

## STEEL STEAMER or MOTORSHIP.

25 JUN 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

12<sup>TH</sup> JUNE 1941Port of **GREENOCK**No. **21444**Survey held at **PORT GLASGOW**

Date First Survey

10<sup>TH</sup> DECEMBER 1940

Last Survey

11<sup>TH</sup> JUNE

1941.

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

**SINGLE SCREW "EMPIRE MOAT" MACHINERY AFT.**

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

**FULL SCANTLING.**State Type of Erections **FORECASTLE.**

TONNAGE under Tonnage Deck...

**2186.46**CLASS **100 A.1.**

State if with freeboard as condition of Class

**NO**Built at **PORT GLASGOW.**

Do. of space or 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 312.0**Launched **28<sup>TH</sup> APRIL 1941** Yard No. **951**

Total

Breadth (greatest moulded)

**B 44.25**Builders **LITHGOWS LTD**

Gross Tonnage

**2921.75**

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

**D 22.08 U.D. 27.08 R.O.D.**Owners **MINISTRY OF SHIPPING.**

Register Tonnage

**1640.32**

1st Longitudinal Number (L x D)

**= 6889**Managers **NATTS, NATTS & CO LD**

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

**PLANTATION HOUSE**Residence **FENCHURCH ST. LONDON E.C.3.**

## REGISTERED DIMENSIONS.

FEET.

