

STEEL STEAMER OR MOTORSHIP.

Received at London Office

State of Report has been sent on the Freeboard of the Vessel *Yes*State of Report is sent on the Machinery of the Vessel *Yes*

Date of completion of report

19th March 1941Port of *Liverpool*No. *115811*

Survey held at

Birkenhead

Date First Survey

6th November/39

Last Survey

18th March 1941

On the

Steel Single Screw "EMPIRE STEEL", Mchy. Aft.

State Type

*Full Scantling*State Type of Erections *Pop, Bridge, Fair*

TONNAGE under Tonnage Deck

*7217.95*CLASS *Petroleum in Bulk* State if with freeboard *No*

Length from fore part of stem to after part of stern

L 460.0

Breadth (greatest moulded)

B 59.0

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

D 34.0

1st Longitudinal Number (L x D)

= 15640

2nd Numeral L x (B + D)

= 42780

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

13.52

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

13.52

Do. Long Bridge to top of keel

27.75

Draught Moulded

27.75

Built at

Birkenhead

Launched

*4th Dec. 1940*Yard No. *7055*

Builders

Messrs. Cammell, Laird & Co. Ltd.

Owners

"His Majesty" represented by Ministry of Shipping

Managers

Andrew Weir & Co. Ltd.

Residence

London

Port of Registry

Liverpool

If surveyed while building, afloat, or in dry dock

Yes

REGISTERED DIMENSIONS.

