

STEEL STEAMER OR MOTORSHIP

25 DEC 1941

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 **December 18th 1941.**Port of **BARROW**No. **2855**Survey held at **BARROW**Date First Survey **JUNE 6th 1940**Last Survey **DECEMBER 5th 1941**

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

SINGLE SCREW STEAMER "EMPIRE BAXTER" MACHINERY AMIDSHIPS.

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings)

COMPLETE SUPERSTRUCTURE - WITHOUT TONNAGE OPENING. State Type of Erections FORECASTLE.TONNAGE under Tonnage Deck ... **6618.87**CLASS **+100 A1.**State if with freeboard as condition of Class **YES.**Built at **BARROW**Do. of space br spaces between Tonnage Dk. and Upper Dk. **✓**Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) **L 425.37**Launched **8th OCTOBER 1941.** Yard No. **787**Breadth (greatest moulded) **B 56.00**Builders **VICKERS - ARMSTRONGS LD.**Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) **D 36.83**Owners **MINISTRY OF WAR TRANSPORT.**Tonnage **7023.65**1st Longitudinal Number (L x D) **15194**Managers **HALDIN & PHILIPPS LD.**

(Where necessary to be entered in Reg. Book)

ster Tonnage **5056.10**2nd Numeral L x (B + D) **38994**Residence **1 LEADENHALL STREET LONDON. E.C.3.**

REGISTERED DIMENSIONS.

FEET

Framing Depth "d," at middle of length. See Sec. 3 (1d) **23.9**Port of Registry **BARROW**th **433.0**Proportions—Depth to Length—Uppermost continuous deck to top of keel **11.54**

If surveyed while building, afloat, or in dry dock

th **56.25**Do. Long Bridge to top of keel **✓****WHILE BUILDING AND AFLOAT.**th **34.4**Draught Moulded **26'-1³/₈"**

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.....	31		Bracket Floors, Frame	6 x 3 ¹ / ₂ x 7/16	
" " from 1/2 length amidships to Collision bulkhead.....	27		" " Reversed Frame.....	6 x 3 ¹ / ₂ x 7/16	
" " in peaks	24		" " Vertical Struts	10 x 3 ¹ / ₂ x 7/16	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	43 ¹ / ₄ x .54	
Frame Amidships, Angle, E or F	12 x 3 ¹ / ₂ x 9/16		" " top Angles	4 x 4 x .50	
" " Extends up to.....	SECOND DECK		" " bottom Angles.....	4 x 4 x 3/16	
Reversed Frame Amidships, Angle	✓		Side Girders, No. each side and thickness.....	1 @ .38	
" " Extends up to	✓		Margin Plate depth (excl. of flange) and thickness	43 ¹ / ₂ MLD x .54	RULE 39"
Depth of Framing Girder.....	12		" " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem	6 ¹ / ₂ x 6 ¹ / ₂ x .625	T
Frames in Uppermost Continuous 'tween Decks, Angle, E or F	6 x 3 ¹ / ₂ x 7/16		" " Vertical Angle to Tank side Bracket from forward 1/4 len. from stem to Panting Area	6 ¹ / ₂ x 6 ¹ / ₂ x .625	T
" " Second 'tween Decks, Angle, E or F	✓		" " Gussets, spacing and scantling abaft 1/4 len. from stem.....	CONTINUOUS .42 - 6.7/8 R.	
" " Third	✓		" " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area	CONTINUOUS .42 5-7/8 R. IN 6 x 3 ¹ / ₂ BACK L. TO WING BKT.	
" " from 1/2 len. for'd. to 15% len. from Stem	12 x 3 ¹ / ₂ x 9/16 WITH 4 x 4 x 50 REV. L. ON ALT.		Tank Side Brackets, height above base line at toe of Frame and thickness	77 x .44	
" " in Peaks, Angle or F	8 x 3 ¹ / ₂ x .35		INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 @ 5 3/4		Breadth and thickness of Middle Line Strake.....	82 x .50	RULE 53 x .52
State if Frame Joggled.....	YES		Thickness of remainder in Holds .....	.44	
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	YES		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?.....	YES	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?.....	YES		BEAMS.		
NGLE BOTTOM.			Uppermost Continuous Deck, amidships in Wells, Angle, E or F	10 x 3 ¹ / ₂ x .437	HALF BEAMS
Floors, Depth and thickness at mid-line in Holds.....			" " in way of Bridge, Angle, E or F	✓	
Height of Brackets at side above base line at toe of frame.....			" " Spacing	31	
Middle Line Keelson, on Floors, Angles, E or F			Second Deck, amidships, Angle, E or F	12 x 3 ¹ / ₂ x .45	HALF BEAMS
" " Through Plate or Inter-costal Plate			" " Spacing	9 x 3 ¹ / ₂ x .375	
" " Foundation Plate on Floors			Third Deck, amidships, Angle, E or F	✓	
" " Flat Plate Keel Angles			" " Spacing.....		
Side Keelsons, No. each side.....			Fourth Deck, amidships, Angle, E or F	✓	
" " thickness of Inter-costal Plate.....			" " Spacing.....		
" " Angles			Poop Deck, Angle, E or F	✓	
DOUBLE BOTTOM.			" " Spacing.....		
Solid Floors, thickness and spacing	42 NOT EXCEED 7'-9"		Bridge Deck, Angle, E or F	✓	
" " Are Frame and Reversed Frame joggled?	YES		" " Spacing.....		
Bracket Floors, breadth and thickness at middle line	32 ¹ / ₄ x .42		Forecastle Deck, Angle, E or F	8 x 3 ¹ / ₂ x 7/16	AND AS PER PLAN.
" " breadth and thickness at margin plate	32 ¹ / ₄ x .42		" " Spacing.....	EVERY.	