Length

**315.2**

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

**19.04**

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

**U.D. 14.13**

Breadth

**44.45**

Do. Long Bridge to top of keel

**R.O.D. 11.52**

Depth

**19.90**

Draught Moulded

**19.92"**

If surveyed while building, afloat, or in dry dock

**BUILDING & AFLOAT.**

## 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.
<b>FRAMES, Spacing amidships</b>	<b>27</b>		<b>Bracket Floors, Frame</b>	<b>✓</b>	
" " from $\frac{3}{8}$ length amidships to Collision bulkhead	<b>27</b>		" " Reversed Frame	<b>✓</b>	
" " in peaks	<b>24</b>		" " Vertical Struts	<b>✓</b>	
<b>SIDE FRAMING.</b>			<b>Centre Girder, depth and thickness amidships</b>	<b>36 x 44</b>	<b>✓</b>
Frame Amidships, Angle, <b>E</b> or <b>C</b> [ <b>R.Q. DECK</b> ]	<b>11 3 1/2 46</b>	<b>✓ 10 x 2 1/2 x 40 U.D.</b>	" " top Angles	<b>3 3 38</b>	<b>✓</b>
" " Extends up to	<b>DECK</b>	<b>✓</b>	" " bottom Angles	<b>3 1/2 3 1/2 44</b>	<b>✓</b>
<b>Reversed Frame Amidships, Angle</b>	<b>✓</b>		<b>Side Girders, No. each side and thickness</b>	<b>ONE</b>	<b>✓</b>
" " Extends up to	<b>✓</b>		<b>Margin Plate depth (excl. of flange) and thickness</b>	<b>32 1/2 x 42</b>	<b>✓</b>
<b>Depth of Framing Girder</b>	<b>10" x 11"</b>	<b>✓</b>	" " Vertical Angle to Tank side	<b>5 x 5 x 41</b>	<b>✓</b>
<b>Frames in Uppermost Continuous 'tween Decks, Angle, [ or ]</b>	<b>✓</b>		Bracket abaft $\frac{1}{4}$ len. from stem	<b>3 x 3 x 39</b>	<b>✓</b>
" " <b>Second 'tween Decks, Angle, [ or ]</b>	<b>✓</b>		" " Vertical Angle to Tank side	<b>3 3 39</b>	<b>✓</b>
" " <b>Third</b>	<b>✓</b>		Bracket from forward $\frac{1}{4}$ len. from stem to Panting Area	<b>9'0" x 34</b>	<b>✓</b>
" " from $\frac{1}{4}$ len. for'd. to 15% len. from Stem	<b>10 3 1/2 44</b>	<b>✓ 10 x 2 1/2 x 40 U.D.</b>	Gussets, spacing and scantling abaft $\frac{1}{4}$ len. from stem	<b>9'0" x 34</b>	<b>✓</b>
" " in Peaks, Angle or [	<b>6 3 39</b>	<b>✓</b>	" " Gussets, spacing and scantling from forward $\frac{1}{4}$ len. from stem to Panting Area	<b>9'0" x 34</b>	<b>✓</b>
<b>Diameter and Spacing of Rivets through Frame and Shell Plating amidships</b>	<b>3/4 - 5/4</b>	<b>✓</b>	<b>Tank Side Brackets, height above base line at toe of Frame and thickness</b>	<b>52 x 39</b>	<b>✓</b>
<b>State if Frame Joggled</b>	<b>YES, AMIDSHIPS</b>	<b>✓</b>	<b>INNER BOTTOM PLATING.</b>		
Are the scantlings and arrangements in the <b>Panting Area</b> in accordance with the Rules and/or as approved?	<b>AS APPROVED</b>	<b>✓</b>	Breadth and thickness of Middle Line Strake	<b>66 1/2 x 50</b>	<b>✓</b>
Are the scantlings and arrangements in way of the <b>Bottom Forward</b> in accordance with the Rules and/or as approved?	<b>AS APPROVED</b>	<b>✓</b>	Thickness of remainder in Holds	<b>50</b>	<b>✓</b>
<b>SINGLE BOTTOM.</b>			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?	<b>YES</b>	<b>✓</b>
<b>Floors, Depth and thickness at mid-line in Holds</b>	<b>✓</b>		<b>BEAMS, RAISED QUARTER</b>		
Height of Brackets at side above base line at toe of frame	<b>✓</b>		<b>Uppermost Continuous Deck, amidships</b>	<b>6 3 1/2 38</b>	<b>✓</b>
<b>Middle Line Keelson, on Floors, Angles, [ or ]</b>	<b>✓</b>		" " in Wells, Angle, <b>E</b> or <b>C</b>	<b>✓</b>	
" " Through Plate or Intercostal Plate	<b>✓</b>		" " in way of Bridge, Angle, <b>E</b> or <b>C</b>	<b>✓</b>	
" " Foundation Plate on Floors	<b>✓</b>		Spacing	<b>EVERY FR.</b>	<b>✓</b>
" " Flat Plate Keel Angles	<b>✓</b>		<b>UPPER Second Deck, amidships, Angle, <b>E</b> or <b>C</b></b>	<b>6 3 1/2 38</b>	<b>✓</b>
<b>Side Keelsons, No. each side</b>	<b>✓</b>		Spacing	<b>EVERY FR.</b>	<b>✓</b>
" " thickness of Intercostal Plate	<b>✓</b>		<b>Third Deck, amidships, Angle, [ or ]</b>	<b>✓</b>	
" " Angles	<b>✓</b>		Spacing	<b>✓</b>	
<b>DOUBLE BOTTOM.</b>			<b>Fourth Deck, amidships, Angle, [ or ]</b>	<b>✓</b>	
<b>Solid Floors, thickness and spacing</b>	<b>34 EV. FR.</b>	<b>✓</b>	Spacing	<b>✓</b>	
" " Are Frame and Reversed Frame joggled?	<b>YES</b>	<b>✓</b>	<b>Poop Deck, Angle, [ or ]</b>	<b>✓</b>	
<b>Bracket Floors, breadth and thickness at middle line</b>	<b>✓</b>		Spacing	<b>✓</b>	
" " breadth and thickness at margin plate	<b>✓</b>		<b>Bridge Deck, Angle, [ or ]</b>	<b>✓</b>	
			Spacing	<b>✓</b>	
			<b>Forecastle Deck, Angle, <b>E</b> or <b>C</b></b>	<b>7 3 33 5 3 30 25</b>	<b>✓</b>
			Spacing	<b>EVERY FR.</b>	<b>✓</b>



