

Rpt. 1.
RECEIVED

8 JUL 1944

12 JUL 1944

STEEL STEAMER or MOTORSHIP

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 4th May, 1944

Port of Vancouver, B. C.

No. 6192

Survey held at North Vancouver, B. C.

Date First Survey 4th December, 1943

Last Survey 2nd May, 1944

On the (State if Machinery fitted with Single, Twin or Triple Screw)

Steel Single Screw Steamer "CRYSTAL PARK"

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

C.S.S. with T.O. closed

State Type of Erections

TONNAGE under Tonnage Deck 6708.61

CLASS 100 A1 with Freeboard corresponding to a Summer Mld. Dft. of 26' 10"

State if with freeboard condition of Class Yes

Built at North Vancouver, B. C.

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

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) L 416.00

Launched 10th March, 1944 Yard No. 140

Total

Breadth (greatest moulded) B 56.88

Builders North Van Ship Repairs, Ltd.

Gross Tonnage 7161.44

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) D 37.33

Owners Minister of Munitions & Supply of Canada.

Register Tonnage 4221.34

Depth to 2nd Deck = 38.58'

Managers Park Steamship Co. Ltd., (Where necessary to be entered in Reg. Book.)

1st Longitudinal Number (L x D) = 15529

2nd Numeral L x (B + D) = 39191

Residence Montreal, Quebec.

REGISTERED DIMENSIONS. FEET.

Length 424.6

Framing Depth "d," at middle of length. See Sec. 3 (1d) 25.08

Port of Registry Montreal, Quebec.

Breadth 57.2

Proportions—Depth to Length—Uppermost continuous deck to top of keel 11.14

If surveyed while building, afloat, or in dry dock

Depth 34.9

Do. Long Bridge to top of keel

Building and afloat.

Draught Moulded 26.86'

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	30	✓	Bracket Floors, Frame	- - -	
" " from $\frac{2}{3}$ length amidships to Collision bulkhead	27	✓	" " Reversed Frame	- - -	
" " in peaks	24	✓	" " Vertical Struts	- - -	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	43½ x .56	✓
Frame Amidships, Angle, [or]	12x4x4x.47	✓	" " top Angles	3½ 3½ .44	✓
" " Extends up to	2nd Deck	✓	" " bottom Angles	4 4 ½	✓
Intern. Forward Reversed Frame Amidships, Angle	(6 4 ½)	✓	Side Girders (No. each side and thickness)	6 One 3½ .44	✓
for Ice Stiffening (Toe to Shell)	-		Margin Plate depth (excl. of flange) and thickness	40½ x .56	✓
" " Extends up to	-		" " Vertical Angle to Tank side	Welded	✓
Depth of Framing Girder	12	✓	Bracket abaft ½ len. from stem		
Frames in Uppermost Continuous 'tween	6 3½ ½	✓	" " Vertical Angle to Tank side		
" " Decks, Angle, [or]			Bracket from forward ½ len. from stem to Panting Area		
" " No. 1 Hold with side sters & web str. as approved	10x3½x3½x.425	✓	Gussets, spacing and scantling abaft ½ len. from stem	10½ x ⅜ (Fl. 2")	✓
" " Third No. 2 Hold	12x4x4x.59	✓	Fr. 144 Continuous		
" " from ½ len. for'd. to 15% len. from Stem	-		Gussets, spacing and scantling from forward ½ len. from stem to Panting Area, Fr. 144	17 x ⅜ (Fl. 2")	✓
" " in Peaks, Angle on [8 3½ .34	✓	Tank Side Brackets, height above base line at toe of Frame and thickness	104½ x .44	✓
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7 At 6½ Dias.	✓	INNER BOTTOM PLATING.		
State if Frame Joggled	No	✓	Breadth and thickness of Middle Line Strake	88 x ½	✓
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	Yes	✓	Thickness of remainder in Holds	.44	✓
Are the scantlings and arrangements in way of the Bottom Forward 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	✓
SINGLE BOTTOM.			BEAMS.		
Floors, Depth and thickness at mid-line in Holds			Uppermost Continuous Deck, amidships	8 3½ .46	✓
Height of Brackets at side above base line at toe of frame			" " in Walls, Angle, [or]		
Middle Line Keelson, on Floors, Angles, [or]			" " in way of Bridge, Angle, [or]		
" " Through Plate or Intercostal Plate			Spacing	Ev. Fr. (BA 9x3½x.44)	✓
" " Foundation Plate on Floors			Second Deck, amidships, Angle, [or]	(Ch. 12x4x4x.467)	✓
" " Flat Plate Keel Angles			Spacing	Ev. Fr.	✓
Side Keelsons, No. each side			Third Deck, amidships, Angle, [or]		
" " thickness of Intercostal Plate			Spacing		
" " Angles			Fourth Deck, amidships, Angle, [or]		
DOUBLE BOTTOM.			Spacing		
Solid Floors, thickness and spacing	⅜ Ev. Fr.	✓	Poop Deck, Angle, [or]		
" " Are Frame and Reversed Frame joggled?	No	✓	Spacing		
Bracket Floors, breadth and thickness at middle line	- - -		Bridge Deck, Angle, [or]		
" " breadth and thickness at margin plate	- - -		Spacing		
			Forecastle Deck, Angle, [or]		
			Spacing		