PILLARS AND DECKS.

136 1 12		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.		58/2		DISPENSED WITH AS A WAR EMERGENCY		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.	
PILLARS, No. of Rows						4 0 7		Stringer Plate, breadth and thickness in way of Bridge		✓		NETHERTON	
" in 'tween Decks, Size and Spacing								Thickness of Plating abreast Deck openings in way of Wells .....		.36			
" 12915 120" 2 5/16" 96 1/4" 134 3/4" 3 1/2" 720 1/4" 270 5/16" 12915 120" 2 5/16" 96 1/4" 134 3/4" 3 1/2" 720 1/4" 270 5/16" 12915 120" 2 5/16" 96 1/4" 134 3/4" 3 1/2" 720 1/4" 270 5/16"						720 1/4" 270 5/16"		Thickness of Plating abreast Deck openings in way of Bridge		✓			
" in Holds 105" 2 5/16" 96 1/4" 134 3/4" 281" 7" 13"						7" 13"		Thickness of Plating within line of openings... 0"		.340		4 1/4 64.6 120	
" " 45" DISPENSED WITH AS A WAR EMERGENCY.								If Sheathed, material and thickness		✓		2 1/4 15.7 20	
Centre Line Bulkhead.								Third Deck.					
Stiffeners and Spacing 12 x 3 1/2 x .45 AND AS PER PLAN.						12 x 3 1/2 x .45		Stringer Plate, breadth and thickness		20 30 2 1/2 37 200			
Plating, thickness of .....						.30		If Plated, state thickness		✓			
STRINGERS AND DECKS.								Fourth Deck.					
Uppermost Continuous Deck.								Stringer Plate, breadth and thickness		✓			
Stringer Plate, breadth and thickness in Wells 66 x .66						66 x .66		If Plated, state thickness		✓			
" " " " in way of Bridge						✓		Poop Deck.					
" Angle in Wells 6 x 6 x 5/8						6 x 6 x 5/8		Stringer Plate, breadth and thickness		✓			
Thickness of Plating abreast Deck openings in way of Wells .....						.63 20 OPENINGS		Plating, Sheathing, material and thickness		✓			
Thickness of Plating abreast Deck openings in way of Bridge .....						.59 20 OPENINGS		Bridge Deck.					
Thickness of Plating within line of openings...						.40		Stringer Plate, breadth and thickness		31 x 20		31 x 20	
If Sheathed, material and thickness						✓		Plating, Sheathing, material and thickness		3		5	
Second Deck.								Forecastle Deck.					
Stringer Plate, breadth and thickness in Wells 72 x .40						72 x .40		Stringer Plate, breadth and thickness .....		.36			
								Plating, Sheathing, material and thickness .....		.32			

SHELL PLATING.

SCANTLINGS.					RIVETING.								
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if joggled?	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.			Inches.	Inches.		Inches.	Inches.		
Flat Plate Keel.....	52	.78	.68	.68		DOUBLE	7/8	3 1/2					
„ Dblg. (if any)	✓					✓							
Bottom Plating, No. of Strakes 4	78	.63	3 @ .69	.50		DOUBLE	7/8	3 1/2					
Bilge Plating, No. of Strakes 1	80 1/2	.63	.50	.50		D°	7/8	3 1/2					
Side Plating, No. of Strakes 4	2 @ 78 1/2	.62	.46	.46		D°	7/8	3 1/2					
Upper Deck, Sheer- strake in Wells.....	58	.69	.46	.46		D°	7/8	3 1/2	ALL BUTTS WELDED VEE.				
Upper Deck, Sheer- strake in Bridge ...	✓					✓							
Strake below Sheer- strake in Wells.....	58	.64	.46	.46		DOUBLE	7/8	3 1/2					
Strake below Sheer- strake in Bridge ...	✓					✓							
Poop Side Plating.....	✓					✓							
Bridge Side Plating.....	✓					✓							
Forecastle Side Plating			.40			SINGLE	3/4	3					