Length *465.3*
 Breadth *59.3*
 Depth *33.85*

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	<i>31 1/2</i>	<i>✓</i>	Bracket Floors, Frame	<i>✓</i>	<i>✓</i>
" from 1/2 length amidships to Collision bulkhead	<i>31 1/2, 36 in fore, cofferdam, and 24</i>	<i>✓</i>	" Reversed Frame	<i>✓</i>	<i>✓</i>
" in peaks	<i>24</i>	<i>✓</i>	" Vertical Struts	<i>✓</i>	<i>✓</i>
SIDE FRAMING.			Centre Girder, depth and thickness amidships	<i>60 54 46</i>	<i>✓</i>
Frame Amidships, Angle <i>E</i>	<i>10 3 1/2 7/16</i>	<i>✓</i>	" top Angles <i>double</i>	<i>4 x 4 x 50</i>	<i>✓</i>
" Extends up to	<i>Upper DK.</i>	<i>✓</i>	" bottom Angles <i>double</i>	<i>4 x 4 x 7/16</i>	<i>✓</i>
Reversed Frame Amidships, Angle	<i>✓</i>	<i>✓</i>	Side Girders, No. each side and thickness	<i>1 inside P.S. 50-24 1/2 42-10 1/2 varying width</i>	<i>✓</i>
" Extends up to	<i>✓</i>	<i>✓</i>	Margin Plate depth (excl. of flange) and thickness	<i>7 mm. 1/2 straight</i>	<i>✓</i>
Depth of Framing Girder	<i>10</i>	<i>✓</i>	" Vertical Angle to Tank side	<i>✓</i>	<i>✓</i>
Frames in Uppermost Continuous 'tween Decks, Angle, <i>E</i> or <i>F</i>	<i>✓</i>	<i>✓</i>	Bracket abaft 1/2 len. from stem	<i>✓</i>	<i>✓</i>
" Second 'tween Decks, Angle, <i>E</i> or <i>F</i>	<i>✓</i>	<i>✓</i>	" Vertical Angle to Tank side	<i>✓</i>	<i>✓</i>
" Third	<i>✓</i>	<i>✓</i>	Bracket from forward 1/2 len. from stem to Panting Area	<i>✓</i>	<i>✓</i>
" from 1/2 len. for'd. to 15% len. from Stem	<i>12 x 3 1/2 x 450 A.P.</i>	<i>✓</i>	Gussets, spacing and scantling abaft 1/2 len. from stem	<i>✓</i>	<i>✓</i>
" in Peaks, Angle <i>E</i>	<i>9 x 3 1/2 x 7/16</i>	<i>✓</i>	Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area	<i>✓</i>	<i>✓</i>
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	<i>7/8 5 1/2 diams c. to c.</i>	<i>✓</i>	Tank Side Brackets, height above base line from toe of Frame and thickness	<i>37 x 44</i>	<i>✓</i>
State if Frame Joggled	<i>yes</i>	<i>✓</i>	INNER BOTTOM PLATING.		
Are the scantlings and arrangements in the Panting Area in accordance with the Rules as approved?	<i>yes</i>	<i>✓</i>	Breadth and thickness of Middle Line Strake in E.Rm.	<i>1 1/2 plating 6 1/2 10 P.S.</i>	<i>✓</i>
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules as approved?	<i>yes</i>	<i>✓</i>	Thickness of remainder in Holds E.Rm.	<i>52</i>	<i>✓</i>
SINGLE BOTTOM.			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?	<i>As appd.</i>	<i>✓</i>
Floors, Depth and thickness at mid-line in Holds	<i>✓</i>	<i>✓</i>	BEAMS.		
Height of Brackets at side above base line at toe of frame	<i>✓</i>	<i>✓</i>	Uppermost Continuous Deck, amidships in Wells, Angle, <i>E</i> or <i>F</i>	<i>Longh. Beams</i>	<i>✓</i>
Middle Line Keelson, on Floors, Angles, <i>E</i> or <i>F</i>	<i>✓</i>	<i>✓</i>	" in way of Bridge, Angle, <i>E</i> or <i>F</i>	<i>(see sheet)</i>	<i>✓</i>
" Through Plate or Intercostal Plate	<i>✓</i>	<i>✓</i>	Spacing	<i>At fore end 9 x 3 1/2 x 7/16 7 x 3 x 7/16</i>	<i>✓</i>
" Foundation Plate on Floors	<i>✓</i>	<i>✓</i>	Second Deck, amidships, Angle, <i>E</i> or <i>F</i>	<i>At fore end 8 x 3 1/2 x 35 8 x 3 1/2 x 7/16 10 x 3 1/2 x 7/16</i>	<i>✓</i>
" Flat Plate Keel Angles	<i>✓</i>	<i>✓</i>	Spacing	<i>At after end 8 x 3 1/2 x 35 8 x 3 1/2 x 7/16 10 x 3 1/2 x 7/16</i>	<i>✓</i>
Side Keelsons, No. each side	<i>✓</i>	<i>✓</i>	Third Deck, amidships, Angle, <i>E</i> or <i>F</i>	<i>✓</i>	<i>✓</i>
" thickness of Intercostal Plate	<i>✓</i>	<i>✓</i>	Spacing	<i>✓</i>	<i>✓</i>
" Angles	<i>✓</i>	<i>✓</i>	Fourth Deck, amidships, Angle, <i>E</i> or <i>F</i>	<i>✓</i>	<i>✓</i>
DOUBLE BOTTOM. in E.Rm.			Spacing	<i>✓</i>	<i>✓</i>
Solid Floors, thickness and spacing	<i>50 and 42 @ 30 1/4</i>	<i>✓</i>	Bridge Deck, Angle, <i>E</i> or <i>F</i>	<i>8 x 3 1/2 x 35</i>	<i>✓</i>
" Are Frame and Reversed Frame joggled?	<i>Joggled</i>	<i>✓</i>	Spacing	<i>3 1/2</i>	<i>✓</i>
Bracket Floors, breadth and thickness at middle line	<i>✓</i>	<i>✓</i>	Forecastle Deck, Angle, <i>E</i> or <i>F</i>	<i>8 x 3 1/2 x 35 8 x 3 1/2 x 7/16 10 x 3 1/2 x 7/16</i>	<i>✓</i>
" breadth and thickness at margin plate	<i>✓</i>	<i>✓</i>	Spacing	<i>27 1/2 24</i>	<i>✓</i>

PILLARS AND DECKS.

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.	
PILLARS, No. of Rows.....			✓		✓	Stringer Plate, breadth and thickness in way of Bridge		✓		✓	
" in 'tween Decks, Size and Spacing.....			✓		✓	Thickness of Plating abreast Deck openings in way of Wells		✓		✓	
" " " " "			✓		✓	Thickness of Plating abreast Deck openings in way of Bridge		✓		✓	
" in Holds " "			✓		✓	Thickness of Plating within line of openings....		✓		✓	
" " " " "			✓		✓	If Sheathed, material and thickness		✓		✓	
Longitudinal Centre Line Bulkheads 1 P.O.S						Third Deck.					✓
Stiffeners and Spacing...@.31½"						Stringer Plate, breadth and thickness.....		✓			✓
						If Plated, state thickness.....		✓			✓
Plating, thickness of			44	42	✓	✓	Fourth Deck.				✓
STRINGERS AND DECKS.						Stringer Plate, breadth and thickness.....		✓			✓
Uppermost Continuous Deck.						If Plated, state thickness		✓			✓
Stringer Plate, breadth and thickness in Wells			90¾	x .80	✓	✓	Poop Deck.				✓
" " " " in way of Bridge			.84	✓	✓	Stringer Plate, breadth and thickness		✓	37	✓	✓
" " " " Angle in Wells			See Table 20		✓	Plating, Sheathing, material and thickness ...		✓	26, 2½ D.P.	✓	✓
Thickness of Plating abreast Deck openings in way of Wells			72	+ 74	✓	✓	Bridge Deck.				✓
Thickness of Plating abreast Deck openings in way of Bridge			✓		✓	Stringer Plate, breadth and thickness.....		✓	4½ x .43	✓	✓
Thickness of Plating within line of openings...			58	✓	✓	Plating, Sheathing, material and thickness ...		✓	34	✓	✓
If Sheathed, material and thickness			✓		✓	Forecastle Deck.					✓
Stringer Plate, breadth and thickness in Wells...			44	36	✓	Stringer Plate, breadth and thickness		✓	38	✓	✓
Second Deck.						Plating, Sheathing, material and thickness ...		✓	36, nil	✓	✓
Deck Plating			forh	34	✓						
Varying widths			forh	36	✓						

