January 6, 2023

Capital Markets

UNIT LINKED SECURITIES | RBC GLOBAL INVESTMENT SOLUTIONS

RBC SPDR S&P Oil & Gas Exploration & Production ETF Geared Buffered Callable Yield 13.25% Securities (CAD), Series 44, F-Class

Non-Principal Protected Security

3 year term

Performance linked to the SPDR® S&P Oil & Gas Exploration & Production ETF

Potential 13.2500% coupon per annual period

Subscriptions Close

on or about
January 16, 2023

FUNDSERV

RBC6594

Autocall Observation Dates

June 30, 2023 and monthly thereafter

This summary is qualified in its entirety by a pricing supplement (the "**Pricing Supplement**"), the base shelf prospectus dated March 25, 2022, the program prospectus supplement dated March 28, 2022, as supplemented November 11, 2022 and the product prospectus supplement dated March 28, 2022 in respect of equity, unit and debt linked securities, as supplemented November 11, 2022.

www.rbcnotes.com

KEY TERMS

Issuer:	Royal Bank of Canada
Issuer Credit Ratings:	Moody's: Aa1; S&P: AA-; DBRS: AA
Currency:	CAD
Minimum Investment:	50 Securities or $5,000
Term:	Approximately 3 years
Principal at Risk:	The Securities are not principal protected.
Underlying Securities:	The return on the Securities is linked to the price performance (excluding any dividends and other distributions) of the units (the "**Underlying Securities**" and each, an "**Underlying Security**") of the SPDR® S&P Oil & Gas Exploration & Production ETF (the "**ETF**"). Securities do not represent an interest in the Underlying Securities or in the component securities comprising the ETF's investment portfolio. The ETF invests primarily in and holds the securities of the constituents of the S&P Oil & Gas Exploration & Production Select Industry Index (the "**Tracked Index**"). Holders of the Securities will have no right or entitlement to the Underlying Securities, the ETF or the securities comprising the Tracked Index, including, without limitation, redemption rights (if any), voting rights or rights to receive dividends or other distributions paid on any of such securities (the annual dividend yield on the Underlying Securities for the ETF as of December 30, 2022 was 2.468%, representing an aggregate dividend yield of approximately 7.588% compounded annually over the approximately three-year term, on the assumption that the dividend yield remains constant).
Issue Date:	January 17, 2023
Initial Closing Price:	The "**Initial Closing Price**" is the Closing Price on December 30, 2022, being US$135.88.
Buffer:	40.00%. The principal of the Securities will be protected against a decline of up to 40.00% in the price performance of the Underlying Securities, but declines in the price performance of the Underlying Securities beyond the Buffer will be subject to the Gearing Multiplier.
Gearing Multiplier:	100/60, which is approximately 1.6667, applied only if the Percentage Change in the Underlying Securities is negative, declining by more than 40.00%.
Protection Buffer Price:	The "**Protection Buffer Price**" is 60.00% of the Initial Closing Price, being US$81.53.
Coupon Barrier Price:	The "**Coupon Barrier Price**" is 60.00% of the Initial Closing Price, being US$81.53.
Final Closing Price:	The "**Final Closing Price**" is the Closing Price on January 2, 2026 (the "**Final Valuation Date**").

KEY TERMS CONTINUED

Closing Price:	The "**Closing Price**" on any Exchange Day is equal to the official closing price of the Underlying Securities, as announced by the New York Stock Exchange, on such Exchange Day.
Maturity Date:	January 20, 2026
Observation Dates:	An "**Observation Date**" for the purposes of determining the amount of any Interest Payment will occur monthly on the dates specified below in each year that the Securities are outstanding, from and including January 30, 2023 to and including January 2, 2026. If any such Observation Date is not an Exchange Day, it shall be postponed to the next succeeding Exchange Day. Provided that the Securities are not redeemed by the Bank as described below, the Bank intends the Observation Dates to be:

January 30, 2023	February 28, 2023	March 30, 2023	April 28, 2023
May 30, 2023	June 30, 2023	July 31, 2023	August 30, 2023
September 29, 2023	October 30, 2023	November 30, 2023	December 29, 2023
January 30, 2024	February 29, 2024	March 28, 2024	April 30, 2024
May 30, 2024	June 28, 2024	July 30, 2024	August 30, 2024
September 30, 2024	October 30, 2024	November 29, 2024	December 30, 2024
January 30, 2025	February 28, 2025	March 31, 2025	April 30, 2025
May 30, 2025	June 30, 2025	July 30, 2025	August 29, 2025
September 30, 2025	October 30, 2025	November 28, 2025	January 2, 2026

