

STEEL ~~STEAMER~~ MOTORSHIP.

21 APR 1931

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 *Yes*Date of completion of report *18th April '31*Port of *Newcastle on Tyne* No. *87052*Survey held at *Newcastle* Date First Survey *7 Feb/30* Last Survey *15th April 1931* 19On the *Steel Twin Screw Motor Tanker "HELIX"*State Type *Full Scantling*State Type of Erections *Fele, trunk dk & poop*TONNAGE under Tonnage Deck... *2251.41*GLASS *petroleum in bulk* State if with freeboard) *No*Built at *Hebburn on Tyne*Launched *3/2/31* Yard No. *576*Builders *R W. Hawthorn Leslie & Co Ltd*Owners *The Anglo Saxon Petroleum Co*Managers *(Where necessary to be entered in Reg. Book.)*Residence *London*Port of Registry *London*

If surveyed while building, afloat, & in dry dock

Yes.

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

Total

Gross Tonnage *3006.86*Register Tonnage *1629.63*

REGISTERED DIMENSIONS.

Length *305*Breadth *50.15*Depth *19.25*Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) *L 305*Breadth (greatest moulded) *B 50*Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) *D 19.25*1st Longitudinal Number (L x D) *= 5871*2nd Numeral L x (B + D) *= 21121*Framing Depth "d" at middle of length. See Sec. 3 (1d) *15.84*Proportions—Depth to Length—Uppermost continuous deck to top of keel *12.03*Do. Long Bridge to top of keel *17-134*Draught Moulded *17-134*