SHELL PLATING.

SCANTLINGS.						RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?	SINGLE OR DOUBLE.	RIVETS.		No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.				Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.									
FLAT PLATE KEEL	87	86	78	78	✓	DR ✓	1	4	5-4	1	4 1/2-4	lapped ✓	
„ DBLG. (if any)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
BOTTOM PLATING, No. of of Strakes 2.....	A 7 1/2 B 98 1/4 C 95 1/8	66 66 64	53 53 50	53 53 50	7 1/2 in. and 2 in. 70 ft. 2 1/2 to Collision Bld. } ✓	D.R ✓	7/8	3 1/2	4-3	7/8	3 1/2-3 1/2	lapped ✓	
BILGE PLATING, No. of Strakes 1.....	D 72 7/8 E 66	64	50	50	✓	„	7/8 + 1/4	3 1/2 + 3	4-3	„	„	✓	
SIDE PLATING, No. of Strakes 4.....	F 74 1/2 G 66 1/2 H 70 1/4	64	50	50	✓	„	1	4	5-3	1 1/8	4-3 1/2	✓	
UPPER DECK, Sheer- strake in Wells.....	K 56	1.00	50	50	✓	„	1	4	5	1 1/4	5	✓	
UPPER DECK, Sheer- strake in Bridge ...	K 62 1/2	90			1.20 at breaks. ✓	„	1	4	5	1 1/4	5	✓	
STRAKE BELOW Sheer- strake in Wells.....	L 83 1/4	76	50	50	✓	„	7/8 + 1/4	3 1/2 + 3	4-3	7/8 + 1/4	3 1/2-2 3/8	✓	
STRAKE BELOW Sheer- strake in Bridge ...	L 83 1/4	76			✓	„	7/8	3 1/2	4	7/8	3 1/2	Rule ✓	
POOP SIDE PLATING			40		✓	S.R.	7/8 + 1/4	3 1/2 + 3	2-1	3/4	2 3/8	✓	
BRIDGE SIDE PLATING ...	43				✓	„	„	„	2	„	„	✓	
FOREC'TLE SIDE PLATING			43		✓	„	„	„	1	Rule	„	✓	

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted
KEEL, Bar	✓	✓	✓	✓
STEM	Rolled Steel Bar ✓			
STERN FRAME	Cast steel upper and lower portions together with forged bulk head.		As appd.	Walsingham Steel Co.
	Propeller Post			
Speed of Vessel	12 knots.			
RUDDER—Type	Electric welded Simplex			
" A x D	Balance Rudder fabricated			
" Diam. of head	by Messrs. Cammell, Laird & Co.			
" Mainpiece at top pintle	Steel castings and forgings			
" " heel	by Darlington Forge as appd.			
" how constructed				
" double or single plate				
" coupling, vertical or				
" horizontal				

[illegible]

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)

STEEL.

Has the Steel been tested as required by the Rules?

Yes

Open Hearth Process

Lloyd's Register
Foundation

"EMPIRE STEEL" Liv. Rpt. No.

PARTICULARS OF LONGITUDINAL FRAMING.

