

STEEL STEAMER ~~OF MOTORSHIP~~

Received at London Office

State if Report has been sent on the Freeboard of the Vessel *Yes.*State if Report is sent on the Machinery of the Vessel *No.*Date of completion of report *Dec. 19<sup>th</sup> 41.*Port of *Middlesbrough.*No. *1716A.*Survey held at *HAVERTON HILL ON TEES.*Date First Survey *22<sup>nd</sup> October, 1940.* Last Survey *15<sup>th</sup> December, 1941.*On the (State if Machinery fitted Aft and Fore) *MACHINERY AFT SINGLE SCREW STEAMER "EMPIRE CELT"*State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) *FULL SCANTLING.*State Type of Erections *POOP BRIDGE & FLE*TONNAGE under Tonnage Deck... *7197.47.*CLASS *100 A1. CARRYING* State if with freeboard *No*  
PETROLEUM IN BULK LONGITUDINAL condition of Class  
FRAMING AT BOTTOM AND AT DECK.

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

Length from fore part of stem to after part of stern } *L 460.0'*  
most on summer L.W.L. See Sec. 3 (1a)Breadth (greatest moulded) ..... *B 61.0'*Total *7197.47.*Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) ..... *D 33.3'*Gross Tonnage *8032.20.*Register Tonnage *4664.17.*1st Longitudinal Number (L x D) ..... = *15295*2nd Numeral L x (B + D) ..... = *43355.*Built at *HAVERTON HILL ON TEES.*Launched *OCT 7<sup>th</sup> 1941.* Yard No. *335.*Builders *ARMSTRONG & CO.*Owners *MINISTRY OF WAR TRANSPORT.*Managers *J. GERMAN & CO.*

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

Residence *CARLISLE.*Port of Registry *MIDDLESBROUGH.*

If surveyed while building, afloat, or in dry dock

*SURVEYED WHILE BUILDING & AFLOAT.*REGISTERED DIMENSIONS.  
FEET.Length *463.5*Breadth *61.2*Depth *33.05.*Framing Depth "d," at middle of length. See Sec. 3 (1d) ..... *13.83.*Proportions—Depth to Length—Uppermost continuous deck to top of keel ..... *27.12"*Draught Moulded ..... *27.12"*