PILLARS AND DECKS.									
PILLARS, No. of Rows.....	INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.		
	Width	Depth							
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 .....	✓				✓				
<b>Third Deck.</b>									
Stringer Plate, breadth and thickness.....	✓				✓				
If Plated, state thickness.....	✓				✓				
<b>Fourth Deck.</b>									
Stringer Plate, breadth and thickness.....	✓				✓				
If Plated, state thickness .....	✓				✓				
<b>Poop Deck.</b>									
Stringer Plate, breadth and thickness .....	✓				✓				
Plating, Sheathing, material and thickness .....	✓				✓				
<b>Bridge Deck.</b>									
Stringer Plate, breadth and thickness.....	✓				✓				
Plating, Sheathing, material and thickness .....	✓				✓				
<b>Forecastle Deck.</b>									
Stringer Plate, breadth and thickness.....	✓				✓				
Plating, Sheathing, material and thickness .....	✓				✓				

SHELL PLATING.												
STRAKES.	SCANTLINGS.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	RIVETING.						
	AS IN VESSEL.					EDGES.			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?	RIVETS.		No. of Rows of Rivets.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.		SINGLE OR DOUBLE.	Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.	Inches.	Inches.		
FLAT PLATE KEEL .....	73 3/4	1/2	57	57		DOUBLE	3/4	3	TREBLE	7/8	3/8	LAPPED
" DELG. (if any)	2 STRAKES OF BOTTOM PLATING P&S 57 FOR 3/4 TO RULE POSITION OF COLLISION BULKHEAD.											
BOTTOM PLATING, No. of Strakes .....		52	45	44		DOUBLE	3/4	3	TREBLE	3/4	2 5/8	LAPPED
BILGE PLATING, No. of Strakes .....		52	45	44		"	"	3	"	"	2 5/8	"
SIDE PLATING, No. of Strakes .....		52	40	40		"	"	3	"	"	2 5/8	"
UPPER DECK, Sheer-strake in Wells .....	65 1/8	1/2	40	40		"	7/8	3 3/8	QUAD.	1	4	"
UPPER DECK, Sheer-strake in Bridge ...	64 7/8	1/2	40	40		"	"	3 3/8	TREBLE	7/8	3/8	"
STRAKE BELOW Sheer-strake in Wells (U.D.)		52	40	-		"	3/4	3	"	3/4	2 5/8	"
STRAKE BELOW Sheer-strake in Bridge (L.D.)		52	-	40		"	"	3	"	"	2 5/8	"
POOP SIDE PLATING .....												
BRIDGE SIDE PLATING ...												
FORECASTLE SIDE PLATING			37			SINGLE	3/4	2 5/8	SINGLE	3/4	2 5/8	LAPPED.

WATERTIGHT BULKHEADS.									
Total No. of W.T. BULKHEADS in Vessel—	4								
Extending to Upper Deck (Sec. 3 c)	3								
Deck next below	1								
As per Rule	5								
MIDSHIP BULKHEAD, Upper tween decks	STIFFENERS.				Any Departure from Approved Plans to be Noted.	FORGINGS and CASTINGS.			
	Plating Thickness.	VERTICAL.	SPACING.	HORIZONTAL.		Casting or Forging.	Scantlings.	Maker's Name.	
" Second "						KEEL, Bar .....	FLAT PLATE		
" Third "						STEM .....	8" x 2 1/4"		
" Holds .....	33 1/2	10 1/2	40 1/2	30 1/2		STERN FRAME { Propeller Post .....	FORGING 9" x 5 1/4" FOSTER		
" COLLISION (in Hold) 127...	33 1/2	10 1/2	40 1/2	30 1/2		Rudder .....	9" x 5 1/4" SONS.		
AFTER PEAK .....	35 1/2	10 1/2	40 1/2	30 1/2		Speed of Vessel.....	UNDER 12 KNOTS.		
Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)						RUDDER—Type.....	DOUBLE PLATE STREAMLINED.		
COLVILLES LTD, THE STEEL CO OF SCOTLAND.						" A x D .....	227		
Has the Steel been tested as required by the Rules? YES.						" Diam. of head .....	FORGING 7 1/2" FOSTER		
						" Mainpiece at top pintle .....	7 1/2 x 6 1/2 SONS.		
						" " heel .....	3 1/4 x 6 1/2		
						" how constructed .....	PARTIAL FORGED FRAME		
						" double or single plate coupling, vertical or horizontal .....	DOUBLE VERTICAL.		