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>32"</i>		Bracket Floors, Frame		
" " from $\frac{3}{8}$ length to Collision bulkhead.....	<i>24" 27" 4" as app'd</i>		" " Reversed Frame.....		
" " in peaks.....	<i>24" 5" as app'd</i>		" " Vertical Struts.....		
SIDE FRAMING.			<i>In Machy. Space</i>		
Frame Amidships, Angle, E or C.....	<i>7.3.40. app'd 38. and as app'd for upper deck</i>		Centre Girders, depth and thickness amidships.....	<i>46 1/2 x 36</i>	
" " Extends up to.....	<i>None</i>		" " top Angles.....	<i>3.3.40</i>	
Reversed Frame Amidships, Angle.....	<i>except at ends as app'd</i>		" " bottom Angles.....	<i>32. 3 1/2. 44</i>	
" " Extends up to.....			Side Girders, No. each side and thickness.....	<i>Two 625</i>	
Depth of Framing Girder.....			Margin Plate depth (excl. of flange) and thickness.....	<i>43 as app'd</i>	
Frames in Uppermost Continuous Decks, Angle, E or C.....	<i>52. 3. 30.</i>		" " Vertical Angle to Tank side Bracket abaft 1/2 len. from stem.....		
" " Second 'tween Decks, Angle, E or C.....			" " Vertical Angle to Tank side Bracket forward 1/2 len. from stem.....		
" " Third " " " ".....			" " Gussets, spacing and scantling abaft 1/2 len. from stem.....		
Framing in Peaks, Angle, E or C.....	<i>52. 3. 37. 7 as app'd</i>		" " Gussets, spacing and scantling forward 1/2 len. from stem.....		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships.....	<i>3/4. 48</i>		Tank Side Brackets, height above base line amidships at toe of Frame and thickness.....	<i>4-5 x 40 and as app'd in ER</i>	
State if Frame Joggled.....	<i>Yes.</i>		INNER BOTTOM PLATING, in Machy. Space		
PANTING ARRANGEMENTS (Sec. 7), state system and particulars.....	<i>well frames as app'd</i>		Breadth and thickness of Middle Line Strake.....	<i>60. 42 7/8. 75. app'd 50.</i>	
STRENGTHENING OF BOTTOM FORWARD. State Particulars.....	<i>5 x 5 x 48. frame bottoms intercostal girders Shell of Midships Thickness</i>		Thickness of remainder in Hold <i>ER.</i>	<i>106. 42</i>	
SINGLE BOTTOM, in Fore Hold			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 Hold.....	<i>30 x 46.</i>		BEAMS.		
Height of Brackets at side above base line at toe of frame.....	<i>4-5 x 40</i>		Uppermost Continuous Deck, amidships in Wells, Angle, E or C.....	<i>8 3 40.</i>	
Middle Line Keelson, in Fore Hold, Angles, E or C.....	<i>3.3.44</i>		" " in way of Bridge, Angle, E or C.....		
" " Through Plate.....	<i>30 x 47.</i>		Spacing.....	<i>27"</i>	
" " Foundation Plate on Floors.....	<i>48 x 38.</i>		Second Deck, amidships, Angle, E or C.....		
" " Flat Plate Keel Angles.....	<i>4. 4. 50</i>		Spacing.....		
Side Keelsons, No. each side in Fore Hold.....	<i>Two.</i>		Third Deck, amidships, Angle, E or C.....		
" " thickness of Intercostal Plate.....	<i>40</i>		Spacing.....		
" " Rider Plate.....	<i>15 x 48</i>		Fourth Deck, amidships, Angle, E or C.....		
" " Angles.....	<i>3.3.40.</i>		Spacing.....		
DOUBLE BOTTOM, in Machy. Space			Poop Deck, Angle, E or C.....	<i>6 1/2. 3. 41</i>	
Solid Floors, thickness and spacing.....	<i>42-38 @ 24 & 30</i>		Spacing.....	<i>24 & 30.</i>	
" " Are Frame and Reversed Frame joggled?.....	<i>Yes</i>		Bridge Deck, Angle, E or C.....		
Bracket Floors, breadth and thickness at middle line.....			Spacing.....		
" " breadth and thickness at margin plate.....			Forecastle Deck, Angle, E or C.....	<i>8. 3. 40</i>	
			Spacing.....	<i>54"</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.
PILLARS, No. of Rows..... <i>one in holds, 2 in 2nd & 3rd decks.</i>									
" <i>7th</i> in between Decks, Size and Spacing.....					2 5/8 @ 48"				
" " " " " " " "									
" in Holds " " " "					8 x 3 1/2 x 3 1/2 @ 8-0" 50/62 as appd				
" WING " " " " "									
Centre Line Bulkheads " " " "					15.4.4. 50/62 appd 44/62				
Stiffeners and Spacing.....					12.2 1/2. 3 1/2. 3 1/2 @ 8-0"				
Plating, thickness of					8 x 3 x 38 @ 32"				
					50 - 40 appd 48-35				
STRINGERS AND DECKS.									
Uppermost Continuous Deck.									
Stringer Plate, breadth and thickness in Wells.....					49 x 46-34				
" " " " " in way of Bridge.....					✓				
" Angle in Wells.....					6. 6. 50				
Thickness of Plating in Deck openings.....					46				
Thickness of Plating <i>doubling</i> in way of Bridge.....					50				
Thickness of Plating within line of openings.....					46 - 30				
If Sheathed, material and thickness					not sheathed				
TRUNK Second Deck.									
Stringer Plate, breadth and thickness in Wells.....					64 - 36				
Stringer Plate, breadth and thickness in way of Bridge.....									
Thickness of Plating in way of Bridge.....					46				
Thickness of Plating within line of openings.....					46 - 30				
If Sheathed, material and thickness					not sheathed				
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.....					68-36 x 42-32				
Plating, Sheathing, material and thickness					64-32 steel sheathed over acc 2 1/2 P.P.				
Bridge Deck.									
Stringer Plate, breadth and thickness.....									
Plating, Sheathing, material and thickness									
Forecastle Deck.									
Stringer Plate, breadth and thickness.....					36 x 32				
Plating, Sheathing, material and thickness					32 sheathed 2 1/2 test.				

SHELL PLATING.