Interest Payment Dates:	The "**Interest Payment Date**" for an Interest Payment, if any, will occur monthly on the dates specified below in each year that the Securities are outstanding, from and including February 2, 2023 to and including January 20, 2026. Provided that the Securities are not redeemed by the Bank as described below, the Bank intends the Interest Payment Dates to be:

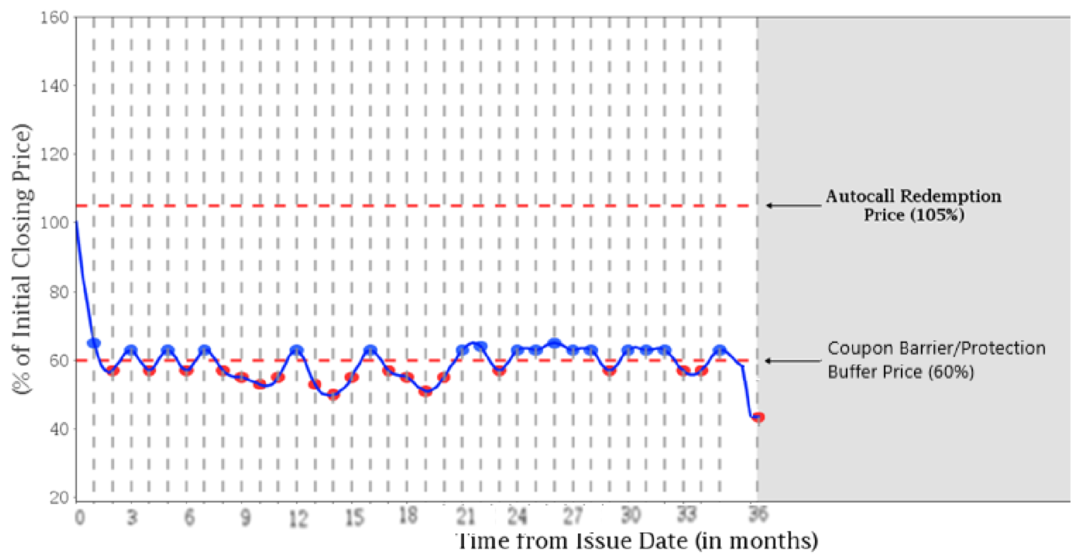
February 2, 2023	March 3, 2023	April 4, 2023	May 3, 2023
June 2, 2023	July 6, 2023	August 3, 2023	September 5, 2023
October 5, 2023	November 2, 2023	December 5, 2023	January 4, 2024
February 2, 2024	March 5, 2024	April 3, 2024	May 3, 2024
June 4, 2024	July 4, 2024	August 2, 2024	September 5, 2024
October 3, 2024	November 4, 2024	December 4, 2024	January 3, 2025
February 4, 2025	March 5, 2025	April 3, 2025	May 5, 2025
June 4, 2025	July 4, 2025	August 5, 2025	September 4, 2025
October 3, 2025	November 4, 2025	December 3, 2025	January 20, 2026