## 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'</i>		Bracket Floors, Frame	<i>8' 3 1/2' 7/16</i>	
" " from 1/2 length amidships to Collision bulkhead	<i>30 3/4 IN. B. SPACE</i>		" " Reversed Frame	<i>8' 3 1/2' 45</i>	
" " in peaks	<i>24'</i>		" " Vertical Struts	<i>2-11' 52'</i>	
LONGITUDINAL FRAMING AT BOTTOM AND AT DECK			Centre Girder, depth and thickness amidships	<i>81' 50' 54</i>	
SIDE FRAMING. SEE SEPARATE SHEET.			" " top Angles	<i>85 3/4 85 7/16</i>	
Frame Amidships, Angle, E or F	<i>7 10' 3 1/2' 40</i>		" " bottom Angles	<i>6' 6' 50</i>	
" " Extends up to	<i>UPPER DECK.</i>		Side Girders, No. each side and thickness	<i>25 TWO 50</i>	
Reversed Frame Amidships, Angle	<i>✓</i>		" " ONE <i>52.</i>		
" " Extends up to	<i>✓</i>		Margin Plate depth (excl. of flange) and thickness		
Depth of Framing Girder	<i>10'</i>		" " Vertical Angle to Tank side		
Frames in Uppermost Continuous 'tween Decks, Angle, E or F	<i>7 10' 3 1/2' 50</i>		Bracket abaft 1/2 len. from stem		
" " Second 'tween Decks, Angle, E or F	<i>7 6' 3 1/2' 38</i>		Vertical Angle to Tank side		
" " Third " " " "	<i>NOT ATTACHED.</i>		Bracket from forward 1/2 len. from stem to Panting Area		
" " from 1/2 len. for'd. to 15% len. from Stem	<i>7 12' 3 1/2' 45</i>		Gussets, spacing and scantling abaft 1/2 len. from stem		
" " in Peaks, Angle, E or F	<i>7 8' 3 1/2' 7/16</i>		Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	<i>7/8 4 7/8</i>		Tank Side Brackets, height above base line at toe of Frame and thickness	<i>82 9 3/4 45.</i>	
State if Frame Joggled	<i>Yes.</i>		INNER BOTTOM PLATING.		
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	<i>Yes</i>		Breadth and thickness of Middle Line Strake	<i>82 54' 58</i>	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	<i>Yes.</i>		Thickness of remainder in Hold	<i>82 54' 58</i>	
SINGLE BOTTOM. AT FORE END.			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>Yes.</i>	
Floors, Depth and thickness at mid-line in Holds	<i>4' 0" 3/8</i>		BEAMS. IN MACHINERY SPACE.	<i>7 8' 3 1/2' 7/16</i>	
Height of Brackets at side above base line at toe of frame	<i>7' 0" 40' 3 1/4</i>		Uppermost Continuous Deck, amidships	<i>EVERY FRAME.</i>	
Middle Line Keelson, on Floors, Angles, IN CARVED TANKS.	<i>40 1/2' 42</i>		" " in Way of Bridge, Angle, E or F	<i>LONGITUDINAL BEAM IN WAY OF OIL TANKS.</i>	
" " Through Plate or Intercostal Plate	<i>3 1/2' 3 1/2' 7/16</i>		Spacing	<i>(SEE SEPARATE SHEET)</i>	
" " Top Angles on Foundation Plate on Floors	<i>4' 4' 50</i>		Second Deck, amidships, Angle, E or F	<i>8' 3 1/2' 7/16</i>	
" " Flat Plate Keel Angles	<i>✓</i>		Spacing	<i>EVERY.</i>	
Side Keelsons, No. each side			Third Deck, amidships, Angle, E or F	<i>✓</i>	
" " thickness of Intercostal Plate			Spacing	<i>✓</i>	
" " Angles			Fourth Deck, amidships, Angle, E or F	<i>✓</i>	
DOUBLE BOTTOM. IN MACHINERY SPACE			Spacing	<i>✓</i>	
Solid Floors, thickness and spacing	<i>42 30 3/4 31 7/8 30</i>		Poop Deck, Angle, E or F	<i>8' 3 1/2' 7/16</i>	
" " Are Frame and Reversed Frame joggled?	<i>AS IN BOILER SPACE ONLY</i>		Spacing	<i>EVERY.</i>	
Bracket Floors, breadth and thickness at middle line	<i>2-11' 52'</i>		Bridge Deck, Angle, E or F	<i>LONGITUDINAL (SEE SEPARATE SHEET)</i>	
" " breadth and thickness at margin plate	<i>AS APPROVED.</i>		Spacing	<i>✓</i>	
			Forecastle Deck, Angle, E or F	<i>8' 3 1/2' 35</i>	
			" " IN WAY OF UNOLASS	<i>9' 3 1/2' 38</i>	
			Spacing	<i>EVERY.</i>	