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—	376 12 -	
Extending to Upper Deck (Sec. 3 c)	93:18 :-	6
„ Deck next below	18 :-	1
	Yes.	
As per Rule		7

FORGINGS AND CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar	✓		100 X 1	
STEM		PLATE - AS PER APPROVED PLAN.		
STERN FRAME { Propeller Post	CAST	AS PER APPROVED PLAN.		
{ Rudder	STEEL			
Speed of Vessel	10 1/2	KNOTS.		
RUDDER—Type		DOUBLE PLATE	STREAMLINE.	
” A x D	575			
” Diam. of head	11" + 10% AREA = 11 1/2"			
” Mainpiece at top pintle				
” ” heel		WELDED PLATES.		
” how constructed				
” double or single plate	5/8 & 1"			
” coupling, vertical or		HORIZONTAL.		
” horizontal				

STEEL.

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

GUEST KEEN BALDWIN'S IRON & STEEL CO. LD.

SIEMENS-MARTIN'S

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

EQUIPMENT No. 40048												LETTER at		ANCHORS.	
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.				WEIGHT REQUIRED BY TABLE 53.	Description of Anchor.	Makers.	Where and when tested, and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.				
40228	1st Bower ...	68	1	-	-	-	-	52	15	2	14	68	STOCKLESS	NOT STATED PER W.L.BYER & CO. LD.	SUNDERLAND 9.10.40 W.V.NORMAN.
40238	2nd „ ...	68	0	12	-	-	-	52	15	2	14	68	D ^o	D ^o	SUNDERLAND 11.10.40 W.V.NORMAN.
	3rd „ ...											58½	DISPENSED WITH AS A WAR EMERGENCY.		
	Collective weight	136	1	12								194½			
99501	Stream	19	1	14	4	3	14	20	4	0	7	19. EX STOCK	IRON STOCK	—	NETHERTON 31.12.40 J.A. ROLF.

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.	
	Fathoms.	Ins.	Tons.	Tons.	Cwts.	qrs.	lbs.	Cwts.	Fathoms.	Ins.					Fathoms.	Ins.		Fathoms.	Ins.
112915	120	2½	96¼	134¾	322	-	0	720¾	270	2½	STUD LINK		NETHERTON 31.12.40 J.A. ROLF	TOWLINE	120	4¾	64.6	120	4¾
112916	105	2½	96¼	134¾	281	-	2.13				D ^o		NETHERTON 31.12.40 J.A. ROLF	HAWSERS & WARPS	2090	2¾	15.7	2090	2¾
															2090	2½	13.7	2090	2½
Iron Stream Chain Steel Wire	90	5	-	52.8	-	-	-	-	90	5	F.S.W 6/12	DIXON CORBITT LD. GATESHEAD	GATESHEAD 21.10.41. R. SPURR						

Steering Gear, Type (Power ~~or hand~~) STEAM. HASTIES. TELEMOTOR CONTROLLED. Alternative Means of Steering BLACK & TACKLE LED TO STEAM WINCH.

Steering Chains (Size and Test) ✓ Windlass STEAM - BY EMERSON WALKER. Boats 27.0 x 8.3 x 3.4. 40 PERS. MOTOR

Ceiling in Holds, thickness and material NONE FITTED. Cargo Battens, thickness, material and spacing NONE FITTED FRAMES PUNCHED CLEATS SUPPLIED.

Cargo Hatchways.—(Upper Deck) STEEL Thickness of Hatches 2½ WOOD COVERS.

Size of Hatchways No. 1 (Fwd.) 31'6" x 20'0" No. 2 31' x 20' No. 3 12'11" x 20' No. 4 10'4" x 20' No. 5 31' x 20' No. 6 31' x 20'

Number of Shifting Beams and/or Fore and Afters 5

Builder's Signature FOR VICKERS-ARMSTRONGS LIMITED.

J. M. Dunlin.
SHIPBUILDING MANAGER,
BARROW WORKS.

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, secretaries letters and the Society's Rules. The workmanship is good and to my satisfaction.

The Fore and Aft Peak tanks, all O.B. tanks cofferdam and dry tank, weather decks and waterways W.T. Doors, windlass steering gear & hand pump have been tested to rule requirements and found satisfactory.

The hull is of the double plate steam line type electrically welded. The stem made up of rounded plates. Wood covers fitted to Tween Deck (2nd & 3rd) hatchways - no battering arrangements no openings in upper Tween Deck bulkheads. all W.T. Blnds tested to rule requirements.

The scantlings are suitable for a draught 18" in excess of that corresponding to the freeboard which could be assigned to a complete superstructure vessel with a tonnage opening fitted.

