2157

Form LL. 4.C. Revised

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD

~~STEAMER~~, TANKER, ~~SAILER~~: S.M. "~~CHANT 59~~ HELNY. ~~WITH~~ / WITHOUT TIMBER DECK CARGO

Nationality BRITISH

Port of Registry MIDDLESBROUGH

Official Number 169135.

Gross Tonnage 401

Date of Build APRIL 1944

Builders' Name and No. of Ship FURNESS S.B. CO LTD HAVERTON HILL-ON-TEES No 372.

Owners REDERIAKTIEBOLAGET HAYNIA. MARIEHAMN/ ~~MINISTRY OF WAR TRANSPORT~~ (~~MOWT~~) ~~COASTAL TANKERS LTD LONDON~~.

Port and Date of survey MIDDLESBROUGH DURING CONSTRUCTION

Name of Surveyor JOHN AITKEN.

Particulars of Classification B.S.* {BULK OIL CARRIER LOADING SERVICE}

Names of Sister Ships CHANT 52, 53, 54, 55, 56 etc

Type of Superstructures POOP AND FORECASTLE

Trade of Ship

Service Endorsement if any

SUMMER FREEBOARD recommended amidships from centre of disc to top of deck line, (.....wood.....steel)			1'-0"
TROPICAL FRESH WATER LINE above centre of disc	5"	Corresponding Freeboard	0'-7"
FRESH WATER LINE " " "	2½"	" "	0' 9½"
TROPICAL LINE " " "	2½"	" "	0' 9½"
WINTER LINE below " "	2½"	"	1'-2½"
WINTER NORTH ATLANTIC LINE " " "	4½"	" "	1'-4½"

SUMMER TIMBER FREEBOARD recommended amidships from top of deck line

TROPICAL FRESH WATER Timber line above L.S.		Corresponding Freeboard
FRESH WATER " " " "		" "
TROPICAL " " " "		" "
WINTER " " below "		" "
WINTER NORTH ATLANTIC " " " "		" "

Number of years recommended for load line certificate

DATE OF ISSUE 17-4-44
DATE OF EXPIRY 16-4-49

The scantlings and protective arrangements being in accordance with the Load Line Rules it is submitted that the freeboards be assigned

Chief Surveyor

Passed at a meeting of the Committee of Management of the British Corporation Register of Shipping and Aircraft

on the 3RD MAY, 1944

Secretary

COMPUTATION OF FREEBOARD

Length on summer load line 140'-0" Moulded Breadth 27'-0" Moulded Depth 11'-0" Depth of Keel 1½"

Moulded displacement (ex bossing) at moulded draught of 85 per cent. of moulded depth 723 Tons

Co-efficient of fineness for use with tables $\frac{\Delta \times 35}{L \times B \times D \times .85}$ = .711

Displacement and tons per inch immersion in salt water at summer load line 789 @ 8.04 T.P.I

Moulded depth		11.000
Stringer Plate	3/8	.031
Sheathing on exposed deck T $\left(\frac{L-S}{L}\right)$		—
Rise of floor (in sailers)		—
Depth for Freeboard (D)		11.031
Table Depth	H/15	9.400
Depth Correction	H/130	1.631

Deduction for Fresh Water $\frac{\Delta}{40\,T}$ = 2½" inches

Round of Beam Correction

Ships Round of Beam 0.00 inches

Standard Round of Beam $\frac{B \times 12}{50}$ 6.48

Difference 6.48

Restricted to

Correction $\frac{\text{Difference}}{4} \times \left(1 - \frac{S}{L}\right)$ = 1.62 × .2262 = .3665 ON.

If restricted by superstructures 1.769. ON.

