

Amended Provisional

Rpt. G.11.

Index. No. 34722
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for ~~Steamer, Sailing Ship, Tanker~~
having poop, bridge and fore-castle Port of Survey _____

(Type of Superstructures.) _____ Date of Survey 13.12.35

Ship's Name <u>John Brown & Co. Ltd.</u> <u>Mary No 544</u> <u>for Anglo American Oil Co.</u>	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
Moulded Dimensions: Length <u>445.0</u> Breadth <u>61.0</u> Depth <u>32.17</u>	Name of Surveyor _____			
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>15900</u> tons	Particulars of Classification <u>100A1</u> <u>carrying petroleum in bulk</u> <u>(Contaminated)</u>			
Coefficient of fineness for use with Tables <u>.750</u> ✓				

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>32.17</u>	(a) Where D is greater than Table depth (D-Table depth) R = <u>(32.25 - 29.67) × 3 = 7.74</u> ✓	Moulded Breadth (B) <u>61.0</u>
Stringer plate ... <u>1.01</u> <u>.08</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <u>2.58</u> ✓	Standard Round of Beam = $\frac{B \times 12}{50} = 14.64$
Sheathing on exposed deck T $\left(\frac{L-S}{L}\right) =$ ✓	If restricted by superstructures ✓	Ship's Round of Beam = <u>15.50</u>
Depth for Freeboard (D) = <u>32.25</u>		Difference = <u>.86</u>
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.86 \times 62.11}{4} = -1.31$

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <u>104.00</u> ✓	<u>104.00</u>	<u>7.75</u>	✓	<u>104.00</u>
„ overhang				
R.Q.D. enclosed				
„ overhang				
Bridge enclosed <u>equivalent</u> <u>32.50</u> ✓	<u>32.50</u>	<u>7.75</u>	✓	<u>32.50</u>
„ overhang aft				
„ overhang forward				
F'castle enclosed <u>32.11</u> ✓	<u>32.11</u>	<u>7.75</u>	✓	<u>32.11</u>
„ overhang				
Trunk aft				
„ forward				
Tonnage opening aft				
„ „ forward				
Total <u>168.61</u>	<u>168.61</u>			<u>168.61</u>

Standard Height of Superstructure 7.5
R.Q.D. ✓
Deduction for complete superstructure 42
Percentage covered $\frac{S}{L} = 37.89$ ✓
„ „ $\frac{S_1}{L} = 37.89$ ✓
„ „ $\frac{E}{L} = 37.89$ ✓
Percentage from Table, Line A Tanker 28.89 ✓
(corrected for absence of fore-castle (if required))
Percentage from Table, Line B. ✓
(corrected for absence of fore-castle (if required))
Interpolation for bridge less than 2L (if required) ✓
Deduction = 42 × 28.89 = -12.13 ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<u>54.50</u>	1		<u>54.50</u>	<u>55.50</u>	<u>55.50</u>	1		<u>55.50</u>
$\frac{1}{8}$ L from A.P. ...	<u>24.25</u>	4		<u>97.00</u>	<u>24.66</u>	<u>98.64</u>	4		<u>394.56</u>
$\frac{2}{8}$ L „ ...	<u>5.995</u>	2		<u>11.99</u>	<u>6.17</u>	<u>12.34</u>	2		<u>24.68</u>
Amidships ...	-	4		-	-	-	4		-
$\frac{3}{8}$ L from F.P. ...	<u>11.99</u>	2		<u>23.98</u>	<u>12.34</u>	<u>24.68</u>	2		<u>49.36</u>
$\frac{1}{8}$ L „ ...	<u>48.50</u>	4		<u>194.00</u>	<u>49.32</u>	<u>197.28</u>	4		<u>789.12</u>
F.P.	<u>109.00</u>	1		<u>109.00</u>	<u>111.00</u>	<u>111.00</u>	1		<u>111.00</u>
Total ...				<u>490.47</u>					<u>499.44</u>

Mean actual sheer aft = Sheer
Mean standard sheer aft = Sheer
Mean actual sheer forward = Sheer
Mean standard sheer forward = Sheer
Length of enclosed superstructure forward of amidships = Tanker
„ „ aft of „ = Tanker

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{8.97}{18} \left(.75 - \frac{1.894}{56.06} \right) = -.28$ ✓
If limited on account of midship superstructure. ✓
If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. ✓

