

## STEEL STEAMER or MOTORSHIP.

17 MAR 1942

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 14/3/42

Port of NEWCASTLE-ON-TYNE

No. 100.252

Survey held at Walker-on-Tyne

Date First Survey 30 Jan 1941

Last Survey 25 February 1942

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

Machinery aft

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

Full Scantling

State Type of Erections

Poop, Bridge, Forecastle

TONNAGE under Tonnage Deck

7205.86

CLASS 100 A.1.

Carrying petroleum in bulk

State if with freeboard as condition of Class

No

Built at

Walker-on-Tyne

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

Total

Gross Tonnage

8129.07

Register Tonnage

4630.99

Length from fore part of stem to after part of stern most on summer L.W.L. See Sec. 3 (1a)

L 460'0"

Breadth (greatest moulded)

B 59'0"

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

D 34'0"

1st Longitudinal Number (L x D) = 15640

2nd Numeral L x (B + D) = 42780

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

✓

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

13.52

Draught Moulded

Managers Anglo-Saxon Petroleum Co. Ltd.

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

Residence

Port of Registry Oslo

If surveyed while building, afloat, or in dry dock

Yes

## 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	32	✓	Bracket Floors, Frame	B.A. 8 3 1/2 7/16	✓
" " from 1/2 length amidships to Collision bulkhead	27	✓	" " Reversed Frame	B.A. 6 3 1/2 7/16	✓
" " in peaks	24	✓	" " Vertical Struts	B.A. 6 6 1/2	✓
IDE FRAMING.			Centre Girder, depth and thickness amidships	In E.B. space 2 E.R. 72x46 B.R. 72x62	✓
Frame Amidships, Angle, E or F	10 3 1/2 .50	✓	" " top Angles	Routle 6 3 1/2 .50	✓
" " Extends up to	Upper deck	✓	" " bottom Angles	6 6 .50	✓
Reversed Frame Amidships, Angle	✓		Side Girders, No. each side and thickness	In E.B. space 2 E.R. 2-50 B.R. 1-52	✓
" " Extends up to	✓		Margin Plate depth (excl. of flange) and thickness	38x.60	✓
Depth of Framing Girder	10	✓	" " Vertical Angle to Tank side Bracket shaft 1/2 len. from stem	4 4 9/16	see plan
Frames in Uppermost Continuous 'tween Decks, Angle, E or F	✓		" " Vertical Angle to Tank side Bracket from forward 1/2 len. from stem to Panting Area	✓	
" " Second 'tween Decks, Angle, E or F	✓		" " Gussets, spacing and scantling shaft 1/2 len. from stem	52 Cent.	✓
" " Third	✓		" " Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area	✓	
" " from 1/2 len. forward to 1/2 len. from Stem	To O.T. Flat. 10x3 1/2 x 7/16 B.A. ✓ In lower + upper 8x3 1/2 x 7/16 B.A. ✓		Tank Side Brackets, height above base line at toe of Frame and thickness	7 1/2 x .54	✓
" " in Peaks, Angle, E or F	9 3 1/2 3/8	✓	INNER BOTTOM PLATING, in E.B. space only		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 - 5/16	✓	Breadth and thickness of Middle Line Strake	78x.58 1.00 under E.B. Bed.	✓
State if Frame Joggled	Yes	✓	Thickness of remainder in Holds	58x.52	✓
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.		
SINGLE BOTTOM.			Uppermost Continuous Deck, amidships in Wells, Angle, E or F	See Longit. framing apt. ✓	
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	✓	
Middle Line Keelson, on Floors, Angles, E or F			Second Deck, amidships, Angle, E or F	✓	
" " Through Plate or Intercoastal Plate			Spacing	✓	
" " 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 Intercoastal Plate			Spacing	✓	
" " Angles			Poop Deck, Angle, E or F	8 3 1/2 7/16	✓
DOUBLE BOTTOM, in E.B. space only			Spacing	Way frame	✓
Solid Floors, thickness and spacing	52 mm frame	✓	Bridge Deck, Angle, E or F	8 3 1/2 7/16	✓
" " Are Frame and Reversed Frame joggled?	Yes	✓	Spacing	32	✓
Bracket Floors, breadth and thickness at middle line	36x.52	✓	Forecastle Deck, Angle, E or F	8 3 1/2 7/16	✓
In Boiler Room only " " breadth and thickness at margin plate	36x.52	✓	Spacing	27x24	✓