	Enclosed Length	Length of Overhang	Height	Mean Covered Length (S)	Height Correction	Effective Length (E)
Poop	37'-6¾"	—	7'-0"	41.26	—	41.26
Raised Quarter Deck						
Bridge F						
Bridge A						
Forecastle	13'-8 11/16"	1'-10"	8'-0"	15.63		14.82
Trunk Aft	21'-9"		7'-0"		18/27	14.50
„ Forward	41'-2"		3'-4"		18×3.33 / 27×6	15.25
~~Tonnage Opening Aft~~	18'-10"		3'-4"		14.71×3.33 / 27×6	5.70
„ „ Forward						
Totals				56.89		91.53

14.50 + 27.44 + 10.26 = 52.20; 52.20 = 56.89 − 4.69

S.109.09 $\frac{S}{L}$ = 77.38%

Standard Height of Superstructure 6'.0"

„ „ R.Q.D.

Percentage covered S/L = 40.34%

„ „ E/L = 64.93%

„ from Table line A, B, (corrected for absence of forecastle if required) —

Percentage from Table by interpolation for Bridge less than .2L if required = —

Deduction = 57.423%

Percentage from Table for Tankers (~~or Timber ships~~) =

Deduction = 20.1 × .5742 = 11.54 ON

Station	Actual Sheer	Standard Sheer	Effective Sheer	S.M.	Product
A.P.				1	
⅛ L from A.P.				4	
¼ L from A.P.				2	
Amidships				4	
¼ L from F.P.				2	
⅛ L „ „				4	
F.P.				1	
				18	

NO SHEER

Effective Mean Sheer =

Standard „ „ .05L + 5 = 12.05

Difference 12.05

Mean Actual sheer aft / Standard „ „ = LESS THAN 1

Mean Actual sheer forward / Standard „ „ = LESS THAN 1.

Length of enclosed superstructure forward of admidships / Length of Ship = —

Length of enclosed superstructure aft of amidships / Length of Ship = —

Sheer Correction = Difference X (.75 − $\frac{S}{2L}$) = 12.05 × .5483 = 6.608 ON.

If limited on account of midship superstructure =

„ to maximum allowance of 1½ ins. per 100 ft. =

TABULAR FREEBOARD corrected for flush deck if required = 14.33

Correction for co-efficient = $\frac{139}{136}$ = 14.66

	+	−
Depth correction	1.77	-
Deduction for superstructures	-	11.54
Sheer correction	6.61	-
Round of Beam correction	.37	-
Correction for thickness of deck amidships	-	-
Other corrections, scantlings, etc.	—	-
	8.75	11.54 - 2.79

Summer Freeboard in Inches 12" = 11.87

Additional allowance for superstructures on Timber carrying ships =

Summer Timber Freeboard in inches =

DRAUGHTS AND SEASONAL CORRECTIONS

	~~Sailer~~, Tanker, Steamer	Timber
Depth to Freeboard Deck in feet	11.031	
Summer Freeboard in feet	1.000	
Moulded Draught (d)	10.031	(d1)
Addition for Keel	.042	
Extreme draught 10' 0 7/8"	10.073	

Deduction for Tropical and addition for Winter freeboard d/4 = 2.5 ins.

Addition for Winter North Atlantic (if required) — 4.5 ins.

Deduction for Tropical Timber Freeboard $\frac{d\,1}{d}$ = — ins.

Addition for Winter „ „ $\frac{d\,1}{3}$ = — ins.

„ „ N.A. Timber Freeboard (if required) = — ins.

Form LL. 4.D.

THE BRITISH CORPORATION REGISTER OF SHIPPING AND AIRCRAFT

SURVEY FOR FREEBOARD

CONDITIONS OF ASSIGNMENT

SHIPS NAME "CHANT 59" OFFICIAL NUMBER 169135

Nationality and Port of Registry BRITISH, MIDDLESBROUGH

PARTICULARS OF SUPERSTRUCTURES, TRUNKS, CASINGS, DECKHOUSES

	Coaming	Plating	Stiffeners	Spacing	End Attachments	No. and size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	-	5/16	5x3x5/16	25 1/2	Brktd T+B	none		
R.Q.D. ,,	-							
Bridge Aft Bulkhead	-							
,, Forward ,,	-							
Forecastle Bulkhead	-	5/16	3x3x1/4	30"	None. Stiff Laps Top + Btm. L's	2 @ 4'-11" x 1'-9"	15"	
Trunk, Aft								
,, Forward								
Exposed Machinery Casings on Freeboard or R.Q. Decks	-							
Exposed Machinery Casings on superstructure decks	.325	.25	3x2 1/2x1/4	21"	Attached to U.D beams at lower end	1 @ 5'-0" x 21" Steel door	18"	
Machinery Casings within Superstructures not fitted with Cl. 1 closing appliances	-							
Deckhouses on flush deck ships	-							

