

State if Report is sent on the Machinery of the Vessel. Yes.

Survey held at Selly and Hull. Date First Survey 3rd. June 1942. Last Survey 20th January 1943.

On the ^(State if Machinery fitted with) ~~Single~~ ^{Steel Single Screw} ~~Twin or Triple Screw~~ ^{Yug "EMPIRE DENIS".}

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) Full Scantling State Type of Erections None.

CLASS **✠ 100 A-1.** State if with freeboard } No. ✓
as condition of Class }

Length from fore part of stem to after part of stern } L 105' ✓
post on summer L.W.L. See Sec. 3 (1a)

Breadth (greatest moulded) _____ B _____ 26-6
Depth, at middle of length from top of keel to top _____ 12 1/2"

of beam at side of uppermost continuous deck. See Sec. 3 (1c) } D 120
1215

1st Longitudinal Number (L x D).....=

Framing Depth "d," at middle of length. See } 11-58'

Proportions—Depth to Length—Uppermost continuous deck to top of keel } 8-1'

Do. Long Bridge to } ✓

Draught Moulded

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	21 ✓		Bracket Floors, Frame		
" " from $\frac{1}{2}$ length amidships to Collision bulkhead.....	21 ✓		" " Reversed Frame.....		
" " in peaks	21 ✓		" " Vertical Struts		
SIDE FRAMING.			Centre Girder, depth and thickness amidships		
Frame Amidships, Angle, E or F	5 3 36 ✓		" " top Angles		
" " IN BOILER ROOM & BUNKERS F	5 3 42 ✓		" " bottom Angles.....		
" " Extends up to.....	UPPER DECK		Side Girders, No. each side and thickness		
Reversed Frame Amidships, Angle	2 1/2 2 1/2 30		Margin Plate depth (excl. of flange) and thickness		
" " Extends up to.....	ACROSS FLOORS		" " Vertical Angle to Tank side Bracket abaft $\frac{1}{2}$ len. from stem		
Depth of Framing Girder.....	5"		" " Vertical Angle to Tank side Bracket from forward $\frac{1}{2}$ len. from stem to Panting Area		
Frames in Uppermost Continuous 'tween Decks, Angle, [or]			" " Gussets, spacing and scantling abaft $\frac{1}{2}$ len. from stem.....		
" " Second 'tween Decks, Angle, [or]			" " Gussets, spacing and scantling from forward $\frac{1}{2}$ len. from stem to Panting Area		
" " Third			Tank Side Brackets, height above base line at toe of Frame and thickness		
" " from $\frac{1}{2}$ len. for'd. to 15% len. from Stem			INNER BOTTOM PLATING.		
" " in Peaks, Angle E or F	5 3 36 ✓		Breadth and thickness of Middle Line Strake...		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	3/4" - 5/4" ✓		Thickness of remainder in Holds		
State if Frame Joggled.....	NO.		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 the Panting Area in accordance with the Rules and/or as approved?	AS APPROVED		BEAMS.		
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?.....			Uppermost Continuous Deck, amidships in Well, Angle, E or F	5 3 34	5" x 3" x 30"
SINGLE BOTTOM.			" " HALF BEAMS in way of Bridge, Angle, E or F	4 3 34	4" x 3" x 30"
Floors, Depth and thickness at mid-line in Holds.....	17 x 30 ✓		" " BOILER ROOM & BUNKERS. E or F		
Height of Brackets at side above base line at toe of frame.....	NONE.		" " Spacing	21"	
Middle Line Keelson, or Floors, Angles, E or F	12" x 4" x 36 lbs ✓		Second Deck, amidships, Angle, [or]		
" " Through Plate or Intercostal Plate	✓		Spacing		
" " Foundation Plate on Floors	✓		Third Deck, amidships, Angle, [or]		
" " Flat Plate Keel Angles	✓		Spacing.....		
Side Keelsons, No. each side.....	ONE		Fourth Deck, amidships, Angle, [or]		
" " thickness of Intercostal Plate...	✓		Spacing.....		
" " Angles	5 x 4 x 38 ✓		Poop Deck, Angle, [or]		
" " IN BOILER ROOM	5" x 4" x 48 ✓		Spacing.....		
DOUBLE BOTTOM.			Bridge Deck, Angle, [or]		
Solid Floors, thickness and spacing			Spacing.....		
Are Frame and Reversed Frame joggled?			Forecastle Deck, Angle, [or]		
Bracket Floors, breadth and thickness at middle line			Spacing.....		
" " breadth and thickness at margin plate.....					

