



FOR THE INFORMATION OF INVESTORS IN OUTSTANDING RBC NORTH AMERICAN TECHNICAL & QUANTITATIVE ROC SECURITIES CAD HEDGED ONLY

Investment Objective:

The Debt Securities have been designed to provide investors with “long” exposure to the Bank’s proprietary 6-factor quantitative models, with the ability to allocate to Fixed Income Investments based on whether the stocks in the S&P/TSX Composite Index (“S&P/TSX”) and S&P 1500® Composite Index (“S&P 1500”) exhibit bearish trends to such an extent that the stocks of less than 20 issuers are eligible for notional inclusion in the applicable Equity Investment as determined by the applicable Model, while at the same time providing a partial hedge of the potential currency risk between the Canadian dollar currency, in which the Debt Securities and all payments under the Debt Securities to holders of the Debt Securities are denominated, including payment of the Redemption Amount at maturity, and the United States dollar currency in which the notional investments in the U.S. Portfolio are denominated. The goal of this strategy is to be exposed to the performance of the stocks selected by the Models, including dividends and other distributions, when the trends are positive for the applicable equity markets and to reduce or eliminate this exposure when the trends for such equity markets become negative.

No Canadian Tax Events:

1. Until maturity or disposition
2. On Portfolio changes or rebalancing
3. On quarterly return of capital payments

Benchmark:

S&P/TSX Composite Index and S&P 1500® Composite Index

Asset Class:

U.S. equity  
Canadian equity

ALLOCATION BY COUNTRY



- U.S. Equity Investment 40.00%
- U.S. Fixed Income Investment 10.00%
- Canadian Equity Investment 32.50%
- Canadian Fixed Income Investment 17.50%

INDUSTRY ALLOCATION



- Energy 27.59%
- Materials 10.34%
- Industrials 10.34%
- Consumer Discretionary 17.24%
- Consumer Staples 10.34%
- Health Care 6.90%
- Financials 10.34%
- Information Technology 3.45%
- Utilities 3.45%
- Fixed Income Investment 0.00%

EQUITY INVESTMENT – JULY 2022

As of June 30, 2022, in the aggregate the Portfolios were allocated 100% to Equity Investments. Indicated dividend yield as of June 30, 2022 was 1.38% on the U.S. Underlying Equity Securities (gross of any applicable withholding tax) and 1.64% on the Canadian Underlying Equity Securities, resulting in a total indicated dividend yield on the Underlying Equity Securities of 1.49% (gross of any applicable withholding tax).

Sector	Index	Symbol	Company	Weight	Dividend Yield (%)	Rank
Energy	S&P/TSX	SU	Suncor Energy Inc.	3.45%	11	4.16
	S&P/TSX	TOU	Tourmaline Oil Corp.	3.45%	12	1.34
	S&P 1500	CTRA	Coterra Energy Inc.	3.45%	12	2.33
	S&P/TSX	CVE	Cenovus Energy Inc.	3.45%	20	1.72
	S&P/TSX	BIR	Birchcliff Energy Ltd.	3.45%	22	0.91
	S&P/TSX	ARX	ARC Resources Ltd.	3.45%	59	2.96
	S&P/TSX	BTE	Baytex Energy Corp.	3.45%	81	0.00
	S&P 1500	OXY	Occidental Petroleum Corp.	3.45%	130	0.88
Materials	S&P/TSX	WPK	Winpak Ltd.	3.45%	3	0.27
	S&P/TSX	CCL.B	CCL Industries Inc.	3.45%	16	1.58
	S&P 1500	CC	The Chemours Co.	3.45%	26	3.12
Industrials	S&P/TSX	RBA	Ritchie Bros Auctioneers Inc.	3.45%	6	1.53
	S&P 1500	RGP	Resources Connection Inc.	3.45%	10	2.75
	S&P 1500	GFF	Griffon Corp.	3.45%	14	1.28
Consumer Discretionary	S&P 1500	MUSA	Murphy USA Inc.	3.45%	2	0.53
	S&P 1500	HRB	H&R Block Inc.	3.45%	6	3.06
	S&P 1500	LCII	LCI Industries	3.45%	13	3.75
	S&P 1500	AN	AutoNation Inc.	3.45%	17	0.00
	S&P 1500	CAL	Caleres Inc.	3.45%	19	1.07
Consumer Staples	S&P 1500	SAFM	Sanderson Farms Inc.	3.45%	1	0.82
	S&P 1500	PPC	Pilgrim's Pride Corp.	3.45%	4	0.00
	S&P/TSX	L	Loblaw Cos Ltd.	3.45%	25	1.40
Health Care	S&P 1500	LNTH	Lantheus Holdings Inc.	3.45%	15	0.00
	S&P 1500	MCK	McKesson Corp.	3.45%	59	0.58
Financials	S&P/TSX	FFH	Fairfax Financial Holdings Ltd.	3.45%	2	1.83
	S&P 1500	UFCS	United Fire Group Inc.	3.45%	7	1.87
	S&P/TSX	IFC	Intact Financial Corp.	3.45%	66	2.20
Information Technology	S&P 1500	CTXS	Citrix Systems Inc.	3.45%	43	0.00
Utilities	S&P/TSX	TA	TransAlta Corp.	3.45%	18	1.36