PILLARS AND DECKS.				
PILLARS, No. of Rows.....	INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.	INCHES IN SHIP.
	One	Two		
in 'tween Decks, Size and Spacing.....	6 x 6 x 3/4 on alt. frs.			.34
in Holds	Cr. Line Bhd.			.34
Centre Line Bulkhead, in Holds.				
Stiffeners and Spacing.....	Ch. 12x3 1/2 x 3 1/2 x 60 on alt. frs.			
Plating, thickness of	.31			
STRINGERS AND DECKS.				
Uppermost Continuous Deck.				
Stringer Plate, breadth and thickness in Way of Bridge	61 x 3/4			
Angle in Way of Bridge	6 6 .69			
Thickness of Plating abreast Deck openings in way of Bridge	.56			
Thickness of Plating abreast Deck openings in way of Bridge	.56			
Thickness of Plating within line of openings	.56			
If Sheathed, material and thickness				
Second Deck.				
Stringer Plate, breadth and thickness in Way of Bridge	59 1/2 x .44			

SHELL PLATING.				
STRAKES.	AS IN VESSEL.			
	AMIDSHIPS.	FORWARD.	AFT.	ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.
FLAT PLATE KEEL	52	.75	.69	.69
Bottom Plating, No. of Strakes	Four	.63	.56	.50
Bilge Plating, No. of Strakes	One	.63	.56	.50
Side Plating, No. of Strakes	Three	.63	.56	.44
Upper Deck, Sheer-strake in Way of Bridge	84	.69	.50	.44
Upper Deck, Sheer-strake in Bridge				
Strake Below Sheer-strake in Way of Bridge	78	.63	.44	.44
Strake Below Sheer-strake in Bridge				
Poop Side Plating				
Bridge Side Plating				
Forecastle Side Plating				

WATERTIGHT BULKHEADS.				
In 'tween dks. - 6 Divisional W.T. Bkds. on (Frs. Nos. 5, 40, 66, 86, 106 & 135.				
Extending to Upper Deck (Sec. 3) One (Collision) on Fr. 162				
Deck next below Seven, on (Frs. Nos. 12, 40, 58, 66, 86, 106 and 135.				
As per Rule Seven				
STIFFENERS.				
MIDSHIP BULKHEAD, Upper 'tween decks	VERTICAL.			
	Plating Thickness.	Scantlings.	Spacing.	Scantlings.
Second	Ins.	6x3 1/2 x 3/4	30	
Third				
Holds				
COLLISION				
AFTER PEAK				
FORGINGS AND CASTINGS.				
KEEL Bar	Flat Plate			
STEEL	Upper Section: M.S. Fashion Plate			
	Lower: Rolled Bar M.S. 10x2 1/2			
STERN FRAME	Propeller Post	C.S. Appd. Eng. Wks.		
	Rudder			
Speed of Vessel	Not exceeding 12 knots			
RUDDER Type	Goldschmidt - Patent - Streamline			
	(Made by Vanc. Eng. Wks.)			
A x D				
Diam. of head	9 1/2			
Mainpiece at top pintle	16" Dia. x 1" thk. tube			
heel	16" Dia. x 1" thk. tube			
how constructed	Built & Welded			
double or single plate	Double			
coupling, vertical or horizontal	Horizontal			
Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)	Open Hearth			
STEEL	The Steel Co. of Canada, Ltd., Dominion Foundries & Steel, Ltd., Manitoba Rolling Mills Co., Carnegie-Illinois Steel Corp., The Phoenix Iron Co., Algoma Steel Products Co. Ltd., Inland Steel Co., Bethlehem Steel Co., American Rolling Mill Co.			
Has the Steel been tested as required by the Rules?	Yes (Partly by American Bureau of Shipping)			