Interest Payments:	Interest payments (the "**Interest Payments**" and each, an "**Interest Payment**"), if any, on the Securities will be payable on each Interest Payment Date, in arrears, at a fixed interest rate of 1.1042% monthly ending on an Interest Payment Date (an "**Interest Period**") for each Interest Period in which a Digital Payout Event occurs on the Observation Date occurring in the Interest Period. On the basis of the foregoing, the interest on each $100 Principal Amount of Securities for an Interest Period in which a Digital Payout Event has occurred would equal $100 × 1.1042%. Thus, if a Digital Payout Event occurs: (a) on each Observation Date in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $13.25; (b) on eleven out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $12.1462; (c) on ten out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $11.042; (d) on nine out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $9.9378; (e) on eight out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $8.8336; (f) on seven out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $7.7294; (g) on six out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $6.6252; (h) on five out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $5.521; (i) on four out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $4.4168; (j) on three out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $3.3126; (k) on two out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $2.2084; and (l) on one out of the twelve Observation Dates in any twelve-month period, the amount of interest payable on each $100 Principal Amount of Securities for that twelve-month period will be $1.1042. If a Digital Payout Event does not occur on the Observation Date during a particular Interest Period, no interest will be payable on the Securities for such Interest Period.
Digital Payout Event:	A "**Digital Payout Event**" will occur if, on the relevant Observation Date, the Closing Price is greater than or equal to the Coupon Barrier Price.
Autocall Redemption Event:	An "**Autocall Redemption Event**" will occur if the Closing Price on an Observation Date other than the first, second, third, fourth, fifth and last Observation Dates is greater than or equal to 105.00% of the Initial Closing Price (the "**Autocall Redemption Price**"). On the next succeeding Interest Payment Date following the occurrence of an Autocall Redemption Event (the "**Autocall Redemption Date**") the Securities will be redeemed for an amount equal to the Principal Amount thereof (the "**Autocall Redemption Amount**"). In addition to the Autocall Redemption Amount, an Interest Payment will be paid on the Autocall Redemption Date.
Payment at Maturity:	On the Maturity Date, if the Securities have not been previously redeemed, the amount payable (the "**Final Redemption Amount**") for each $100 Principal Amount per Security will be equal to: (a) if the Final Closing Price is greater than or equal to the Protection Buffer Price, $100; or (b) if the Final Closing Price is less than the Protection Buffer Price, the Final Redemption Amount will be reduced by the amount of any decline beyond the Buffer multiplied by the Gearing Multiplier, and the Final Redemption Amount will be: $100.00 + [$100.00 × (Percentage Change + 40.00%) × Gearing Multiplier] In addition to the Final Redemption Amount, an Interest Payment will be paid on the Maturity Date if a Digital Payout Event occurs on the Final Valuation Date. The minimum payment at maturity is $1.00.
Percentage Change:	The "**Percentage Change**" is the amount, expressed as a percentage rounded to three decimal places, equal to: $\frac{(\text{Final Closing Price - Initial Closing Price})}{\text{Initial Closing Price}}$
Secondary Market:	Fundserv, RBC6594 Generally, to be effective on a Business Day, a redemption request will need to be initiated by 2:00 p.m. (Toronto time) on that Business Day (or such other time as may be established by Fundserv). Any request received after such time will be deemed to be a request sent and received on the next following Business Day.

Sample Calculations of Final Redemption Amount or Autocall Redemption Amount and Interest Payments:

The examples set out below are included for illustration purposes only. The price performance of the Underlying Securities used to illustrate the calculation of the Final Redemption Amount or Autocall Redemption Amount and the Interest Payments over the term of the Securities is not an estimate or forecast of the price performance of the Underlying Securities or the Securities. All examples assume that a holder of the Securities has purchased Securities with an aggregate Principal Amount of $100 and that no Extraordinary Event has occurred. All examples assume a Buffer of 40.00%, a Gearing Multiplier of 100/60, which is approximately 1.6667, a Coupon Barrier Price of 60.00% of the Initial Closing Price, a Protection Buffer Price of 60.00% of the Initial Closing Price and an Autocall Redemption Price of 105.00% of the Initial Closing Price. For convenience, each vertical line in the charts below represents both a hypothetical Observation Date and the next succeeding Interest Payment Date. Certain dollar amounts are rounded to the nearest whole cent.

Example #1: Loss Scenario with Payment on the Maturity Date at Less Than the Principal Amount



- Indicates Observation Dates on which the Coupon Barrier Price is breached; therefore no Interest Payment will occur on the related Interest Payment Date.
- Indicates Observation Dates on which there is a Digital Payout Event; therefore an Interest Payment will occur on the related Interest Payment Date.
- SPDR® S&P Oil & Gas Exploration & Production ETF

In this scenario, there is no Observation Date on which the Closing Price is at or above the Autocall Redemption Price and, accordingly, the Securities would not be redeemed before the Maturity Date. On the Final Valuation Date, the Final Closing Price is below the Protection Buffer Price.