## 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.
<b>PILLARS, No. of Rows.....</b>			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 .....		
G.T. CENTRE LINE BULKHEAD DEPARTURE TWO 44-40 ✓ STIFFENERS 10x32x50 7 SPACES 26x31 APART. WEB FRAME ON 165 28x40 DOUBLE FACE LONGITUDINAL BARS 8x32x35 ✓ Centre Line Bulkhead, P.S. Stiffeners and Spacing..... 10x32x42 7 31 APART. ✓			Thickness of Plating within line of openings...		
Plating, thickness of ..... 51 40 ✓			If Sheathed, material and thickness .....		
<b>STRINGERS AND DECKS.</b>			<b>Third Deck.</b>		
<b>Uppermost Continuous Deck.</b>			Stringer Plate, breadth and thickness.....		
Stringer Plate, breadth and thickness in Wells 90 78 ✓ 92 AT BREAK OF POOP & BRIDGE ✓			If Plated, state thickness.....		
" " " " in way of Bridge 78 ✓			<b>Fourth Deck.</b>		
" Angle in Wells 6 6 5/8 ✓			Stringer Plate, breadth and thickness.....		
Thickness of Plating abreast Deck openings in way of Wells 72-60 ✓			If Plated, state thickness .....		
Thickness of Plating abreast Deck openings in way of Bridge .....			<b>Poop Deck.</b>		
Thickness of Plating within line of openings...			Stringer Plate, breadth and thickness .....	37 ✓	
If Sheathed, material and thickness .....			Plating, Sheathing, material and thickness ...	30 ✓	
<b>Second Deck.</b>			<b>Bridge Deck.</b>		
Stringer Plate, breadth and thickness in Wells...			Stringer Plate, breadth and thickness.....	80 1/2 37 ✓	
			Plating, Sheathing, material and thickness ...	34 ✓	
			<b>Forecastle Deck.</b>		
			Stringer Plate, breadth and thickness.....	37 ✓	
			Plating, Sheathing, material and thickness ...	36 ✓	
			UNDER WINDLASS	50 ✓	

## SHELL PLATING.

SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. No. 1 State if jogged?			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.			Diam.	Spacing or. to cr.		Diam.	Spacing or. to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.	
FLAT PLATE KEEL .....	53	97	80	82		DOUBLE.	1	4	QUINTUPLE FOR 3 LTH QUARTERS	1	4	LAPPED.
„ DBLG. (if any)	THREE STRAKES NEXT KEEL INCREASED FROM 5 LTH RUN TO COLLISION BULK 77, 81 IN WAY OF 81" SPACING.											
BOTTOM PLATING, No. of of Strakes ....		70	60	66			7/8	3 1/2	QUADRUPLE.	7/8	3 1/2	LAPPED.
BILGE PLATING, No. of Strakes .....	E	64	50	66								
	F	63	50	48								
SIDE PLATING, No. of Strakes .....	G	63	46	46								
	H	63	46	46								
UPPER DECK, Sheer- strake in Wells.....	K 72 1/2	94	46	46			1	3 7/8	5 - 4	7/8	4 1/2	
UPPER DECK, Sheer- strake in Bridge ...	72 1/2	112					1	3 7/8	5.	1 1/8	5 1/8	
STRAKE BELOW Sheer- strake in Wells.....	72	78	46	46			1	3 7/8	4 - 3	7/8	3 1/8	
STRAKE BELOW Sheer- strake in Bridge ...												
POOP SIDE PLATING .....				40		SINGLE.			2	3/4	2 5/8	LAPPED.
BRIDGE SIDE PLATING ...		44				SINGLE			2	3/4	2 5/8	
FOREC'TLE SIDE PLATING			43			SINGLE.	3/4	3	1.	3/4	2 5/8	

## WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel— *16 BH's R.BK*  
 Extending to Upper Deck (Sec. 3 c) *15 oiltight  
 2 watertight* } *To upper Deck.*  
 " Deck next below *ALL EXTENDED TO UPPER DECK.*  
 As per Rule.

FORGINGS and CASTINGS.

	Casting or Forging.	Scanthings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar	FLAT PLATE.			
STEM	STEM PLATING '66' CAST STEEL EXTENSION.			
STERN FRAME	Propeller Post	BUILT PLATES 1 1/2" E.W. + STEEL CASTINGS.		
	Rudder	BUILT PLATES E.W. 1" THICK.		
Speed of Vessel	12 KNOTS.			
RUDDER—Type	DOUBLE PLATES STREAM LINED.			
" A x D	664			
" Diam. of head	FORGED STEEL	14"	✓	
" Mainpiece at top pintle	CAST STEEL PINTLES & COUPLING			
" " heel				
" how constructed				
" double or single plate				
" coupling, vertical or horizontal	6 BOLTS.			