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	<u>73.80</u> ✓
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.750 + .68}{1.36} = \frac{1.43}{1.36}$ ✓	<u>77.60</u> ✓
Depth to Freeboard Deck = <u>32.25</u> Ft.	$\Delta = 15262$ ✓	Depth Correction <u>7.74</u>	
Summer freeboard = <u>6.06</u>	Tons per inch immersion at summer load water line	Deduction for superstructures <u>12.13</u> ✓	
Moulded draught (d) = <u>26.19</u>	T = <u>54.55</u> ✓	Sheer correction <u>0.28</u> ✓	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>6.55</u> = <u>6.5</u>	Deduction = $\frac{\Delta}{40T}$ inches = <u>6.99</u> ✓	Round of Beam correction <u>0.13</u> ✓	
Addition for Winter North Atlantic Freeboard (if required) = <u>4.2 + 6.2 = 10.4</u>	<u>= 7</u> ✓	Correction for Thickness of Deck amidships -	
		Other corrections, scantlings, etc. -	
		<u>7.74</u> <u>12.54</u> <u>-4.80</u>	
		Summer Freeboard = <u>72.80</u> ✓	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, W, Steel, Deck: 6'-0 3/4"

Tropical Fresh Water Line above Centre of Disc <u>13 1/2"</u>	Tropical Fresh Water Freeboard <u>4'-11 1/4"</u>
Fresh Water Line " " <u>7"</u>	Fresh Water " " <u>5'-5 3/4"</u>
Tropical Line " " <u>6 1/2"</u>	Tropical " " <u>5'-6 1/4"</u>
Winter Line below " " <u>6 1/2"</u>	Winter " " <u>6'-7 1/4"</u>
Winter North Atlantic Line " " <u>11"</u>	Winter North Atlantic " " <u>6'-11 3/4"</u>

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...
COAMINGS	}	Height above Deck	...	...	...	...	...	...	...
		Thickness	...	...	...	...	...	...	...
		Stiffeners	...	...	...	...	...	...	...
		Brackets, Stays	...	...	...	...	...	...	...
HATCH BEAMS	}	Number	...	...	...	...	...	...	...
		Spacing	...	...	...	...	...	...	...
		Scantling and Sketch	...	...	...	...	...	...	...
FORE AND AFTERS	}	Number	...	...	...	...	...	...	...
		Spacing	...	...	...	...	...	...	...
		Unsupported Lengths	...	...	...	...	...	...	...
		Scantling* and Sketch	...	...	...	...	...	...	...
HATCH COVERS	}	Bearing Surface	...	...	...	...	...	...	...
		Material	...	...	...	...	...	...	...
		Thickness	...	...	...	...	...	...	...
		How fitted	...	...	...	...	...	...	...
Spacing of Cleats	}	Bearing Surface	...	...	...	...	...	...	...
		Number of Tarpaulins	...	...	...	...	...	...	...

*Are wood fore and afters steel shod at all bearing surfaces?
 Are battens and wedges efficient and in good condition?
 Are tarpaulins in good condition and in accordance with rule requirements?
 Are lashings provided in accordance with rule requirements?

Particulars of fiddle, funnel and ventilator coamings :—

Particulars of Flush Bunker Scuttles :—

Particulars of Companionways :—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