U.S. Portfolio Deletions

ZEUS	Olympic Steel Inc.	US\$19.42
WIRE	Encore Wire Corp.	US\$80.22
STLD	Steel Dynamics Inc.	US\$52.07
RS	Reliance Steel & Aluminum Co.	US\$136.81
NUE	Nucor Corp.	US\$85.45
IJIN	Insteel Industries Inc.	US\$28.13
CMC	Commercial Metals Co.	US\$26.76
CF	CF Industries Holdings Inc.	US\$67.22
CAR	Avis Budget Group Inc.	US\$122.67
BCC	Boise Cascade Co.	US\$47.97
AMPH	Amphastar Pharmaceuticals Inc.	US\$28.48

Canadian Portfolio Deletions

VET	Vermilion Energy Inc.	\$25.39
TRQ	Turquoise Hill Resources Ltd.	\$33.86
TECK.B	Teck Resources Ltd.	\$36.86
STLC	Stelco Holdings Inc.	\$32.59
RUS	Russel Metals Inc.	\$25.45
OGC	OceanaGold Corp.	\$2.41
NTR	Nutrien Ltd.	\$99.03
ECN	ECN Capital Corp.	\$5.52
CNQ	Canadian Natural Resources Ltd.	\$66.07
AAV	Advantage Energy Ltd.	\$8.34

U.S. Portfolio Additions

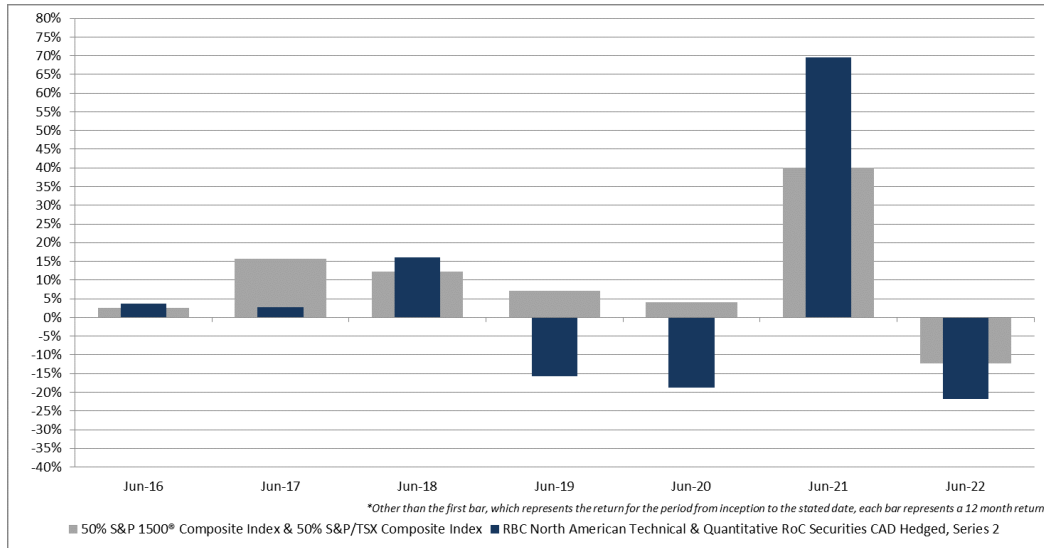
SAFM	Sanderson Farms Inc.	US\$172.09
RGP	Resources Connection Inc.	US\$16.61
LNTH	Lantheus Holdings Inc.	US\$51.57
LCII	LCI Industries	US\$94.26
GFF	Griffon Corp.	US\$21.74
CAL	Caleres Inc.	US\$21.01
AN	AutoNation Inc.	US\$91.45

Canadian Portfolio Additions

TA	TransAlta Corp.	\$14.87
RBA	Ritchie Bros Auctioneers Inc.	\$85.17
CCL.B	CCL Industries Inc.	\$61.82



