ~~to be~~ sent to Hull. Date of issue 9/6/43

Hull made a Glasgow

Committee's Minute FRI. 28 MAY 1943

Character assigned ✠100 A1 S
For Towing Services
Lloyds A&CP + LMC 5.43

W.M.C.

The Surveyors are requested not to write on or below the Committee's Minutes.

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 following approved plans are forwarded herewith:-

1 Sections:-
2 Profile + deck plan
3 Bulkheads.
4 Stemframe + Rudder.
5 Boiler feed tank.
6 General Pumping Plan.

The following reports are enclosed herewith:-

Stemframe Hld Rpt No 9350.
Rudder mainpiece. " " " 9465.

Copy of completion + interim certificates, also steering chain test certificate are enclosed herewith.

PARTICULARS OF ELECTRIC WELDING (*if employed*)

Steel flat forward + aft. electrically welded at ships sides.
Approved electrodes used.

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

✠ 100 A.1.
"FOR TOWING SERVICE"
C

Particulars of **Drop Test** of Cast Steel Anchors, viz.:—Weight, Surveyor's Initials, Number of Certificate, Date of Test.					
	1st Bower	3-3-24 incl. cup + pins	A.E.G.	7255.	17.9.42.
	2nd ,,	3-0-22 " " "	A.E.G.	7195.	3.9.42.
	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. 169084 Signal Letters ✓ Extreme Breadth over Belting (Circ. 1611) 26-62' ✓ Over-all Length (Circ. 1703) 103-5 ✓

No. and Material of Decks 1 DK (STL)

Parts of Bottom of Vessel coated with cement or approved composition Cemented ✓

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,	7.04	9
Double bottom, under Engines and Boilers,	✓		After peak tank,	9.2	15.5 ✓
Double bottom, if under Engines only,	✓		Deep tank, aft,	✓	
Double bottom, if under Boilers only,	✓		Deep tank, forward,	✓	
Double bottom, forward, (BOILER FEED TANK)	5.25	13	Other tanks, if fitted,		
Total length (if continuous) and Capacity	✓		(If necessary furnish further information by sketch.)		

Order for Special Survey No. 3326

Date 2nd June 1942

Dates of Surveys held while building

1942:- Sept. 22. 29. Oct. 2. 9. 14. 19. 27. 30. Nov. 3. 9. 13. 18. 24. 27. Dec. 1. 8. 11. 16. 22. 29.
1943:- Jany. 1. 5. 15. 22. 26. 29. Feby. 3. 9. 18. 23. 26. March 2. 5. 12. 16. 19. 22. 29. 31.
April 1. 6. 8. 12. 15. 16. 19. 21. 22. 23. 27. 28. May 3.

Total No. of Visits 52.