The freeboards, as assigned, have been cut in on the vessel's side and verified.

An endorsement for deeper loading was attached to the load line Certificate and copy. Report 10 handed to Builders for the master (copy herewith)

The amount of Entry Fee..... £10 : - : - Fees applied for, 19

Special Survey Fee..... £375 : 12 : - Specification (25%) £93 : 18 : - Received by me, 19

Travelling Expenses, if any £ - : - : -

Done of load line Certificate £18 : - : -

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

I am of opinion the Vessel should be Classed + 100 A1 WITH FREEBOARD.

Signature S. Bowman.
Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to Barrow. Date of issue 2/2/42

Committee's Minute Glasgow FRI. 9 JAN 1942

Character assigned + 100 A1
with freeboard
Lloyd's A & CR + LNC 12 41

Wrote Gls

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.)

SISTER VESSELS:—"EMPIRE GALE" & "EMPIRE MOEN" BARROW REPORT NOS 2824 & 2839.

Approved plans as per list on Report 2824 ("Empire Gale") are in Wokingham Office.

Plans returned with this report:-

Midship section - as fitted

Profile and Deck plans - as fitted

Casting Certificates (3 in 10)

Plans - as approved:-

Midship section

Profile and Deck plans

Recess at Fore End of Boiler Room for additional Boilers

Additional stiffening to Bkt. floors in way of W.T. Bulkheads.

Compared with "E/Gale" & "E/Moen" - this vessel has one auxiliary boiler fitted, as shown on plans approved for "Empire Baxter".

PARTICULARS OF ELECTRIC WELDING (if employed) all butts are vee welded with back run to the following:-
shell plating, deck plating, tank top plating, centre girders and margin plates, W.T. Bulkheads and Tunnel plating.

Ventilator coamings to decks.

Rudder - double welded plates.

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

E.S.D. - Cruisers Stern - Lloyds A.C.P.

Butts of shell and deck plating electrically welded.

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

1st Bower	40 CWTs. 2 QRS. 0 lbs.	J.D.	3127	20.7.40.
2nd "	40 CWTs. 2 QRS. 6 lbs.	J.D.	3141	24.7.40
3rd "	DISPENSED WITH AS A WAR EMERGENCY.			

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. ☒ ft., Bridge ☒ ft., Forecastle ☒ 39 ft.

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

Official No. 167740 Signal Letters BCSJ Extreme Breadth over Belting ☒ Over-all Length 447-4 1/2 (Circ. 1611) (Circ. 1703)

No. and Material of Decks 2 - STEEL.

Parts of Bottom of Vessel coated with cement or approved composition Dry tank cemented, bilge cemented in way of margin bar.

Inside of all O.B. tanks cement washed. Bitumin coating applied to scallings of the O.B. in way of aux. Boilers (Glasgow Letter 22/7/41)

Particulars of composition (if fitted) and of approval Paratex in way of accommodation.

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.	Water Capacity.	Where Fitted.	Length.	Water Capacity.
Double bottom, aft,	Feet. 132 Tons. 371	✓	Fore peak tank,	22	122
Double bottom, under Engines and Boilers, DRY TANK & C/DAM FEED TANK	18 26	✓	After peak tank,	23	172
Double bottom, if under Engines only,	✓	✓	Deep tank, aft,	✓	✓
Double bottom, if under Boilers only,	✓	✓	Deep tank, forward,	✓	✓
Double bottom, forward,	194	724	Other tanks, if fitted,	✓	✓
Total length (if continuous) and Capacity	370	1215	(If necessary furnish further information by sketch.)		

Order for Special Survey No. ☒

Date 29th March 1940.

Dates of Surveys held while building

1940. June 6 - July 11. 29 Aug. 16. 20. 22. 26. 27. 28. 30 Sept 2. 3. 5. 6. 10. 19. 23. 24. 26. 27. 30 Oct 1. 3. 7. 8. 10. 11. 14. 16. 18. 24. 31. Nov 4. 6. 7. 12. 20. Dec 2. 4. 9. 13. 17. 20. 23. 24. 27. 31. 1941 Jan 1. 3. 7. 8. 10. 15. 27. Feb 4. 5. 6. 10. 14. 18. 19. Mar 12. 13. 14. 26. 28. Apr 7. 11. 15. May 2. 19. 21. 28. June 9. 13. July 2. 14. 24. 30. Aug 5. 6. 19. 27. Sept 3. 8. 12. 15. 16. 17. 18. 22. 23. 24. 26. 30. Oct 1. 2. 3. 4. 5. 6. 7. 8. 13. 21. 22. 27. Nov 3. 4. 5. 7. 10. 11. 12. 17. 18. 21. 26. 28. Dec 1. 4. 5. 11. 12.

Total No. of Visits 128

Lloyd's Register Foundation