Steel Casting.  
Dark Unhard Roll, Famboury Lm.  
Haverdon Mill on Tees.  
Tillars Cast Steel, Farnon Metal.  
Industries Ltd  
Roose Head Forged Steel.  
Farnon Steel, 17-170

## STIFFENERS.

		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKHEAD	Upper tween decks	.54 To 41	10 x 3½ x 407	36" IN CORNER TANKS. INCREASED ON BULBS AS APPROVED.	120-132-137-149	
"	" Second "	.54 To 41	10 x 3½ x 407	36" IN WING TANKS		
"	" Third "	.54 To 41	10 x 3½ x 507	36" ON 120 BULK.		
"	" Holds .....		12 x 3½ x 457	24" To W.T.F.		50MM BOX BEAM.
COLLISION	" (in Hold) .....	.52-26	6 x 3½ x 387	24" To U.O.		
AFTER PEAK	" " .....	.50-30	9 x 3½ x 387	24" To PEAK TOP		
			7 x 3½ x 337	24" To U.O.		

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, South Durham S.I.C.L. Bethlehem Steel Company*  
*Sections, Corro Steel Iron Co. Dorman Long & Co.*  
 Has the Steel been tested as required by the Rules? *Yes.*

Lloyd's Register  
Foundation



FRAMING.		AMIDSHIPS.			ENDS.			Any Departure from Approved Plans to be Noted.	RIVETING.					
		In Ship.			In Ship.				Rivets in Longitudinal Frames.		Spacing of Rivets on each side of Transverses and Bulkheads. Inches.	Rivets in Brackets to Bulkheads.		
									Diam.	Speng.		Number.	Diameter.	
		Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	
Framing of L, L or E .....		7	3	3/8					3/4	4 1/2		7	7/8	
Frames in Bridge 'tween Decks ...		30" APART.												
Frames from Uppermost Continuous Deck No. 1		SIDE FRAMING BALOW UPPER DECK TRANSVERSE												
" 2														
" 3														
" 4														
" 5														
" 6														
" 7														
" 8														
" 9														
" 10														
" 11		12	3 1/2	50 7	12	3 1/2	50 7		7/8	5 1/2	7/8 DIA RIVETS SPACED 30" APART EACH SIDE OF TRANSVERSES & BULKHEADS. 7/8 DIA RIVETS IN BRACKETS TO BULKHEADS 18 TO LONGITUDINALS 16 VERTICALLY.			
" 12		17	58	4 1/4 68 7	17	58	4 1/4 68 7							
" 13														
" 14														
" 15														
" 16														
Spacing of Longitudinal Frames		Amidships .....			3'-0"			3'-0"						
		At Ends .....			3'-0"			3'-0"						
Double Bottoms L, E or C		Tank Top Longitudinals												
		Bottom												
Spacing of Longitudinals		Amidships												
		At Ends...												
Transverses.		15			38									
Side (in 'tween Decks)		3			3	38								
		3 1/2			3 1/2	38				7/8	3 1/2			
Side (in Hold)		TRANSVERSE FRAMING												
		37			44	SIDE.								
		40 1/2			44	CENTRE.								
Bottom		6			3 1/2	56								
		6			6	50				7/8	3 1/2			
		3 1/2			3 1/2	7/16				1" RIVETS THROUGH KEEL PLATE SPACED AS APPROVED.				
		44												
Spacing of Transverse Frames .....		10'-4"												
		* State if joggled or liners.												
Longitudinal Beams of L, L or C		5			3	3/8 7			3'-0"			12	7/16 4 1/4 60 7	
		9			3 1/2	7/16 7			3'-0"			28	42 6 3 1/2 56 5	

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.



ANCHORS. 2. B. 15

## CHAIN CABLES.

## HAWSERS AND WARPS.

*Builder's Signature*

The workmanship and materials are good.

Write Here

The Surveyor, are requested not to write on or

FD. CL

Lloyd's Register  
Foundation

69114-5003 3/4



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.)

