

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR ~~STEAMER~~, ~~SAILING SHIP~~, TANKER.)

Ship's Name <b>"CALTEX LIVERPOOL"</b>	Official Number <b>184737</b>	Nationality and Port of Registry <b>BRITISH LONDON</b> <i>Sydney</i>	Gross Tonnage <b>11814</b>	Date of Build <b>1952</b>	Port of Survey <b>NEWCASTLE-ON-TYNE</b>
Moulded Dimensions: Length <b>516'0"</b> Breadth <b>70'0"</b> Depth <b>39'75"</b>					Date of Survey <b>During Construction</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>26433</b> tons					Surveyor's Signature <i>W. Robinson</i>
Coefficient of fineness for use with Tables <b>.758</b>					Particulars of Classification <b>+ 100A1</b> <b>Classification Contemp.</b> <b>Carrying Petroleum in Bulk.</b>

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	39'75"	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	70'0"
Stringer plate	0'85"	(39'82" - 34'40") 3 = +16'26"		Standard Round of Beam = $\frac{B \times 12}{50}$	16'8"
Sheathing on exposed deck	none	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam $\sqrt{17'5}$	1'46"
$T \left( \frac{L-S}{L} \right) =$				Difference	70'0"
Depth for Freeboard (D) =	39'82"	If restricted by superstructures		Restricted to	70'0"
				Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right)$	$\frac{.70^2}{4} \times 6123 = -15$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed <i>see sketch</i>	115'00		8'0"	—	115'00
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed <i>see sketch</i>	42'31		8'0"	—	42'31
" overhang aft					
" overhang forward					
Fore enclosed	42'75	42'75	9'0"	—	42'75
" overhang			(at front)		
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	200'06	200'06			200'06

Standard Height of Superstructure **6'00"** ✓  
" " R.Q.D. ✓  
Deduction for complete superstructure **42"** ✓  
Percentage covered  $\frac{S}{L} =$   
" "  $\frac{S_1}{L} =$  } **38.77** ✓  
" "  $\frac{E}{L} =$   
Percentage from Table, Line A. TANKER **29.77** ✓  
(corrected for absence of forecastle (if required))  
Percentage from Table, Line B.  
(corrected for absence of forecastle (if required))  
Interpolation for bridge less than .2L (if required)  
Deduction =  $42 \times .2977 = -12.50"$  ✓

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. (R. Stock)	61'60	1		61'60	30'76	30'56	1		30'56
$\frac{1}{8}L$ from A.P. ...	27'41	4		109'64	3'76	3'19	4		12'76
$\frac{2}{8}L$ " ...	6'78	2		13'56	0	0	2		0
Amidships ...	0	4		0	0	0	4		0
$\frac{3}{8}L$ from F.P. ...	13'55	2		27'10	0	0	2		0
$\frac{4}{8}L$ " ...	54'825	4		219'30	2'38	2'38	4		9'52
F.P. ...	123'20	1		123'20	17'38	17'38	1		17'38
Total				554'40					70'22

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{484.18}{18} \left( .75 - \frac{1939}{2 \times 516} \right) = +14'96"$   
If limited on account of midship superstructure. **5561** ✓  
If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.

Deck without sheer from aft of No 9 cargo tank to fore end of vessel.

Mean actual sheer aft  
Mean standard sheer aft = } **DEFICIENT**  
Mean actual sheer forward  
Mean standard sheer forward = }  
Length of enclosed superstructure forward of amidships = } **DEFICIENT**  
" " aft of " = } **SHEER**

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <b>39'82"</b> Summer freeboard = <b>9'58"</b> Moulded draught (d) = <b>30'24"</b> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <b>7'56" = 7'2"</b> Addition for Winter North Atlantic Freeboard = <b>7'56" + 5'16" = 12'72" = 12'3/4"</b>	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta = 23427$ Tons per inch immersion at summer load water line $T = 73.29$ Deduction = $\frac{\Delta}{40 T}$ inches = <b>8"</b>	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient $.758 + .68 = 1.438$ $\frac{1.438}{1.36}$ Depth Correction ... <b>16'26"</b> Deduction for superstructures ... <b>12'50"</b> Sheer correction ... <b>14'96"</b> Round of Beam correction ... <b>.15</b> Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. ... <b>31'22" 12'65" + 18'57" = 91'18"</b> Summer Freeboard = <b>96'41"</b>
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	15'1/2"	Tropical Fresh Water Freeboard	8'3 1/2"
Fresh Water Line	8"	Fresh Water	8'11"
Tropical Line	7'1/2"	Tropical	8'11 1/2"
Winter Line below	7'1/2"	Winter	10'2 1/2"
Winter North Atlantic Line	12'3/4"	Winter North Atlantic	10'17 3/4"



# *Calter Liverpool.*

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Draft (B. of Keel)	Extr. Displ.	Mid Displ.	T. P. I.
32' 0"	24913	24759	74.25
31' 0"	24019	23874	73.67
30' 0"	23139	23001	73.10
29' 0"	22263	22130	72.53

$$\text{LENGTH OF POOP} = 111.00 + \frac{2}{3} \times 6 \quad \checkmark$$

$$= 115.00 \quad \checkmark$$

$$\text{LENGTH OF BRIDGE} = \left\{ 41.33 + \frac{2}{3} \times 3.33 \right\} \frac{68}{70}$$

$$= 43.55 \times \frac{68}{70} \quad \checkmark$$

$$= 42.31 \quad \checkmark$$

Trade of ship International.

Names of sister ships ✓

Builder's name and yard number R & W Hawthorn Leslie & Co Yard No 706

Owners Overseas Tankship Co (U.K.) Ltd.

Fee £                     



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Lloyd's Register  
Foundation

DVT. CO  
t. C.11.  
NNERS'  
United with  
THE  
BRITISH  
CORPORATION  
REGISTER.

Ship's Name

Official Number

Nationality and

Disposition

Diagrams  
St.

Poop Bulkhead

Raised Quarter

Bridge, Aft

Bridge, Fore

Forecastle

Pump Room

Trunk, Aft

Trunk, Fore

Board

Exposed Machinery

Appliances

Deckhouse

Poop Bulkhead

Raised Quarter

Bridge, Aft

Bridge, Fore

Forecastle

Pump Room

Trunk, Aft

Trunk, Fore

Board

Exposed Machinery

Appliances

Deckhouse