Particulars of Gangway Cargo and Coaling Ports :—

Particulars of Scuppers and Sanitary Discharge Pipes :—

Particulars of Side Scuttles :—

Particulars of Guard Rails :—

Particulars of Gangways, Lifelines, etc. :—

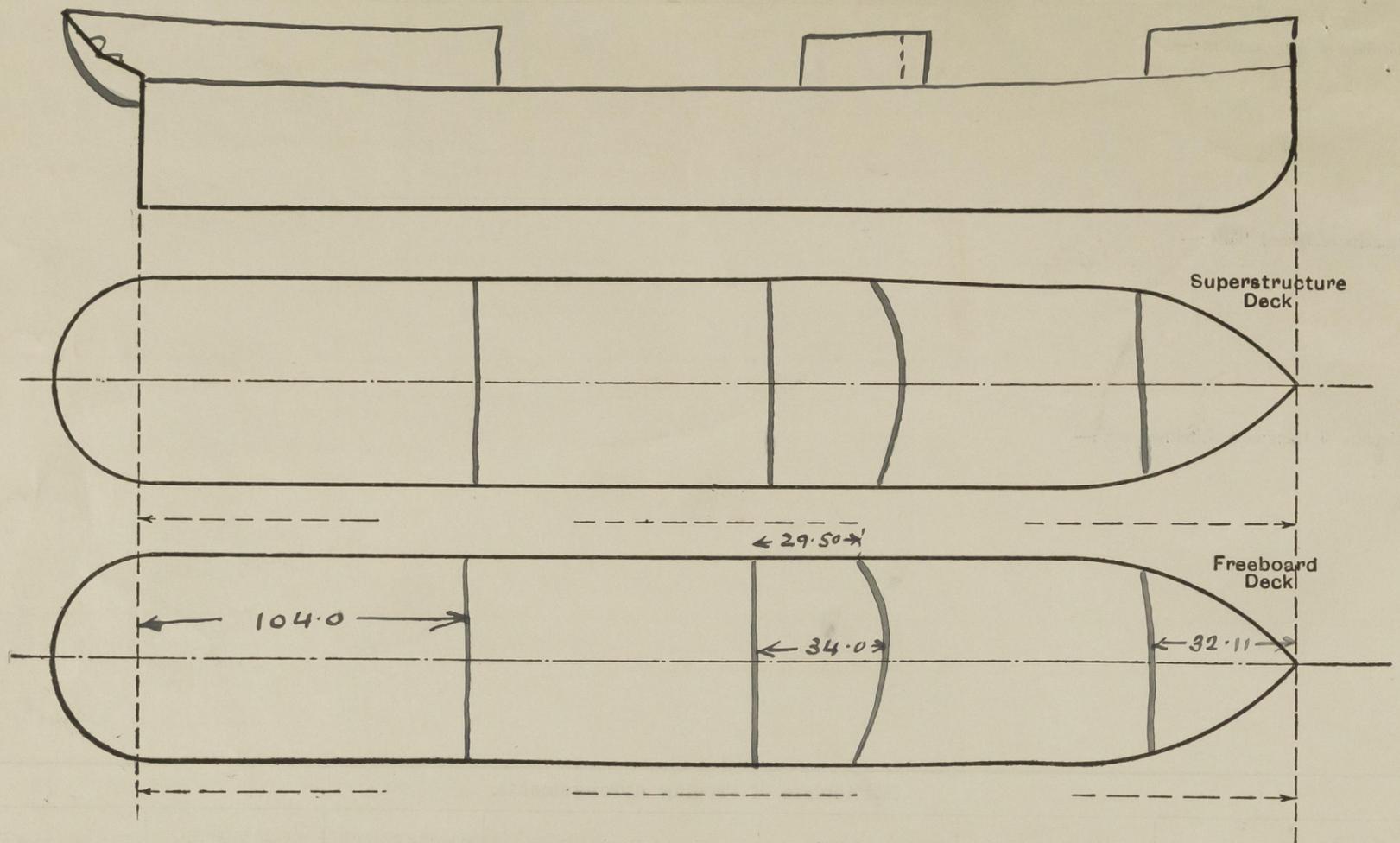
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well
Forward Well

State position of each freeing port ... { After Well :—
 (F. and A. position and height above deck edge) } Forward Well :—
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :—
 Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead
Raised Quarter Deck Bulkhead
Bridge, After Bulkhead
Bridge, Forward Bulkhead
Forecastle Bulkhead
Trunk, Aft
Trunk, Forward
Exposed Machinery Casings on Freeboard or Raised Quarter Decks
Exposed Machinery Casings on Superstructure Decks
Machinery Casings within Superstructures not fitted with Class I Closing Appliances
Deckhouses on Flush Deck Ships

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	...
Raised Quarter Deck Bulkhead	...
Bridge, After Bulkhead	...
Bridge, Forward Bulkhead	...
Forecastle Bulkhead	...
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...
Exposed Machinery Casings on Superstructure Decks	...
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...
Deckhouses on Flush Deck Ships	...

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



State any special features in the construction of the ship:—

Bridge at side 29.50 ✓
 $\frac{2}{3} \times 4.5 = 3.00$
 32.50 equivalent 29.50

Builder's name and yard number

Names of sister ships

Owners

Fee £

Received by me



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Foundation