SCANTLINGS.					RIVETING.				
STRAKES.	AS IN VESSEL.				EDGES. <i>no</i>				
	AMIDSHIPS.		FORWARD.	AFT.	State if joggled?		BUTTS.		
	Breadth.	Thickness.	Thickness.	Thickness.	SINGLE OR DOUBLE.	RIVETS.	No. of Rows of Rivets.	RIVETS.	STRAPPED OR LAPPED.
	Inches.	Inches.	Inches.	Inches.		Diam.	Spacing cr. to cr.	Diam.	Spacing cr. to cr.
FLAT PLATE KEEL	53	68	58	58	2 Rows	7/8	3 1/8"	4-3 Rows	7/8 3 1/2 lapped
" DELG. (if any)		✓	✓	✓	✓				
BOTTOM PLATING, No. of Strakes.....		50	40	48	do	3/4	2 5/8	3 Rows	3/4 2 5/8
BILGE PLATING, No. of Strakes.....		50	40	48	do	3/4			
SIDE PLATING, No. of Strakes.....		50	40	40	do	3/4			
UPPER DECK, Sheer-strake in Wells.....	58	50	40	40	do	3/4			
UPPER DECK, Sheer-strake in Bridge.....			✓	68				4 Rows	7/8 3 1/2
STRAKE BELOW Sheer-strake in Wells.....		50	40	40	do	3/4		3 Rows	3/4 2 5/8
STRAKE BELOW Sheer-strake in Bridge.....			✓	53	do	3/4			
POOP SIDE PLATING.....			✓	40-34	2-1 Row.	3/4	3	2-1 Row	
BRIDGE SIDE PLATING...			✓	✓					
FORECASTLE SIDE PLATING			38	✓	1 Row	3/4	3"	1 Row	

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—	
Extending to Upper Deck (Sec. 3 c).....	11.
" Deck next below.....	11.
As per Rule.....	As approved.

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
KEEL, Bar				Flat plate keel
STEM				Roller 1 1/2 x 2 1/2 Lanarkshire
STERN FRAME { Propeller.....				Alto Froyed 11 x 4. Weller Rodenburg
{ Rudder.....				do 8 x 2 5/8 do
RUDDER—A x D				do 384.3 do
Speed of Vessel				10. K
RUDDER mainpiece at head				10 5/8
" " heel				8 1/2
" how constructed				Arms chunk on
" double or single plate coupling, vertical or horizontal.....				100. Single plate Horizontal

STIFFENERS.

	Plating Thickness.	VERTICAL.				HORIZONTAL.			
		Scantlings.		Spacing.		Scantlings.		Spacing.	
		Inches.	Thickness.	Inches.	Thickness.	Inches.	Thickness.	Inches.	Thickness.
MIDSHIP BULKHEAD, Upper tween decks									
" " Second "									
" " Third "									
" " Holds.....		51-39.	7 1/2. 3. 40. 2	32.	27 x 40. S.B. Beam				
COLLISION " (in Hold).....		38-26	6 1/2. 3. 44.	24"	Flat				
AFTER PEAK ".....		38-30.	8 1/2. 3. 42. 26	24	Flat.				

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) *open heart*
Dorman & Co. : Peter Partner Ld. : Appley Iron Co. : Cornish Iron Co. : Cleveland Steel Works : Anglo Slat Iron Works : South Durham S. I. Co. : Lanarkshire S. C. : Rodenham Steel Co.
 Has the Steel been tested as required by the Rules? *Yes.*

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 16 in number relating to this vessel & the Sister Ship "HARPA" (Uwe. Rpt. No 86846.) are forwarded herewith, together with the joining reports.

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

1st Bower	26. 3. 7.	M.B.	7926.	13. 5. 20.
2nd "	24. 2. 8.	K.H.	7803.	29. 4. 30.
3rd "	21. 2. 13.	M.B.	8110.	28. 6. 30.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 86.16 ft., R.Q.D. ✓ ft., Bridge ✓ ft., Forecastle 49.53 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated Poop & Forecastle are joined by Transverse bulkhead.

No. and Material of Decks (this information is to be given as it should appear in the Register Book) One deck steel

Official No. 162562. ; Signal Letters L.G.V.W.

Is bottom of Vessel coated with cement Feltite if not give particulars of composition in F.W. Tank. Full cement in Peats.

PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,			Fore peak tank,	19-10	51.547.7
Double bottom, under Engines and Boilers, fore end, O.S.	16-6.	(54.0. oil)	After peak tank,	17-2	56.0. ✓
Double bottom, if under Engines only, after end F.W.	27-6	48.34. (oil)	Deep tank, aft,		
Double bottom, if under Boilers only, Centre Tank Drain	5-0	(10.0. oil)	Deep tank, forward,	✓ C.D. 111-113	4-0- 121.0 ✓
Double bottom, forward, Engines	49-0		Other tanks, if fitted,		
		Total capacity of double bottom 48.34. (oil)	(If necessary, furnish further information by sketch.)		