EQUIPMENT No. 39800				
LETTER A				
ANCHORS.				
Number of Certificate.	Anchor.	WEIGHT, EX. STOCK.	WEIGHT OF STOCK.	TEST, PER CERTIFICATE.
F.9442	1st Bower	8435 LBS.		8400 lbs.
F.9443	2nd "	8428 LBS.		8400 lbs.
	3rd "	16863 LBS.		16800 lbs.
F.9447	Stream	3266 LBS.		23 1/2 Cwts.

CHAIN CABLES.				
HAWERS AND WARPS.				
Number of Certificate.	Length and size supplied.	Test per Certificate.	WEIGHT OF CHAIN CABLE.	Length and size supplied.
F.1016	270 2 1/2	24330 LBS.	65550	270 2 1/2
1990	2000 2 1/2	24330 LBS.	608	2000 2 1/2
1887E	500 2 1/2	24330 LBS.	293	500 2 1/2
90	5	532	6 x 12 G.S.W.R.	90 5

Steering Gear, Type (Power or hand)	Steam with telemotor control	Alternative Means of Steering	(Blocks and tackle led to after warping winch)
Steering Chains (Size and Test)	Windlass Steam - 11" x 13"	Boats	(4 @ 26' x 9' x 3.82' 2 with motors.)
Ceiling in Holds, thickness and material	2 1/2" B.C. Fir	Cargo Battens, thickness, material and spacing	1 1/2" B.C. Fir - 9" Clear
Cargo Hatchways. (Upper Deck)	Steel plates and angles	Thickness of Hatches	3" - B.C. Fir
Size of Hatchways No. 1 (Fwd.)	33'9"x20'	No. 2	35'x20'
No. 3	20'x20'	No. 4	35'x20'
No. 5	35'x20'	No. 6	--
Number of Shifting Beams	Nos. 1, 2, 4 and 5 -- each 5.	No. 3	- 3.
Builder's Signature	NORTH VAN SHIP REPAIRS LIMITED		
	Vice President		

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		No
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 ship has been built in conformity with the Society's Rules and Regulations and the Secretary's letters. The scantlings and arrangements are in accordance with, or equivalent to, those shown on the approved plans.		
The materials and workmanship are of good quality.		
The double bottom, peaks, deep and O.F. settling tanks, decks, bulkheads, tunnel, watertight doors, steering gear and windlass have been tested as required by the Rules and found satisfactory.		
Oil is carried as fuel in the double bottom tanks (except under Engine and Boiler spaces), the deep tanks (2 amidships) and 2 settling tanks.		
The flash point of oil is not lower than 150° Fah.		
Section 20 of the Rules has been complied with.		
The equipment of anchors is in accordance with the War Emergency Reduction of Equipment requirements. The anchors have been tested as required by Sections 12 and 13 of the Rules for quality and testing of materials except the Statutory Tests of Section 12 for which tensile tests on the materials of each head and shank were substituted (28 tons per sq. inch minimum with the usual extension). It is recommended that a suitable Notation be entered on the 1st Entry Certificate because of these departures from the Rules.		
The ship has also been surveyed during construction on behalf of the Minister of Munitions and Supply of Canada in accordance with the Hull Specification requirements which have been carried out to our satisfaction.		

The amount of Entry Fee	£ 50.00	Fees applied for, rd	3 May, 1944
Special Survey Fee	£ 1645.00	Received by me,	
Travelling Expenses, if any	£ 50.00	Owner's Rep.	£ 1000.00
State whether the Vessel has been built under Special Survey	Yes	Signature	M. J. Caldwell
Certificate to be sent to	New York	Date of issue	25/7/44
Committee's Minute	TUES. 18 JUL 1944		
Character assigned	+100A1 with 76d		
	2dled p. 16 Incl 5.44 77. above 150°2		
	LMC * 5.44 20 Ch		
	subject		
	2 WTA 250 Ch		
	(P. 240 Ch)		

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 ship is the fourteenth of the "Victory" type ships to be built by North Van Ship Repairs, Ltd., North Vancouver, to the order of the Minister of Munitions and Supply of Canada and is a sistership to their Hull No.127 - S.S. "FORT HALL" - (Ver. Report No.5952), except that the four forward deep tanks have been omitted. In lieu of these deep tanks' top, the main side frames in No.1 hold have been reinforced by one side stringer and web frame as shown on the blue print of N.V.S.R. Drg. N.V.55 forwarded with our First Entry Hull Report No.6090 - S.S. "LEASIDE PARK". This arrangement was approved in New York - please see certified copy of approved Drg. No.7439A sent with our First Entry Hull Report No.6046 - S.S. "BEATON PARK".