(i) Interest Payments

In this example, there is a Digital Payout Event on 17 of the 36 Observation Dates. On the other 19 Observation Dates, no Digital Payout Event would occur because the Closing Price is below the Coupon Barrier Price. Therefore, the Interest Payment of $1.1042 per Interest Period would be payable for 17 Interest Periods on the applicable Interest Payment Date, for total Interest Payments of:

Principal Amount of Securities × 1.1042% per Interest Period × 17 Interest Periods

$100 × 1.1042% × 17 = $18.77

(ii) Final Redemption Amount

In this example, the Initial Closing Price is US$135.88 and the Final Closing Price is US$54.35. Therefore, the Final Redemption Amount would be calculated as follows:

Initial Closing Price = US$135.88

Final Closing Price = US$54.35

Percentage Change = (US$54.35 - US$135.88) / US$135.88 = -0.60001 or -60.001%

Since the Final Closing Price is below its Protection Buffer Price, the Final Redemption Amount is reduced by the amount of any decline beyond the Buffer multiplied by the Gearing Multiplier and is calculated as follows:

Final Redemption Amount = $100.00 + [$100.00 × (-60.001% + 40.00%) × 1.6667] = $66.66

Therefore, the total amounts payable per Security from the Issue Date to the Maturity Date are:

(a) Total Interest Payments: $18.77

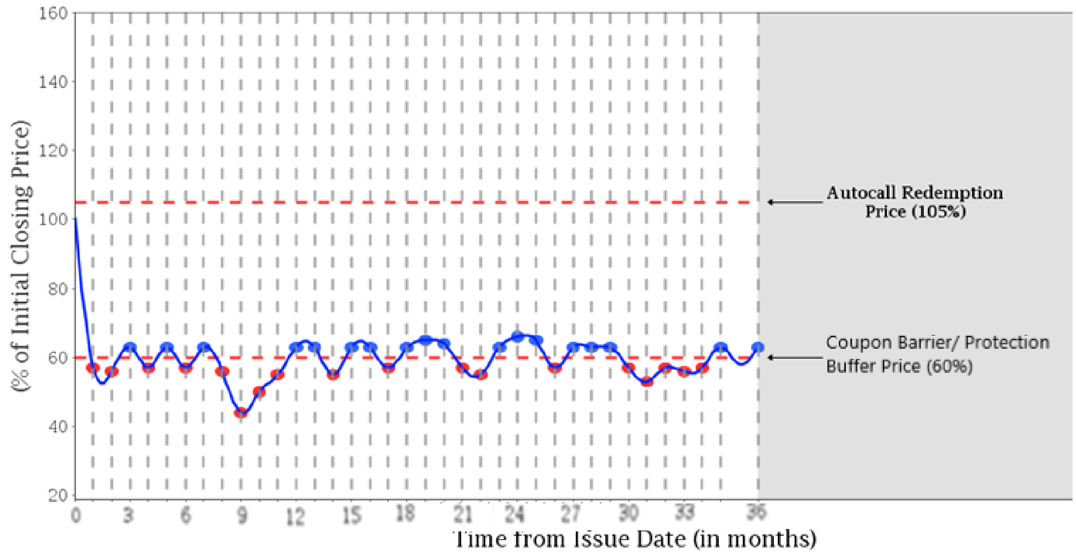
(b) Final Redemption Amount: $66.66

(c) Total amount paid over the term of the Securities: $85.43

The equivalent annually compounded rate of return in this example is -5.11%.

Sample Calculations:
(continued)

Example #2: Gain Scenario with Payment on the Maturity Date at the Principal Amount



- Indicates Observation Dates on which the Coupon Barrier Price is breached; therefore no Interest Payment will occur on the related Interest Payment Date.
- Indicates Observation Dates on which there is a Digital Payout Event; therefore an Interest Payment will occur on the related Interest Payment Date.
- SPDR® S&P Oil & Gas Exploration & Production ETF

In this scenario, there is no Observation Date on which the Closing Price is at or above the Autocall Redemption Price and, accordingly, the Securities would not be redeemed before the Maturity Date. On the Final Valuation Date, the Final Closing Price is at or above the Protection Buffer Price.

(i) Interest Payments

In this example, there is a Digital Payout Event on 18 of the 36 Observation Dates. On the other 18 Observation Dates, no Digital Payout Event would occur because the Closing Price is below the Coupon Barrier Price. Therefore, the Interest Payment of $1.1042 per Interest Period would be payable for 18 Interest Periods on the applicable Interest Payment Date for total Interest Payments of:

$$\text{Principal Amount of Securities} \times 1.1042\% \text{ per Interest Period} \times 18 \text{ Interest Periods}$$

$$\$100 \times 1.1042\% \times 18 = \$19.88$$

(ii) Final Redemption Amount

In this example, since the Final Closing Price is US$85.60, which is above the Protection Buffer Price of 60.00% of the Initial Closing Price of US$135.88, being US$81.53, the Final Redemption Amount per Security is equal to $100.00.