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	ONE		Stringer Plate, breadth and thickness in way of Bridge		
ACCOMMODATION FORWARD			Thickness of Plating abreast Deck openings in way of Wells		
" in way of Decks, Size and Spacing	2 1/2" DIAM - 42"	✓	Thickness of Plating abreast Deck openings in way of Bridge		
"	✓		Thickness of Plating within line of openings...		
" in Holds	✓		If Sheathed, material and thickness		
"	✓		Third Deck.		
Centre Line Bulkhead.	✓		Stringer Plate, breadth and thickness		
Stiffeners and Spacing	✓		If Plated, state thickness		
Plating, thickness of	✓		Fourth Deck.		
STRINGERS AND DECKS.			Stringer Plate, breadth and thickness		
Uppermost Continuous Deck.			If Plated, state thickness		
Stringer Plate, breadth and thickness in Wells	60 x 35	✓	Poop Deck.		
" " " " in way of Bridge	✓		Stringer Plate, breadth and thickness		
" " " " Angle in Wells	3 3 35	✓	Plating, Sheathing, material and thickness		
Thickness of Plating abreast Deck openings in way of Wells ENGINE CASING	30	✓	Bridge Deck.		
Thickness of Plating abreast Deck openings in way of Bridge BOILER CASING	35	✓	Stringer Plate, breadth and thickness		
Thickness of Plating within line of openings...	30 - 25	✓	Plating, Sheathing, material and thickness		
If Sheathed, material and thickness	✓		Forecastle Deck.		
Second Deck.			Stringer Plate, breadth and thickness		
Stringer Plate, breadth and thickness in Wells	✓		Plating, Sheathing, material and thickness...		

SHELL PLATING.

[illegible]

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—
 Extending to Upper Deck (Sec. 3 c) 4
 „ Deck next below ✓
 As per Rule 4.

FORGINGS AND CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar	ROLLED	7" x 1 1/4"	✓	6 1/2" x 1 1/4" ✓
STEM	"	7" x 1 1/4"	✓	6 1/2" x 1 1/4" ✓
STERN FRAME	FORGED	5 1/2" x 2 1/2"	T.S. FORSTER ✓	✓
(Propeller Post	"	5 1/2" x 2 1/2"	& SONS LTD. ✓	✓
(Rudder	"	11 KNOTS.	✓	✓
Speed of Vessel	ORDINARY TYPE.	82.5	✓	✓
RUDDER—Type	82.5	58"	✓	✓
" A x D.	5 1/2"	6"	✓	✓
" Diam. of head	FORGED & BUILT.	SINGEE '80	✓	✓
" Mainpiece at top pintle	HORIZONTAL	21	✓	✓
" heel				
" how constructed				
" double or single plate				
" coupling, vertical or				
" horizontal				

		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP	BULKHEAD, Upper & lower		6 x 3 x 60	} 30"		
"	ON FRAME NO	#1 .375	5 x 3 x 34			
"	Second	" "				
"	Third	#3 .26	4 x 3 x 30	} 30"		
"	HOLD	#4 .34-26	4 x 3 x 38-30	24" x 30"		W.T. FLAT.
"	(in Hold)	#5 .34-26	3 x 3 x 38-30	24"		PEAK TANK TOP
COLLISION		#5 .43-30	4 x 3 x 30	24"		STEEL FLAT.
AFTER PEAK						

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:- CONSETT IRON CO. LD. DORMAN, LONG & CO. LD. APPLEBY FRODINGHAM STEEL CO. LD.
SECTIONS:- APPLEBY FRODINGHAM STEEL CO. LD. CONSETT IRON CO. LD.
 Has the Steel been tested as required by the Rules? **Yes.**

EQUIPMENT No. <input checked="" type="checkbox"/>				LETTER <input checked="" type="checkbox"/>				ANCHORS.			
Number of Certificate.	Anchor.	WEIGHT, EX. STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.			Where and when tested, and Superintendent.
55486	1st Bower	6	1	22	Stockless	8	15	0	0	6 1/2	Britannic (Cast Steel head) Richard Sykes C. Heath 21-10-42 W.V.
55487	2nd	6	1	10	"	8	12	2	0	6	" " " " " " " "
	3rd										
	Collective weight	12	3	4						12 1/2	
	Stream										