EQUIPMENT No 22097										LETTER 'E'		ANCHORS.	
Number of Certificate.	Anchor.	WEIGHT, EX. STOCK.	WEIGHT OF STOCK.	TEST, PER CERTIFICATE.	WEIGHT REQUIRED BY TABLE 33.	Description of Anchor.	Makers.	Where and when tested and Superintendent.					
53751	1st Bower	42 1 21	STOCKLESS	37 10 0 0	42	GREEN'S QUICK-GRIP (CAST STEEL HOOK)	J. GREEN/OLD HILL	CADLEY HEATH 14/12/40 L.P.					
53798	2nd "	42 2 0	"	37 10 0 0	42	" " " "	"	CADLEY HEATH 31/12/40 L.P.					
	3rd "	84 3 21	"		84	" " " "	"						
99443	Stream	11 0 14	3 0 0	13 0 0 0	11	ORDINARY (FORGED HOOK IRON)	NOT STATED.	NATHERTON 25/11/40 J.R.R.					

  

CHAIN CABLES.										HAWERS AND WARPS.									
Number of Certificate.	Length and size supplied.	Test per Certificate.	WEIGHT OF CHAIN CABLE.	Length and size per Table 33.	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 33.								
	Length. Diam.	Break. Tons.	Supplied. Per Rule.	Length. Diam.					Length. Cir.	Tons.	Length. Cir.								
114761	105 1 7/8	63 1/4 88 1/2	189.2-0	42 3/4	240 1 7/8	STUP LINK	NOT STATED	NATHERTON 6/12/40 J.R.R.	TOWLINE	100 4	33.2	100 4							
114762	105 1 7/8	63 1/4 88 1/2	190.0-0			"	"	NATHERTON 7/12/40 J.R.R.	HAWERS & WARPS	2090 2 1/2	13.2	2090 2 1/2							
										2090 2 1/4	10.8	2090 2 1/4							

  

Steering Gear, Type (Power or Hand) **BY HASTIE, GREENOCK** Alternative Means of Steering **HAND WHEEL AFT.**

Steering Chains (Size and Test) **NONE, STEERING GEAR AFT.** Windlass **STEAM, EMERSON, WALKER LTD** Boats **1 @ 26'-0" MOTOR BOAT. 1 @ 24'-0" LIFEBOAT.**

Ceiling in Holds, thickness and material **NONE.** Cargo Battens, thickness, material and spacing **NONE.**

Cargo Hatchways.—(Upper Deck) **42' x 51" COAMINGS, STIFFENED.** Thickness of Hatches **3" PINE.**

Size of Hatchways No. 1 (Fwd.) **38'-0" x 25'-0"** No. 2 **38'-3" x 30'-0"** No. 3 **45'-0" x 30'-0"** No. 4 **42'-9" x 30'-0"** No. 5 **✓** No. 6 **✓**

Number of Shifting Beams **NONE** 1 x 2 HATCHES = 5. NONE 3 x 4 HATCHES = 6.