## 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</b> , No. of Rows.....	✓		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 .....	✓	
„ in Holds „ „	✓		Thickness of Plating within line of openings...	✓	
„ „ „ „ „	✓		If Sheathed, material and thickness .....	✓	
<i>Wing</i> <b>Centre Line Bulkhead</b>			<b>Third Deck.</b>		
Stiffeners and Spacing.....	32 ✓	10 3 1/2 50 B.A. ✓	Stringer Plate, breadth and thickness.....	✓	
Plating, thickness of .....	5/16 x 40. ✓		If Plated, state thickness.....	✓	
<b>STRINGERS AND DECKS.</b>			<b>Fourth Deck.</b>		
<b>Uppermost Continuous Deck.</b>			Stringer Plate, breadth and thickness.....	✓	
Stringer Plate, breadth and thickness in Wells	83 1/2 x 81 ✓		If Plated, state thickness .....	✓	
„ „ „ „ in way of Bridge	92 x 81 ✓		<b>Poop Deck.</b>		
„ Angle in Wells .....	7 7 .70 ✓		Stringer Plate, breadth and thickness .....	38 x 36 ✓	
Thickness of Plating <del>abreast Deck openings</del> in way of Wells .....	Centre stake 70" ✓		Plating, Sheathing, material and thickness ...	30 Bar steel ✓	
Thickness of Plating <del>abreast Deck openings</del> in way of Bridge .....	Through Hatch " 76 59 x 60 ✓		<b>Bridge Deck.</b>		
Thickness of Plating within line of openings...	✓		Stringer Plate, breadth and thickness.....	42 ✓	
If Sheathed, material and thickness .....	✓		Plating, Sheathing, material and thickness ...	35 Composition in accordance ✓	
<b>Second Deck.</b>			<b>Forecastle Deck.</b>		
Stringer Plate, breadth and thickness in Wells...	✓		Stringer Plate, breadth and thickness.....	36 ✓	
			Plating, Sheathing, material and thickness ...	36 Bar steel ✓	

## SHELL PLATING.

SCANTLINGS.					RIVETING.								
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. <i>ho. ✓</i>			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?.....	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 .....	<i>57</i> ✓	<i>99</i> ✓	<i>82</i> ✓	<i>82</i> ✓		<i>2R.</i> ✓	<i>1</i> ✓	<i>4</i> ✓	<i>5R</i> ✓	<i>1 1/8</i> ✓	<i>5</i> ✓	<i>Lapped</i> ✓	
„ DELG. (if any) .....	✓					✓	✓	✓	✓	✓	✓	✓	
BOTTOM PLATING, No. of Strakes <i>4</i> .....	<i>B</i> <i>D</i> <i>E</i>	<i>.67</i> <i>.74</i> <i>.64</i>	<i>.74</i> <i>.74</i> <i>.74</i>	<i>.67</i> <i>.54</i> <i>.54</i>		<i>2R</i> ✓	<i>7/8</i>	<i>3 1/2</i>	<i>4R</i>	<i>7/8</i>	<i>3 1/2</i>	↑	
BILGE PLATING, No. of Strakes <i>1</i> .....		<i>.64</i>	<i>.56</i>	<i>.63</i>		<i>2R</i> ✓	<i>7/8</i>	<i>3 1/2</i>	<i>4R</i>	<i>7/8</i>	<i>3 1/2</i>		
SIDE PLATING, No. of Strakes <i>3</i> .....	<i>G</i> <i>H</i> <i>J</i>	<i>.64</i>	<i>.48</i>	<i>.54</i>		<i>2R</i> ✓	<i>7/8</i>	<i>3 1/2</i>	<i>4R.</i>	<i>7/8</i>	<i>3 1/2</i>		
UPPER DECK, Sheer- strake in Wells.....	<i>51</i>	<i>1.03</i> ✓	<i>.48</i>	<i>.48</i>	<i>see plan</i>	✓	✓	✓	<i>5R</i>	<i>1 1/8</i>	<i>5</i>		
UPPER DECK, Sheer- strake in Bridge ...	<i>51</i>	<i>1.24</i> ✓	<i>.48</i>	✓		<i>2R</i> ✓	<i>1 1/8</i>	<i>4 1/2</i>	<i>5R</i>	<i>1 1/4</i>	<i>5 5/8</i>	<i>Lapped</i>	
STRAKE BELOW Sheer- strake in Wells.....	<i>84</i>	<i>.76</i> ✓	<i>.48</i>	<i>.48</i>		<i>2R</i> ✓	<i>1</i> ✓	<i>4</i>	<i>4R</i>	<i>1</i>	<i>4</i>		
STRAKE BELOW Sheer- strake in Bridge ...	<i>84</i>	<i>.76</i> ✓	✓	✓		<i>2R</i> ✓	<i>1</i> ✓	<i>4</i>	<i>4R.</i>	<i>1</i>	<i>4</i>		
POOP SIDE PLATING .....	✓	✓	✓	<i>.40</i> ✓		<i>1R</i> ✓	<i>5/8</i> <i>3/4</i>	<i>3 1/2</i> <i>3</i>	<i>2R</i> ✓	<i>3/4</i>	<i>2 5/8</i>	✓	
BRIDGE SIDE PLATING ...	✓	<i>.43</i>	✓	✓		✓	✓	✓	<i>2R</i>	<i>3/4</i>	<i>2 5/8</i>		
FOREC'TLE SIDE PLATING	✓	✓	<i>.43</i>	✓		<i>1R.</i>	<i>3/4</i>	<i>3</i>	<i>1R</i>	<i>3/4</i>	<i>2 5/8</i>		