PARTICULARS OF CLOSING APPLIANCES (state if capable of being manipulated from both sides)

Poop Bulkhead	No openings
R.Q.D. ,,	-
Bridge Aft Bulkhead	-
,, Forward ,,	-
Forecastle Bulkhead	Steel doors. 15" Coaming
Exposed Machinery Casings on Freeboard or R.Q. decks	-
Exposed Machinery Casings on superstructure decks	Steel door fore end. 18" Coaming, Manipulated both sides
Machinery Casings within superstructures not fitted with Cl. 1 Closing Appliances	-
Deck houses on Flush Deck ships	-

PARTICULARS OF FREEING ARRANGEMENTS

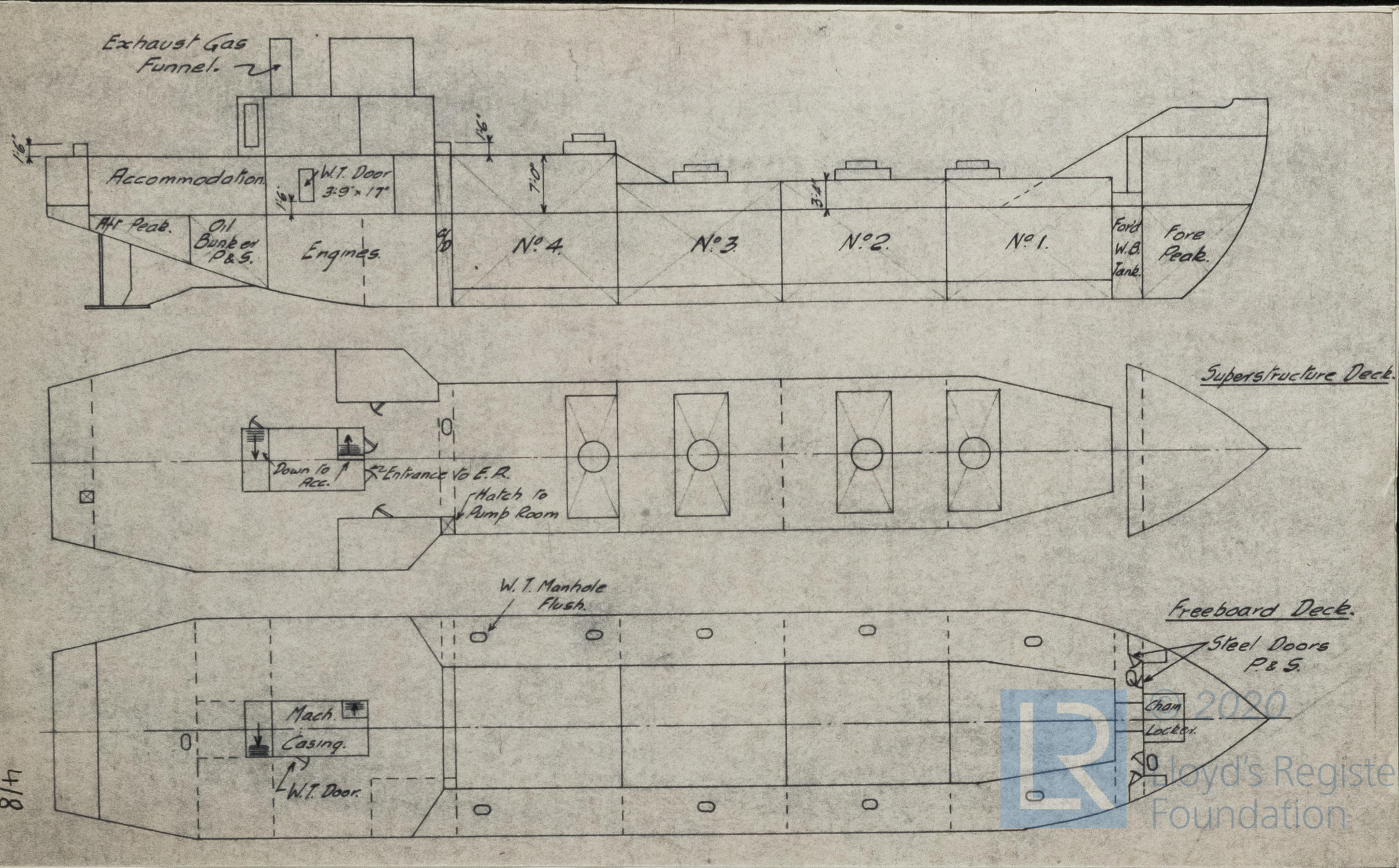
	Length of Bulwark	Height of Bulwark	No. and size of Freeing Ports each side	Area each side	Rule Area
After Well	Open rails				
Forward Well					