FRAMING.		AMIDSHIPS.			ENDS.			AMIDSHIPS.			ENDS.			RIVETING.		RIVETING.			
		In Ship.			In Ship.			Per Rule or as approved.			Per Rule or as approved.			Rivets in Longitudinal Frames.		Spacing of Rivets on each side of Transverse and Bulkheads.		Rivets in Brackets to Bulkheads.	
		Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	
Framing of L, [or C																			
Frames in Bridge 'tween Decks ...																			
Frames from Uppermost Continuous Deck																			
	No. 1																		
	" 2																		
	" 3																		
	" 4																		
	" 5																		
	" 6																		
	" 7																		
	" 8																		
	" 9																		
	" 10																		
	" 11																		
	" 12																		
	" 13																		
	" 14																		
	" 15																		
	" 16																		
Spacing of Longitudinal Frames		Amidships			At Ends														
Double Bottoms		Tank Top Longitudinals			Bottom														
Spacing of Longitudinals		Amidships			At Ends														
Transverses.																			
In Bridge 'tween Decks		Depth and Thickness			Face Angles			Lugs to Shell											
In Upper 'tween Decks		Depth and Thickness			Face Angles			Lugs to Shell											
In Hold.		Depth and Thickness			Face Angles			Lugs to Shell											
		Double			Single														
		Centre Tanks			Wing Tanks														
		6x6x1/2			3x3x1/2														
		3x3x1/2			3x3x1/2														
		10'-6"			As amidships														
Spacing of Transverse Frames		State if jogged or liners.																	
Longitudinal Beams of		Bridge Deck			Upper and wing tanks			Second			Third								
		9x3 1/2 x 7/16			9x3 1/2 x 7/16														

The particulars of framing in peaks (if ordinary), Floors, Centre Girder, Side Girders and Margin Plate and their angle attachments, etc., to be entered in their respective places provided for on the Report Forms.

NOTE:—This slip to be pasted on the fourth page of the Report, and reference to same to be made under framing, etc., on the first page.

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.)

Similar to Deloma

PARTICULARS OF ELECTRIC WELDING (if employed) Corner bars to oil cargo tanks welded in lieu of smith welds; hatch coamings on upper deck fabricated by welding. Solid pillars in erections welded head and heel. All ventilator coamings (clear of upper deck in wells) welded to deck plating.

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

10091 - "Carrying Petroleum in Bulk," "Longitudinal Framing at Bottom and at Deck." Cruiser Stern, D.F., E.S.D., Mch. Aft.

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

1st Bower 43 cwt. 3 qrs 10 lbs., J.D., N^o. 2767, 20/4/40
2nd " 43 cwt 3 qrs 22 lbs, J.D., N^o. 2781, 24/4/40
3rd "

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 93 ft., R.Q.D. ft., Bridge 45 ft., Forecastle 48 ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 168313 Signal Letters Extreme Breadth over Belting Over-all Length 483'-3 1/2"
No. and Material of Decks 1 DK (Steel), 2nd DK. Clear of Cargo Tanks.
Parts of Bottom of Vessel coated with cement or approved composition Cement fillets in way of cargo oil tanks. Cement in E. Rm. Tanks and E. & A. Peak Tanks.
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,	23.2	138
Double bottom, under Engines and Boilers,	✓	✓	After peak tank,	16.0	86
Double bottom, if under Engines only,	70.0	160.0	Deep tank, aft,	✓	✓
Double bottom, if under Boilers only,	✓	✓	Deep tank, forward,	24.75	291
Double bottom, forward,	✓	✓	Other tanks, if fitted,	9.25	494
Total length (if continuous) and Capacity	✓	✓	(If necessary, furnish further information by sketch.)	12.81	19
			Cross Bk. + Settling Tanks		
			Lib. Oil Tank S. side aft		
			Lib. Tanks above B.P.	14.0	85

Order for Special Survey No. 1031.

Date 18/3/40.

Dates of Surveys held while building

1939 1940
Nov 18. Dec 18. Jan 3. 11. 12. 16. 18. 23. Feb 1. 6. 8. 14. 19. 21. 22. 26. 28. Mar 1. 4. 5. 6. 8. 12. 13. 15. 19. 21. 29. Apr 1. 2. 3. 4. 5. 8. 10. 11. 17. 19. 25. 29. May 1. 3. 6. 7. 8. 9. 14. 17. 20. 21. 22. 23. 27. 28. 30. June 3. 5. 10. 12. 17. 19. 21. 25. 27. 28. July 1. 2. 3. 4. 11. 18. 22. 25. 29. 30. 31. Aug 1. 5. 6. 9. 10. 14. 15. 17. 19. 20. 21. 22. 23. 26. 28. 30. Sept 2. 4. 6. 9. 11. 12. 13. 16. 17. 20. 24. 26. 28. 30. Oct 4. 8. 10. 14. 15. 16. 17. 22. 23. 25. 29. Nov 1. 4. 7. 11. 12. 18. 19. 20. 25. 26. 28. Dec 2. 4. 6. 10. 13. 17. Jan 7. 16. 20. 27. 28. 29. Feb 3. 14. 17. 18. 30. 24. 26. 28. 28. Mar 3. 4. 7. 9. 10. 12. 13. 14. 15. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Apr 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. May 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Jun 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Jul 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Aug 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Sep 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Oct 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Nov 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. Dec 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31.

Total no. of Visits 165.