HISTORICAL SECONDARY MARKET PRICE<sup>1,2</sup>



Return as of June 30, 2022	1 month	3 months	YTD	1 Year	Since Inception
RBC North American Technical & Quantitative RoC Securities CAD Hedged, Series 2	-12.18%	-19.11%	-24.52%	-21.79%	1.90%
50% S&P 1500 <sup>®</sup> Composite Index & 50% S&P/TSX Composite Index	-8.48%	-16.36%	-20.53%	-12.31%	10.25%

<sup>1</sup>This Historical Secondary Market Price chart reflects the historical closing secondary market price of RBC North American Technical & Quantitative RoC Securities CAD Hedged, Series 2 (the "Series 2") for each day such secondary market was open for trading and an amalgamation of the percentage change of the levels of the S&P 1500<sup>®</sup> Composite Index (50%) and the S&P/TSX Composite Index (50%) since the Issue Date of Series 2 on May 5, 2016. The Series 2 is the initial public implementation of the RBC North American Technical & Quantitative RoC Securities strategy. The closing secondary market price of Series 2 on its Issue Date was \$100.00. For Series 2, on the Issue Date, an amount equal to \$48.93 per Debt Security was notionally invested in the Canadian Portfolio and an amount equal to \$48.92 per Debt Security was notionally invested in the U.S. Portfolio. The secondary market price at any particular time is the price at which a holder of RBC North American Technical & Quantitative RoC Securities could dispose of such securities. The secondary market price may not be the same as, and may be substantially different from the NAV per Debt Security. The NAV per Debt Security between different series of RBC North American Technical & Quantitative RoC Securities may differ for various reasons including as a result of different levels of Note Program Amounts, applicable early trading charges and the issue date for a particular series. The difference in NAV per Debt Security between the Debt Securities for different series of RBC North American Technical & Quantitative RoC Securities could result in different secondary market prices for Debt Securities of different series of RBC North American Technical & Quantitative RoC Securities. The historical secondary market price for RBC North American Technical & Quantitative RoC Securities which are not Series 2 may differ from the historical secondary market price for Series 2 because the different Note Program Amounts for the different series of RBC North American Technical & Quantitative RoC Securities may affect the secondary market price of such securities. A series of RBC North American Technical & Quantitative RoC Securities with a Note Program Amount which is higher than the Note Program Amount for Series 2 would likely have a lower secondary market price than the secondary market price for Series 2. Prior historical secondary market prices of Series 2 are not necessarily indicative of any future secondary market price for Series 2 or other RBC North American Technical & Quantitative RoC Securities. There is no assurance that a secondary market for the Debt Securities will develop or be sustained.

<sup>2</sup>The secondary market price of the Debt Securities at any time will generally depend on, among other things, (a) how much the prices of the underlying interests have risen or fallen since the Issue Date of such Debt Securities; and (b) a number of other interrelated factors, including, without limitation, volatility in the prices of the underlying interests, the level of interest rates in the applicable markets, dividend yields on any of the securities, if any, comprising the underlying interest, the currency in which the series is denominated, any currency hedging and the Maturity Date. The relationship among these factors is complex and may also be influenced by various political, economic and other factors that can affect the trading price of a Debt Security.



**THE NORTH AMERICAN VALUE TECHNICAL & QUANTITATIVE STRATEGIES**

On the last Exchange Day of the month immediately preceding the Issue Date, and on the last Exchange Day of each month thereafter that the Debt Securities remain outstanding, other than the month immediately preceding the month in which the Final Valuation Date and/or Maturity Date falls, the Canadian Strategy and the U.S. Strategy will compare the Reassessed Number of Issuers to the Current Number of Issuers, if any, to determine the asset allocation for the applicable Portfolio for the next month.

If the Reassessed Number of Issuers on an Allocation Date is less than the Current Number of Issuers on such Allocation Date (such that the corresponding Equity Investment for the following month will consist of at least one less Underlying Equity Security Issuer than the current month), the ineligible stocks will be notionally sold and the proceeds will be used to notionally purchase the Underlying Equity Securities to be notionally added to the applicable Equity Investment, if any, and the remaining portion will be used to notionally purchase Bonds for the applicable Fixed Income Investment, as described in the Pricing Supplement.