State fore and aft position and height above deck to bottom of port, for each port — After Well —

Forward Well —

State whether freeing ports are fitted with shutters, bars or rails, and give particulars —

Give particulars of freeing port area, etc., on superstructure decks —


Exhaust Gas Funnel.
Accommodation.
W.T. Door 3'9" x 17"
Aft Peak.
Oil Bunker P & S.
Engines.
No. 4.
No. 3.
No. 2.
No. 1.
Fore W.B. Tank.
Fore Peak.
7'0"
Superstructure Deck.
Down to Acc.
2nd Entrance to E.R.
Hatch to Pump Room
W.T. Manhole Flush.
Freeboard Deck.
Steel Doors P & S.
Mach. Casing.
W.T. Door.
Cham Locker.
814

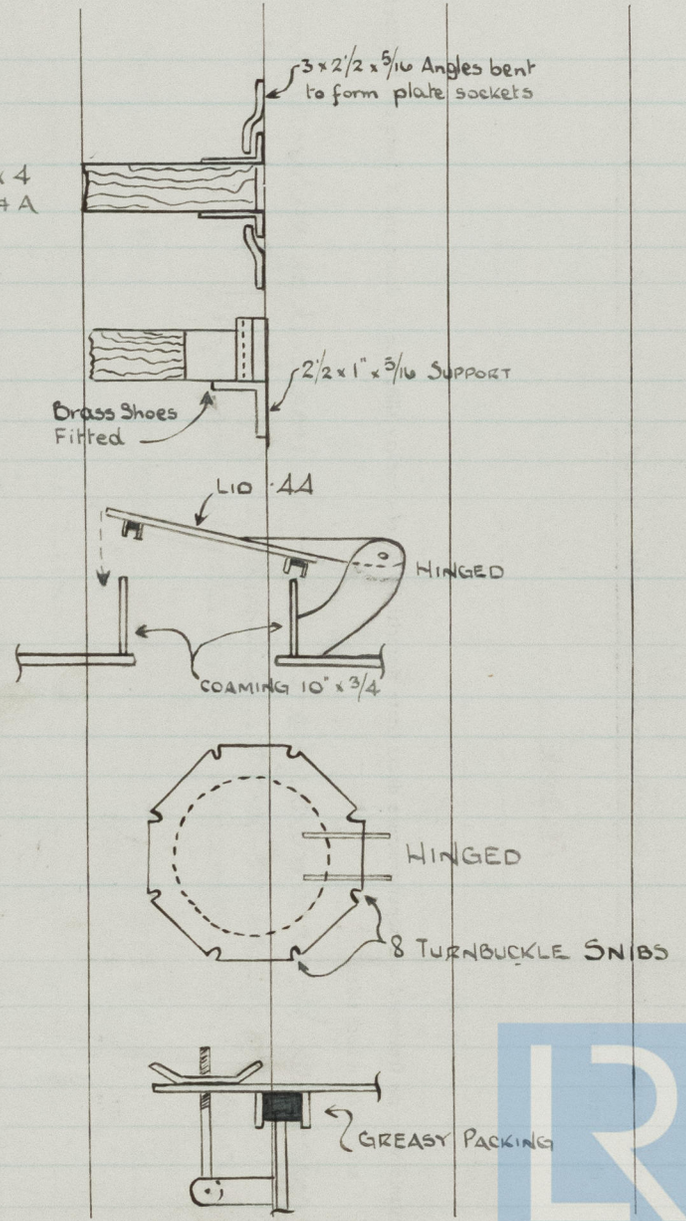
PARTICULARS OF ALL HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS

		No 1.	No 2	No 3	No 4
Number and description of Hatchway from forward					
Dimensions of Hatchway		15'-0" x 6'-8"	15'-0" x 6'-8"	15'-0" x 6'-8"	15'-0" x 6'-8"
COAMINGS	Height above steel ~~wood~~ Trunk deck	18"	18"	18"	18"
	Thickness sides	5/16"	5/16"	5/16"	5/16"
	Thickness ends	5/16"	5/16"	5/16"	5/16"
	Stiffeners	—	—	—	—
	Brackets or Stays	—	—	—	—
HATCH BEAMS	Number	—	—	—	—
	Spacing	—	—	—	—
	Scantling and Sketch	—	—	—	—
	Bearing Surface and thickness of carriers or sockets	—	—	—	—
FORE AND AFTERS	Number	2	2	2	2
	Spacing	5'-0"	5'-0"	5'-0"	5'-0"
	Unsupported lengths	6'-6 3/8"	6'-6 3/8"	6'-6 3/8"	6'-6 3/8"
	Scantling and Sketch	7x4 wood	7x4 wood	7x4 wood	7x4 wood
	Bearing Surface and thickness of carriers or sockets	5/16 Plate Sockets	5/16 Plate Sockets	5/16 Plate Sockets	5/16 Plate Sockets
HATCH COVERS	Material	Wood	Wood	Wood	Wood
	Thickness	2 3/8	2 3/8	2 3/8	2 3/8
	How Fitted	Th' Ship	Th' Ship	Th' Ship	Th' Ship
	Bearing Surface				
Spacing of Cleats		2'-0"	2'-0"	2'-0"	2'-0"
Number of Tarpaulins		2	2	2	2

Are tarpaulins in good condition and in accordance with rule requirements? Yes

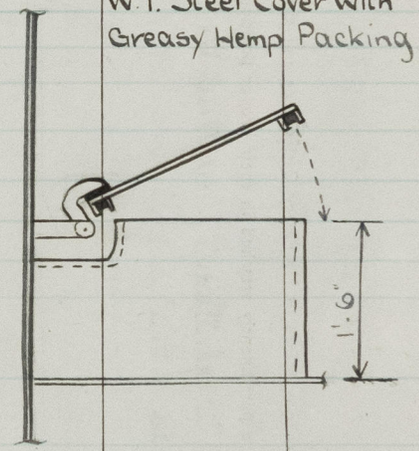
Are lashings provided in accordance with rule requirements? Yes

8/S



Are wood fore and afters steel shod at all bearing surfaces? Brass Shod. Brass Angles

Are battens and wedges efficient and in good condition? Yes



Hatch to store in Counter

24" x 22". Coaming 18". Wood hatch, Tarps., Cleats, etc & Locking bar

Give full particulars of the following :—

Fiddley, Funnel and Vent Coamings, Engine Room skylight and other openings in Machinery Casing tops and their means of closing (state height of coamings, type of fiddley covers, and if these are permanently attached in their proper positions)