Builder's Signature **LITHGOWS LIMITED** *R. Campbell*

  

**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 and in general conformity with the Society's Rules for the class contemplated. The materials and workmanship are of good quality. All the double bottom tanks, fore and aft peak tanks and deep tank have been tested as required by the rules and found satisfactory. The weather decks, w.t. bulkheads and w.t. door have been hose tested and found satisfactory. The foreboard has been verified and the marks cut in on the vessel's sides. The hand pumps, windlass, steering gear, auxiliary steering gear, w.t. door and bilge suction were tried under working conditions and found satisfactory. Emergency equipment has been supplied to this vessel and no sparring has been fitted.*

  

The amount of Entry Fee .....		Fees applied for,		(Special notations, where part of class, to be stated.)	
£ 6	0 : 0	14th JUN 1941			
Special Survey Fee ...	£ 22 / 1 : 6	Received by me,			
FREEBOARD.	13 0 0	19			
Travelling Expenses, if any £	:				
SPECIALISATION FEE.	55 5 6				

State whether the Vessel has been built under Special Survey **YES.** Signature *J. A. Jamieson* Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to **GREENOCK OFFICE.** Date of issue **24 JUN 1941**

Committee's Minute **GLASGOW 24 JUN 1941**

Character assigned **-1 100 A1** *6.41*

*Lloyd's A+C* **-1 Linc 6.41** *J.D.*

Cargo battens not fitted. Intermediate B.H. dispensed with: 4 B.H.

Note Log.



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.)

This vessel is a sister vessel of the "S.S. Empire Stream" Lithgow's L.L. Lord No 948 and Greenock Ship Entry Report No 21292, "S.S. Empire Ridge" Lithgow's L.L. Lord No 949 and Greenock Ship Entry Report No 21371, "S.S. Empire Ness" Lithgow's L.L. Lord No 950 and Greenock Ship Entry Report No 21403, and is the fourth vessel to be constructed by Messrs Lithgow & Co to the "E" type design. Logging Reports are forwarded herewith.

As requested in the London letters dated 4th March 1940 and 17th May 1940 the plans and specification have been supervised and a copy of the certificate is herewith enclosed.

PARTICULARS OF ELECTRIC WELDING (if employed) BULKHEAD BRACKETS TO TANK TOP & STIFFENERS. CORNER BARS OF BULKHEADS & TANK ENDS. GUSSET PLATES TO TANK TOP. CRUISER STERN. BUTTS OF DECK STRINGER & HATCH SIDE CORNING ANGLES. HEADS & HEELS OF PILLARS. 2 UPPER DECK STRINGER PLATE BUTTS, PORT & STARBOARD, REINFORCED WITH ELECTRIC WELDING. BULWARK STAYS & HATCH CORNING BRACKETS TO DECK.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book CRUISER STERN, D.F., LLOYDS A & C.P. "INTERMEDIATE B.H. DISPERSED WITH 1/4 B.H." "CARVED BATTENS NOT FITTED"

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

1st Bower	26-3-27: A.E.G.: 476: 26-7-40
2nd "	27-1-0: A.E.G.: 734: 29-11-40
3rd "	

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. 192.77 ft., Bridge ☒ ft., Forecastle 26.92 ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. Signal Letters ☒ Extreme Breadth over Belting (Circ. 1611) Over-all Length 325.75' (Circ. 1703)

No. and Material of Decks 10K & R.Q.D.K.

Parts of Bottom of Vessel coated with cement or approved composition TANK UNDER BOILERS CEMENTED. REMAINDER CEMENTED IN WAY OF LANDINGS & BUTTS ONLY. PEAKS & POCKETS 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, Nos 3 & 4 HOLDS	144	419	Fore peak tank,		172
Double bottom, under Engines and Boilers,			After peak tank,		63
Double bottom, if under Engines only,	22.5	36	Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,	9.0	296
Double bottom, forward, Nos 1 & 2 HOLDS	99.0	253	Other tanks, if fitted,		
Total length (if continuous) and Capacity	265.5	708	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 3442

Date 18th APRIL 1940

Dates of Surveys held while building

(1940) DEC. 10. 16. 14. (1941) JAN. 8. 13. 27. 30. 31. FEB. 17. 26. 27. 28. MAR. 3. 6. 7. 11. 13. 14. 18. 19. 21. 24. 25. 31. APRIL 2. 3. 7. 8. 9. 12. 14. 16. 17. 18. 21. 23. 24. 25. MAY 1. 5. 23. 28. JUNE 4. 11.

Total No. of Visits

46.