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 Cable.	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.	Ins.	Supplied.	Per Rule.			Fathoms.	Ins.					Fathoms.	Ins.		Fathoms.	Ins.
66002	75	1	18	27	41-0-3				90	12	Steel Richard	C. Heath 31-10-42 W.V.			90	12	MANILA		
66003	75 1/2	1	18	27	40-3-20						Link Sykes & Son	"			2090	5	MANILA	60	6
															90	4	"	60	4 1/2
															120	2 1/2			
Iron Stream Chain or Steel Wire																			

Steering Gear, Type (Power or hand) **STEAM HYDRAULIC TYPE - DONKIN & CO. LD.** Alternative Means of Steering **TILLER WITH BLOCKS & TACKLE**

Steering Chains (Size and Test) **7/8" DIAR - 9 1/8 TONS.** Windlass **STEAM CLARK, CHAPMAN & CO. LD.** Boats **2 LIFEBOATS.**

Ceiling in Hold, thickness and material **WOOD GRATINGS - 1 1/2" PINE** Cargo Battens, thickness, material and spacing **NONE.**

Cargo Hatchways. (Upper Deck) ☒ Thickness of Hatches ☒

Size of Hatchways No. 1 (Fwd.) ☒ No. 2 ☒ No. 3 ☒ No. 4 ☒ No. 5 ☒ No. 6 ☒

Number of Shifting Beams and/or Fore and Afters ☒ **FOR COCHRANE & SONS, LTD.**

Builder's Signature V. Gray DIRECTOR

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. **Yes.**

(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, the Secretary's letters of various dates, the specification, and in general conformity with the Rules for the class contemplated.

The materials & workmanship are good.

Fore & after peaks, boiler feed tank, fresh water tank and oil fuel tanks have been tested to rule requirements and found in order. Flash point of oil fuel 150°F.

Oil fuel tanks are situated between the engine & boiler spaces.

Decks, casing, W.F. bulkheads etc., have been hoisted and found in order.

Windlass & steering gear tried under working conditions and found in order.

A freeboard has been assigned, the marks cut in on the vessel's sides and verified.

The amount of Entry Fee **£ 3 0 0** Fees applied for **4 FEB 1943** (Special notations, where part of class, to be stated.)

FREEBOARD FEE **£ 4 0 0**

Special Survey Fee **£ 27 8 0**

SUPERVISION OF SPECIFICATION **£ 6 17 0**

Travelling Expenses, if any **£ 2 16 7**

Received by me, **I am of opinion the Vessel should be Classed** ***100 A1.**

State whether the Vessel has been built under Special Survey **yes.** **"FOR TOWING SERVICES"**

Signature M. Macleod Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to **Hull.** Date of issue **26/3/43**

Committee's Minute

Character assigned

The Surveyors are requested not to write on or below the Committee's Minutes.

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 are being retained for reference in dealing with sister-vessels under construction.

The following reports are enclosed herewith:—

Stem frame. Sld. Rpt. No. 7557
Rudder frame & rudder head " " 7715

Copy of completion and interim certificates, & steering chain test certificate are enclosed herewith.

This vessel is a sister ship to Cocheane Houshd. Yaid No 1255—Hull Rpt. No. 51866.
"EMPIRE ACE"

PARTICULARS OF ELECTRIC WELDING (if employed)

W.T. flats electrically welded at ship's sides.
Approved electrodes used.

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

* 100 A.I.

"FOR TOWING SERVICES."

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

1st Bower.

3-3-6 incl. cup & pins

A.E.G.

7224.

14.9.42.

2nd "

3-3-20 " " "

A.E.G.

7219.

14.9.42.

3rd "

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

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

Official No. 169079.

Signal Letters.

Extreme Breadth over Belting

28' 4 1/2"

Over-all Length

111' 8"

No. and Material of Decks

10K (STL).

Parts of Bottom of Vessel coated with cement or approved composition.

Bottom 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,			Fore peak tank,		
Double bottom, under Engines and Boilers,			After peak tank,	8' 4"	5
Double bottom, if under Engines only,			Deep tank, aft,	9' 2"	20
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,			Other tanks, if fitted,		
Total length (if continuous) and Capacity			(If necessary furnish further information by sketch.)		

Order for Special Survey No. 3314

Date 10th Feb 1942

Dates of Surveys held while building

1942:— June 3. 12. 17. 20. 24. 29. July 2. 6. 10. 15. 21. 24. 28. 31. August 12. 19. 21. 25. Sept. 2. 9. 15. 18. 22. Oct. 2. 9. 14. 19. 27. 30. Nov. 3. 9. 13. 18. 24. 27. Dec. 1. 1943:— Jan. 8. 11. 12. 13. 16. 18. 20

Total No. of Visits

43.