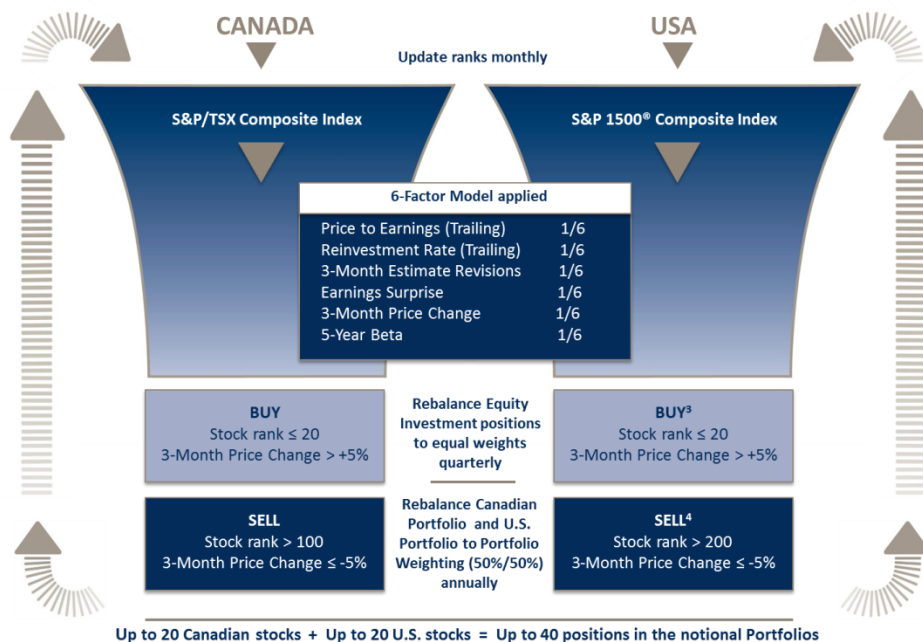
If the Reassessed Number of Issuers on an Allocation Date is greater than the Current Number of Issuers on such Allocation Date (such that the corresponding Equity Investment for the following month will consist of at least one more Underlying Equity Security Issuer than the current month), the Bonds (or the applicable portion thereof) notionally included in the applicable Fixed Income Investment on such Allocation Date will be notionally sold and the proceeds will be used to notionally purchase the Underlying Equity Securities to be notionally added to the applicable Equity Investment, as described in the Pricing Supplement.

If the Reassessed Number of Issuers on an Allocation Date equals the Current Number of Issuers on such Allocation Date, the allocation of the applicable Portfolio between an Equity Investment and a Fixed Income Investment will remain unchanged for the following month.

"Reassessed Number of Issuers" on any Allocation Date means the lesser of (a)(i) the number of Underlying Equity Security Issuers that are eligible to notionally remain in the applicable Equity Investment for the following month, plus (ii) the number of issuers that are eligible to be added to the applicable Equity Investment for the following month (each number as determined by the applicable Model on the last Business Day of the month in which such Allocation Date falls) and (b) 20 issuers.

"Current Number of Issuers" on any Allocation Date means the number of Underlying Equity Security Issuers notionally included in the applicable Equity Investment on such Allocation Date.

**MODELS – CANADIAN MODEL AND U.S. MODEL**



<sup>3</sup> High Risk Country Stocks and stocks that breach the Share Volume Purchase Limits will not be eligible for notional purchase.

<sup>4</sup> High Risk Country Stocks and certain stocks of real estate investment trusts will also be notionally sold, as further described in the Pricing Supplement.

The S&P 1500® Composite Index is a product of S&P Dow Jones Indices LLC or its affiliates ("SPDJI") and the S&P/TSX Composite Index is a product of SPDJI or its affiliates and TSX Inc., and such indices have been licensed for use by the Bank. Standard & Poor's® and S&P® are registered trademarks of Standard & Poor's Financial Services LLC ("S&P") and Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). TSX is a registered trademark of TSX Inc. The trademarks have been licensed to SPDJI and have been sublicensed for use for certain purposes by the Bank. The Debt Securities are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, any of their respective affiliates or TSX Inc. and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the S&P 1500® Composite Index or S&P/TSX Composite Index.

Capitalized terms used but not defined herein have the meanings ascribed to such terms in the Pricing Supplement.

Clients should evaluate the financial, market, legal, regulatory, credit, tax and accounting risks and consequences of the proposal before entering into any transaction, or purchasing any instrument. Clients should evaluate such risks and consequences independently of Royal Bank of Canada and the Dealers, RBC Dominion Securities Inc. and Laurentian Bank Securities Inc., respectively.

An investment in the Debt Securities involves risks. An investment in the Debt Securities is not the same as a direct investment in the securities that comprise the Portfolios and investors have no rights with respect to the securities in the Portfolios. The Debt Securities are considered to be "specified derivatives" under applicable Canadian securities laws. If you purchase Debt Securities, you will be exposed to fluctuations in interest rates and changes in the Value of the Portfolios, among other factors. Price changes may be volatile and an investment in the Debt Securities may be considered to be speculative. Since the Debt Securities are not principal protected and the Principal Amount will be at risk, you could lose substantially all of your investment.

The Debt Securities are not fixed income securities and are not designed to be alternatives to fixed income or money market instruments. The Debt Securities are structured products that possess downside risk.