Engine Room Skylight -, Steel, Steel Flaps, no lights.
no Fiddley openings. Funnel & E.R. Vents on top of 4'-0" casing, above poop deck

Flush Bunker Scuttles on freeboard and superstructure decks (state material, type of joints, etc., and if secured by hinge or permanent chain attachment)

None

Companionways on freeboard and superstructure decks (state material, height of doorway sills, type of doors, and if these can be closed and secured from both sides)

Entrance to accomodation:- Door at fore end of casing structure 18" coaming, Wood door. Also, door at aft end of casing structure portside, 18" coaming, wood doors. Doors 4'-10" x 22"

Ventilators in exposed positions on freeboard, raised quarter and superstructure decks to spaces below freeboard decks and fully enclosed superstructures enclosed by Class 1 appliances (state height of steel coamings, pitch of rivets in deck connection, type of closing arrangements)

Uppet deck - Swan neck vents, 39" to throat, 9" dia, fastened with 8 bolts 3/4" dia, closed with fine gauze, also wood plug & canvas covet.
Poop deck vents - Swan necks 24' to throat.
Ordinary vents 7" x 12", 30" coaming x 3/8 Th. welded to deck, wood plugs & canvas covets.

Airpipes in exposed positions on freeboard, raised quarter and superstructure decks (state height to opening and if satisfactory closing arrangements are provided)

Air pipes — Uppet Deck 39", Forecastle 22", Poop 21" — Wood plugs attached with chain

Scuppers and Sanitary Discharge Pipes (state material, type and number of valves)

PORT 1-2" GUNN METAL SCREW DOWN VALVE. STRAIGHT THROUGH TYPE WITH EXTENDED SPINDLE TO UPPER DECK

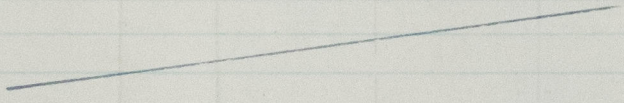
STARB'D 2-2" " " " " " " " " " "

" A-A" " " " " " " " " " "

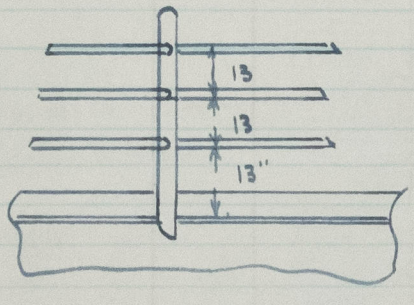
Side Scuttles to spaces below freeboard and superstructure decks (state type or pattern, and if permanent or portable deadlights are supplied)

SIDESCUTTLES TO ACCOMMODATION IN POOP SPACE. BRASS FRAMES HINGED M.S. DEADLIGHTS 1/4" PLATE.

Vertical distance of sill of lowest side scuttle below top of freeboard deck at side amidships



Guard Rails on freeboard and superstructure decks (state type and where fitted)



FITTED ROUND POOP DECK CLEAR OF SIDEHOUSES AND ALONG WELL DECK FROM POOP TO FORECASTLE BULWARK ON FORECASTLE.

Gangways and Lifelines

LIFELINE FITTED FROM FORE END OF POOP TO AFT END OF FORECASTLE FITTED ON STANCHIONS EACH SIDE ON TOP EDGE OF TRUNK

Gangway, Cargo and Coaling Ports in sides of ship

NONE

SUPPLEMENTARY REQUIREMENTS FOR STEAMER CARRYING TIMBER DECK CARGOES

Do Superstructure and Machinery Casings comply with rules?

Is provision made for protection of steering gear?

Is emergency steering gear provided?

Are efficient sockets and eyes for lashings provided and properly spaced?

State particulars of longitudinal subdivision in double bottom

State particulars of Bulwarks and Rails

Particulars of any Special Features in the construction of the Ship

Endorsement at first survey and at surveys for Renewal of Certificate:—

The fittings and appliances are in accordance with the particulars shown in the form and are in good condition