

B.T. COPY.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No. **35793**
(For London Office only).**GREENOCK RPT.**
NO. 20628.

| | | | | | |
|---|----------------------------------|---|--|------------------------------|--|
| Ship's Name M.V. "DOSINIA" | Official Number 166589 | Nationality and Port of Registry BRITISH LONDON | Gross Tonnage APPROX. 8000 8058.30 | Date of Build 1938 | Port of Survey GREENOCK |
| Moulded Dimensions: Length 460' 0" Breadth 59' 0" Depth 34' 0" | | | | | Date of Survey WHILE BUILDING. |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth 17745 tons | | | | | Surveyor's Signature J. Jamieson |
| Coefficient of fineness for use with Tables | | | | | Particulars of Classification +100 A.I. (CONO) "CARRYING PETROLEUM IN BULK" LONGITUDINAL FRAMING AT BOTTOM & AT DECK. |

| Depth for Freeboard (D). | | Depth correction. | | Round of Beam correction. | |
|---|---------|--|--|--|--------------------------------------|
| Moulded depth | 34' 0" | (a) Where D is greater than Table depth (D - Table depth) R = $(34.07 - 30.67) \times 3 = +10.20"$ | | Moulded Breadth (B) | 59' 0" |
| Stringer plate | 78" .07 | (b) Where D is less than Table depth (if allowed) (Table depth - D) R = | | Standard Round of Beam = $\frac{B \times 12}{50} =$ | 14' 16" |
| Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ | NIL. | | | Ship's Round of Beam = | 14' 75" |
| Depth for Freeboard (D) = | 34.07 | If restricted by superstructures | | Difference | 59" |
| | | | | Restricted to | |
| | | | | Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) =$ | $\frac{59^2}{4} \times .5784 = -0.8$ |

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|---|-------------------------|--|-------------|-------------------|----------------------|
| Poop enclosed <i>Sq. mtr.</i> (90' 12" AT SIDE) | 92.94 | 92.94 | 7.5' | ✓ | 92.94 |
| „ overhang ... | 6" | | | | |
| R.Q.D. enclosed | | | | | |
| „ overhang | 44' 6.3 | | | | |
| Bridge enclosed <i>Sq. mtr.</i> (42' 1" AT SIDE) | 44.63 | 44.63 | 7.5' | ✓ | 44.63 |
| „ overhang aft | 38" | 38 | | | 38 |
| „ overhang forward | 8" | | | | |
| F'cle enclosed <i>Sq. mtr.</i> (65' 6" AT SIDE) | 56.00 | 56.00 | 7.5' | ✓ | 56.00 |
| „ overhang | 56.00 | | | | |
| Trunk aft | | | | | |
| „ forward | | | | | |
| Tonnage opening aft | | | | | |
| „ forward | | | | | |
| Total | 194.07 | 193.95 | | | 193.95 |

Standard Height of Superstructure **7.50'**„ „ R.Q.D. **✓**Deduction for complete superstructure **42.00"**Percentage covered $\frac{S}{L} =$ **42.19**„ „ $\frac{S_1}{L} =$ **42.16**„ „ $\frac{E}{L} =$ **42.16**Percentage from Table, Line A. **Tanker 33.16**
(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 = **42.00" x .3316 = -13.93"**

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|---------------------|-------------------|---|--------|---------|-----------------|--------------------|---|--------|---------|
| A.P. ... | 56.00 | 1 | 56.00 | 56.0 | 56.00 | 56.00 | 1 | 56.00 | |
| 1/4 L from A.P. ... | 24.92 | 4 | 99.68 | 25.25 | 25.25 | 25.25 | 4 | 101.00 | |
| 3/4 L „ ... | 6.16 | 2 | 12.32 | 6.70 | 6.70 | 6.70 | 2 | 13.40 | |
| Amidships ... | - | 4 | - | 0 | - | - | 4 | - | |
| 3/4 L from F.P. ... | 12.32 | 2 | 24.64 | 13.0 | 13.00 | 13.00 | 2 | 26.00 | |
| 1/4 L „ ... | 49.84 | 4 | 199.36 | 49.75 | 49.75 | 49.75 | 4 | 199.00 | |
| F.P. ... | 112.00 | 1 | 112.00 | 112.0 | 112.00 | 112.00 | 1 | 112.00 | |
| Total | | | 504.00 | | | | | 507.40 | |

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{3.40}{18} (.75 - .211) = -.10"$
If limited on account of midship superstructure.Mean actual sheer aft = **Excess**
Mean standard sheer aftMean actual sheer forward = **Excess**
Mean standard sheer forwardLength of enclosed superstructure forward of amidships =
„ „ aft of „ = } **Tanker**

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **34' 07"**
Summer freeboard = **6' 69"**
Moulded draught (d) = **27' 38"**Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **6.85 = 6 3/4"**Addition for Winter North Atlantic Freeboard (if required) = **6.85 + 4.6 = 11.45 = 11 1/2"**

Deduction for Fresh Water.

Displacement in salt water at summer load water line
28' 0" - 17133
Δ = 27' 0" - 16456 16862
Tons per inch immersion at summer load water line
T = 28' 0" - 56.42 56.25
27' 0" - 56.00
Deduction = $\frac{\Delta}{40 T}$ inches
= 7.49
= 7 1/2"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.792 + .68}{1.36} = \frac{1.472}{1.36}$

| | + | - |
|--|-------|-------|
| Depth Correction | 10.20 | - |
| Deduction for superstructures | - | 13.93 |
| Sheer correction | - | 10 |
| Round of Beam correction | - | 0.08 |
| Correction for Thickness of Deck amidships | - | - |
| Other corrections, scantlings, etc. | - | - |
| | 10.20 | 14.11 |

Summer Freeboard = **80.19**SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, **Wood, Steel, Deck :-**

| | |
|--|--------|
| Tropical Fresh Water Line above Centre of Disc | 14 1/4 |
| Fresh Water Line | 7 1/2 |
| Tropical Line | 6 3/4 |
| Winter Line below | 6 3/4 |
| Winter North Atlantic Line | 11 1/2 |

| | |
|--------------------------------|-----------|
| Tropical Fresh Water Freeboard | 5' 2 1/4" |
| Fresh Water | 6' 0 3/4" |
| Tropical | 6' 1 1/2" |
| Winter | 7' 3" |
| Winter North Atlantic | 7' 7 1/2" |

23 SEP 1938

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.

Roof Equivalent Bhd. $90.12 + (2/3 \times 4.21) = 92.94$

Bridge Equivalent Bhd. $42.08 + (1/3 \times 3.83) = 44.63$

Forecastle Equivalent Bhd. $\frac{29.71 \times 17.42}{54.50} = \frac{65.5}{9.5} = 56.0$

Trade of ship INTERNATIONAL.

Names of sister ships M.V. "DAVILA" & "DORCASIA", GREENOCK FREEBOARD REPORT, Nos 20542 & 20584.

Builder's name and yard number LITHGOWS LIMITED, No 910

Owners ANGLO SAXON PETROLEUM CO LTD

Fee £ 19-0-0, APPROX.

TO BE RENDERED WITH FIRST ENTRY.

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Lloyd's Register
Foundation

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Ship's Name

Official Number

Nationality

Disposition

Poop Bulk

Raised Qu

Bridge, A

Bridge, F

Forecastle

Trunk, A

Trunk, F

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