Cast No	Length	Size	Star	Bearing	Weight	Where & When Tested	Sister vessels built by Harland & Wolff
116056	15	23	113.8	159.3	36-3-14	Noterton 31-3-41 JAR.	N° 325 Rpt N° 16969, "EMPIRE GOLD"
116057	"	"	"	"	36-3-7	"	- 326 - - 17010 "EMPIRE GRANITE"
116058	"	"	"	"	36-3-7	"	- 327 - - 17038 "EMPIRE OIL"
116059	"	"	"	"	37-0-7	"	- 328 - - 17054 "EMPIRE MICA"
116060	"	"	"	"	37-1-0	"	- 329 - - 17081 "EMPIRE GRANITE"
116061	"	"	"	"	37-0-14	"	- 330 - - 17097 "EMPIRE AMSTER"
116062	"	"	"	"	37-0-3	"	- 334 - - 17123 "EMPIRE EMERALD"
116063	"	"	"	"	36-3-21	"	
116064	"	"	"	"	36-3-14	"	
116065	"	"	"	"	36-3-0	"	
116066	"	"	"	"	36-3-21	"	
116067	"	"	"	"	36-3-14	"	
116068	"	"	"	"	37-1-19	"	
116069	"	"	"	"	37-2-17	"	
116070	"	"	"	"	38-0-12	"	
116071	"	"	"	"	37-3-19	"	
116527	"	"	"	"	36-0-16	Noterton 12-9-41 JAR.	
116528	"	"	"	"	36-0-0	"	
116529	"	"	"	"	36-0-0	"	
116530	"	"	"	"	36-0-16	"	
360					738-2-25		

#### PARTICULARS OF ELECTRIC WELDING (if employed)

Welds electrically welded (Quasi arc electrodes)

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

100 R.L. carrying petroleum in bulk. Longitudinal framing at bottom and at decks. Gunner stern, Machinery aft. Echo sounding, Direction finding apparatus.

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

1st Bower	43-0-7	AG	N° 3268	2-10-40
2nd "	44-2-21	LT	N° 3635	20-12-40
3rd "				

#### PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 105.33 ft., R.Q.D. ✓ ft., Bridge 43.16 ft., Forecastle 38.2 ft.

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 164851 Signal Letters ✓ Extreme Breadth over Belting ✓ Over-all Length 479-0 1/2 ✓  
No. and Material of Decks 100 (50) 2nd 04 (50) CLEAR OF OIL TANKS.  
Parts of Bottom of Vessel coated with cement or approved composition AS BELOW.

Particulars of composition (if fitted) and of approval FORE & AFTER PEAK TANKS, PEEL TANK, & COFFERDAMS IN I.R. CEMENT IN BOTTOM & CEMENT WASHED. PUMP ROOM COATED WITH GUNITE BELOW PLATFORM PAINTED ABOVE, REMAINDER OF TANKS INCLUDING CARGO TANKS LEFT BARE.

#### 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,	23-5	140
Double bottom, under Engines and Boilers,			After peak tank,	16-0	78
Double bottom, if under Engines only,	38-3	95	Deep tank, aft,		
Double bottom, if under Boilers only,	43-1 1/2	279	Deep tank, forward,	32-0	664
Double bottom, forward,	Cofferdam, 2-6 3/4		Other tanks, if fitted,		
Total length (if continuous) and Capacity	84-8 1/4	374	(If necessary, furnish further information by sketch.)		
	San 85-0				

Order for Special Survey No. 1529

Date 15.1.40.

Dates of Surveys held while building

1940. Oct. 22. Dec. 16. 1941 Jan. 4. 17. 23. March 7. 18. April 4. 19. 16. 17. 22. 25. May 1. 2. 20. June 12. 15. 31. Aug. 5. 11. 13. 25. 27. 29. Sept. 1. 3. 5. 8. 10. 12. 15. 17. 18. 19. 22. 23. 25. 29. Oct. 1. 7. 8. 9. 14. 1956. 11. 14. 20. 28. 30. Nov. 6. 13. 25. 26. 27. 29. Dec. 2. 4. 15.

Lloyd's Register Foundation  
Total No. of Visits 57.