* The wells are not to be included in the lengths of the tanks.

Order for Special Survey No. 5416

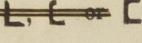
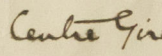
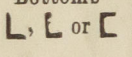
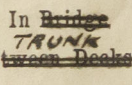
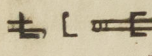
Date 28. 2. 30

Dates of Surveys held while building

1930
Feb. 7. 10. 13. 17. 25. 26. Apr. 16. 22. 23. 28. May 1. 6. 15. 16. 20. 23. June 11. 12. 13. 16. 30. July 2. 3. 4. 8. 9. 10. 11. 14. 17.
18. 24. 25. 28. 30. Aug. 1. 8. 27. Sep. 1. 12. 22. 23. 25. 29. Oct. 2. 3. 6. 8. 10. 14. 15. 16. 17. 20. 21. 22. 23. 24. 27. 29. 31. Nov. 3. 5. 7.
10. 13. 14. 18. 21. 24. 25. 26. 27. 28. Dec. 1. 2. 4. 5. 9. 10. 12. 17. 22.
1931
Jan. 15. 26. Feb. 2. 3. 13. 17. Mar. 3. 4. 5. 9. 11. 25. 26. 27. 30.
31. Apr. 9. 13. 15.

Total No. of Visits 102

PARTICULARS OF LONGITUDINAL FRAMING.

FRAMING.	AMIDSHIPS.			ENDS.			AMIDSHIPS.			ENDS.			RIVETING.			Rivets in Br to Bulkheads	Rpt.
	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 Transverses and Bulkheads.		
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Diam.	Spang.	Inches.			
Framing of 																	
Frames in Bridge 'tween Decks ...																	
Frames from Uppermost Continuous Deck No. 1																	
" 2																	
" 3																	
" 4																	
" 5																	
" 6																	
" 7																	
" 8	12. 3 1/2. 3 1/2. 37/50						10. 3 1/2. 3 1/2. 42/50					3/4. 4 1/2. 3 3/8			16		
" 9	do						do					"			"		
" 10	Wing Bulkhead						Wing Bulkhead					"			"		
" 11	12. 3 1/2. 3 1/2. 37/50						10. 3 1/2. 3 1/2. 42/50					"			"		
" 12	do						do					"			"		
" 13	do						do					"			"		
" 14	do						do					"			"		
" 15	do						do					"			"		
Centre Girder, 	45 x 42. Bottom Bars 3 1/2. 3 1/2. 50						Top Bars Int. 6 x 3 x 42. 5.										
Spacing of Longitudinal Frames	Amidships						32" 36"										
	At Ends						Transverse framing at ends.										
Double Bottoms 	Tank Top Longitudinals																
	Bottom																
Spacing of Longitudinals	Amidships																
	At Ends																
Transverses.																	
In Bridge 	Depth and Thickness	15. 4. 4. 4 1/2					15. 4. 4. 4 1/2					3/4. 3 3/4					
	Face Angles																
	Lugs to Shell																
On Upper 'tween Decks.	Depth and Thickness	12. 3 1/2. 3 1/2. 38/50					12. 3 1/2. 3 1/2. 38/50					3/4. 3 3/4					
	Face Angles																
	Lugs to Shell																
Bottom Transverse	Depth and Thickness	45 x 46, to 30 x 40 in wing tanks					Throughout oil tanks as approved.										
	Face Angles	6. 3 1/2. 64. 09. to 3 x 3 x 44. 09. Single.															
In Hold.	Lugs to Shell	Joggled. 5. 5. 40					5. 5. 40.					3/4. 3 3/4					
	" " Back Bars																
	Brackets	53 x 40. as appd.					53 x 40.										
		8'-0".					8'-0"										
Spacing of Transverse Frames																	
	State if joggled or liners.																
Longitudinal Beams of 	TANK. Bridge Deck	6. 3. 26					6. 3. 36					32					
	Upper	7. 3. 40					7. 3. 40					36					
	Second																
	Third																

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.