The approved plans have been retained here for dealing with sisterships building and to be built.

Blue print of Midship Section plan (finished) forwarded herewith.

Interim Certificate issued - Copy attached.

Immersed main ship's side openings Certificate issued - Copy attached.

A copy of each of the following Certificates attached hereto:-

Certificate No. F-10644 for cast steel stern frame.

Certificate No. F-11210 for rudder.

Certificate No. F-10897 for steam steering engine, quadrant and tiller.

Certificate No. F-10960 for windlass.

Certificate Nos. F-9324, F-9322, F-9839, F-9305, F-9325, F-9183, F-9838, F-8243, F-11129, F-9185 & F-10775 for winches.

Certificate Nos. F-9442, F-9443, F-9447 for anchors.

There are six (6) divisional bulkheads in tween decks all watertight, having no openings except on the forward bulkhead of the steering gear compartment which has 1 opening closed with steel hinging W.T. door.

PARTICULARS OF ELECTRIC WELDING (if employed) Plate butts and seams of:- O.T. hold bhds., (Trans. and Cr line). Plate butts of:- Upper and 2nd dks., side and bottom shell; inner bottom tank top (part) and margin; cr. girder and hatch side girders and tunnel. Stiffeners of:- O.T. hold bhds. (trans. and cr. line) and thrust recess. All connections to double bottom tanks' margin plates and gusset plates. 2nd deck and double bottom tanks' margin plates to shell and upper dk. stringer plates to shell at ends. Hold bhds. and tunnel sides to double bottom tank top. Other items of minor importance. Electrodes:- complying with Section 4, paras. 1 - 9 of the Rules have been employed for manual welding and the Rules for the application of Electric Arc Welding, to ship construction have been complied with where applicable.

SPECIAL NOTATIONS:- Either as part of the vessel's class or for record in the Register Book Cruiser stern, Direction finder, Echo Sounder, Wireless, Gyro Compass. The double bottom and deep tanks are fitted for the carriage of oil fuel - F.P. above 150° F.

HEAD

SHANK

Particulars of Drop Test of Cast Steel Anchors, viz.:- Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower 6111 lbs. J.F.H. F-9442 12-11-43	2014 lbs. J.F.H. F-9442 8-11-43
	2nd " 6110 lbs. J.F.H. F-9443 1-11-43	2008 lbs. J.F.H. F-9443 19-11-43
	Stream 2354 lbs. J.F.H. F-9447 20-11-43	772 lbs. J.F.H. F-9447 26-10-43

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop -- ft., R.Q.D. -- ft., Bridge -- ft., Forecastle -- ft.
(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 175384 Signal Letters V. G. G. C. Extreme Breadth over Belting No belting Over-all Length 441.5'

No. and Material of Decks Two - Steel

Parts of Bottom of Vessel coated with cement or approved composition Cement wash only in No.4 double bottom tank (under Engine and boiler space) and in bilges throughout except in way of deep tanks which remain uncoated. Cement in peaks.

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, Nos. 5 and 6	135.	306.0	Fore peak tank,	22.	145.
Double bottom, under Engines and Boilers, No.4	42.5	185.0	After peak tank,	24.	160.
Double bottom, if under Engines only, C/dam.	2.5	--	Deep tank, aft, of M/C Space	20.	753.
Double bottom, if under Boilers only, C/dam.	2.5	--	Deep tank, forward,		
Double bottom, forward, Nos. 1, 2 & 3	185.75	631.0	Other tanks, if fitted,		
Total length (if continuous) and Capacity	368.25	1122.0	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 76

Date 4-6-43

Dates of Surveys held while building

1943. Dec. 4, 31.

1944. Jan. 13, 22, 27, 31. Feb. 1, 7, 8, 9, 10, 11, 12, 14, 16, 17, 18, 19, 21, 22, 23, 25, 28, 29. Mar. 1, 2, 3, 6, 7, 8, 10, 15, 17, 21, 23, 24, 27, 28, 30. April 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 24, 25, 28, 29. May 2.

Total No. of Visits 55