## WATERTIGHT BULKHEADS.

## FORGINGS and CASTINGS.

Total No. of W.T. BULKHEADS in Vessel—		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
Extending to Upper Deck (Sec. 3 c)	16					
" Deck next below						
As per Rule						
MIDSHIP BULKH'D, Upper tween decks						
"	" Second "					
"	" Third "					
"	" Holds	8'-40	10 x 3 1/2 x .40	2'-6" wing tanks	2'-9" Centre	
COLLISION						
"	(in Hold)	4'-26	5 x 3 x 3/8 B.A.	10 x 3 1/2 x .50 "	24	
AFTER PEAK						
"	"	4'-30	6 x 3 x 3/8 " O.A.	9 x 3 x .375 BA	24	

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) open hearth.  
Cargo Fleet Iron Co. Conssett Iron Co. South Durham Steel & Iron Co. Ltd. Appleby Frodingham. Roman Long.  
Colwilles. Skinningrove Iron Co. Raines. Lamarkshire Steel Co.  
 Has the Steel been tested as required by the Rules? Yes.



## FRAMING.

FRL 20 MAR 1942



EQUIPMENT No 44681										LETTER C		ANCHORS.			
Number of Certificate.	Anchors.	WEIGHT, <del>EX</del> 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.
40800	1st Bower ...	74	0	0	-	-	-	55	15	0	0	4/3 1/2	Improved stockless	L.P.H.S. 9/5/41	L.P.H.S. 9/5/41. W.V. Herman
40899	2nd „ ...	73	2	0				55	15	0	0	4/3	50		L.P.H.S. 14/3/41. W.V. Herman
	3rd „ ...											4/3			
	Collective weight.											21 9 1/2			
99935	Stream .....	22	1	14	5	2	21	22	13	0	14	22	ordinary forged WT Iron	S. Taylor & Sons (Brisbane Hill) Ltd.	L.P.H.N.S. 8/7/41. J.A. Relf.

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.	
	Length.	Diam.	Static.	Break-ing.	Supplied.	Per Rule.	Length.	Diam.	Length.	Cir.					Fathoms.	Ins.		Fathoms.	Ins.
116397	240	2 1/8	113 8/10	159 3/10	598-3-10			300	2 1/8	Stud "Jagco"	S Taylor & Sons. (Brimley Hill) Ltd.	L.P.H.N. 15/7/41. J. A. Relf.	TOWLINE...	130	5 1/4	77.5	130	5 1/4	
116398	60	2 1/8	113 8/10	159 3/10	149-2-14			ordinary c.c.		50	50	L.P.H.N. 15/7/41. J. A. Relf.	HAWSERS & WARPS	2-100	2 3/4	15.2	2-100	2 3/4	
	300												"	2-100	2 3/4	15.2	2-100	2 3/4	
Iron Stream Chain or Steel Wire	120	5"		52.8					5"	9/12			"						

Steering Gear, Type (Power or hand) *Power (Steam Hydraulic)* Alternative Means of Steering *Blocks & Tackle*

Steering Chains (Size and Test) *3-24'-0" x 7'-6" x 3'-2"* *1 24'-0" x 7'-8" x 3'-3" (motor).*

Ceiling in Holds, thickness and material *✓* Windlass *Emerson Walker (Steam)* Boats *Boats*

Cargo Battens, thickness, material and spacing *✓* Thickness of Hatches *60 stud*

Hatchways. (Upper Deck) *24'-0" T. hatches 4'-6" x 3'-6" 8'-0" x 8'-0"*

Hatchways No. 1 (Fwd.) *✓* No. 2 *✓* No. 3 *✓* No. 4 *✓* No. 5 *✓* No. 6 *✓*

Number of Shifting Beams *✓* and/or Fore and Afters *✓*

Builder's Signature *Thos. Morrison* 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 *Tanker* 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 letter and usually conforms with the Society's Rules for the class contemplated.

The materials and workmanship are good.

The weather decks clear of oil tanks and the W.T. bulkheads above the fore peak tank have been tested and found satisfactory.

The peak tanks, all cargo tanks, deep tank forward, oil fuel bunkers, F.W. tank, cofferdams, and double bottom tanks have been tested as required by the Rules and found satisfactory.

The requirements of Section 20 of the Rules, when applicable for the carriage of oil fuel having flash point above 150°F have been complied with and the oil fuel is carried in bunkers at the forward end of the engine room, in fore deep tank and part of the double bottom under the engines.

The windlass, main and auxiliary steering gear have been tried over (quayside) satisfactorily.

The assigned portboard marks have been marked on the vessel's sides, verified and cut in.

The amount of Entry Fee ..... £ 11 : 0 : 0 Fees applied for, *196 MAR 1942*

Special Survey Fee.... £ 756 : 0 : 0 Received by me, *19*

Travelling Expenses, if any £ *19* 0 0

Freight *19* 0 0

State whether the Vessel has been built under Special Survey *yes.*

I am of opinion the Vessel should be Classed *+100 A.I. Carrying Petroleum in bulk.*

Signature *E.A. Dean.* Surveyor to Lloyd's Register of Shipping.

Certificate to be sent to *NEWCASTLE-ON-TYNE* Date of issue *1/8/42*

Committee's Minute *FRI 20 MAR 1942*

Character assigned *+100 A.I.*

*Carrying petroleum in bulk*

*Lloyd's Arch. O.L. E.S.D.*

*White safe note for S.P.L.*

*filled front fuel 2.42 at 150°F*

*20. Ch.*

*2021*

*Lloyd's Register Foundation*

*006175-006188-016334*



**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 similar to "EMPIRE FLINT" Newcastle report no. 99774.

Approved plans as per attached sheet are forwarded herewith.

Tracing reports forwarded with this report. ✓

**PARTICULARS OF ELECTRIC WELDING** (if employed) only minor details of the structure electrically welded. Electrodes used and methods employed are in accordance with the Rules. ✓

**SPECIAL NOTATIONS**:—Either as part of the vessel's class or for record in the Register Book *Cruiser Stern; Machinery aft. Longitudinal framing at bottom and at deck. Lloyds & C.P. E.S.D. D.F.*

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

1st Bower *W<sup>ts</sup> 44-0-20; Initials J.T.; No. of Cert. 3748; Date 19-2-41.*  
2nd " " *44-2-12; " J.T.; " 3693; " 24-1-41.*  
3rd " " *109.16*

**PARTICULARS FOR RECORD in the REGISTER BOOK**.—Length of Poop *109.87* ft., R.Q.D. ✓ ft., Bridge *46.5* ft., Forecastle *39.6* 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 Bolting* *59.4'* Over-all Length *483.08'*  
(Circ. 1611) (Circ. 1703)

No. and Material of Decks *1st 5th. 2nd 1st clear of cargo tanks.*

Parts of Bottom of Vessel coated with cement or approved composition *Bottom of fore & after peak tanks and Engine room after bell 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,	<i>24-3"</i>	<i>156</i>
Double bottom, under Engines and Boilers,	✓		After peak tank,	<i>16-0"</i>	<i>87</i>
Double bottom, if under Engines only, <i>Feed Water</i>	<i>52.5'</i>	<i>125.12/24 F.W.</i>	Deep tank, aft,	✓	
Double bottom, if under Boilers only,	✓	<i>162.00/162</i>	Deep tank, forward,	✓	<i>628</i>
Double bottom, forward,	✓	<i>90.5'</i>	Other tanks, if fitted, <i>apx Cofferdams</i>	<i>3-0"</i>	<i>159</i>
Total length (if continuous) and Capacity	<i>90.5'</i>	<i>162.00</i>	(If necessary, furnish further information by sketch.)	✓	

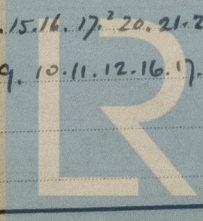
Order for Special Survey No. *5625*

Date *28.2.41.*

Dates of Surveys held while building

*1941*  
*Jan 30. Feb. 3. Mar. 10. 14. 19. 21. Apr. 12. 15. 17. 28. 31. May 7. 22. June 5. 10. 12. 18. 30. July 4. 17. 23. 29.*  
*Aug. 13. 19. 27. Sep. 3. 5. 15. 30. Oct. 1. 2. 3. 7. 8. 9. 10. 13. 14. 15. 16. 17. 20. 21. 22. 23. 24. 27. 28. 29. 31. Nov. 3. 4. 7. 13.*  
*1942*  
*15. 18. 20. Dec. 2. 29. Jan. 2. 16. 22. 28. 30. Feb. 3. 6. 9. 10. 11. 12. 16. 17. 18. 19. 20. 23. 24. 25.*

Total No. of Visits *84*



Lloyd's Register Foundation