Therefore, the total amounts payable per Security from the Issue Date to the Maturity Date are:

(a) Total Interest Payments: $19.88

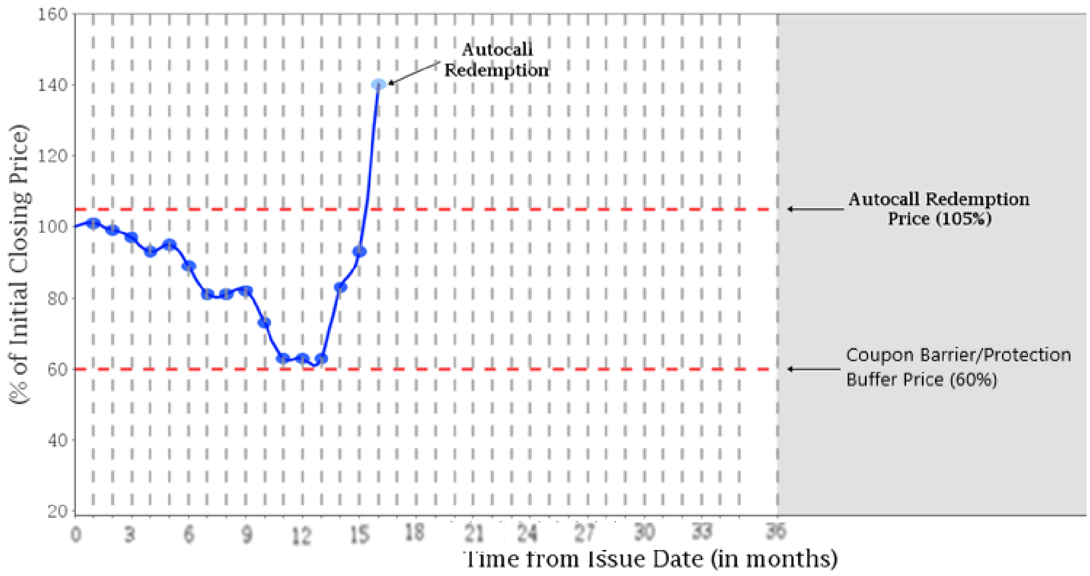
(b) Final Redemption Amount: $100.00

(c) Total amount paid over the term of the Securities: $119.88

The equivalent annually compounded rate of return in this example is 6.23%.

Sample Calculations: *(continued)*

Example #3: Gain Scenario with Autocall Redemption Event



- Indicates Observation Date on which the Autocall Redemption Price is exceeded.
- Indicates Observation Dates on which there is a Digital Payout Event; therefore an Interest Payment will occur on the related Interest Payment Date.
- — SPDR® S&P Oil & Gas Exploration & Production ETF

In this scenario, the Closing Price is at or above the Autocall Redemption Price on the Observation Date that falls 16 months into the term of the Securities. This would constitute an Autocall Redemption Event and, on the next succeeding Interest Payment Date, the Bank would redeem the Securities.

(i) Interest Payments

In this example, there is a Digital Payout Event on each of the 16 Observation Dates prior to the redemption of the Securities because the Closing Price is at or above the Coupon Barrier Price on each such date. Therefore, the Interest Payment of $1.1042 per Interest Period would be payable for each Interest Period on the applicable Interest Payment Date (including on the Autocall Redemption Date), for total Interest Payments of:

$$\text{Principal Amount of Securities} \times 1.1042\% \text{ per Interest Period} \times 16 \text{ Interest Periods}$$

$$\$100 \times 1.1042\% \times 16 = \$17.67$$

(ii) Autocall Redemption Amount

The Autocall Redemption Amount per Security is equal to $100.00.

Therefore, the total amounts payable per Security from the Issue Date to the Autocall Redemption Date are:

(a) Total Interest Payments: $17.67

(b) Autocall Redemption Amount: $100.00

(c) Total amount paid over the term of the Securities: $117.67

The equivalent annually compounded rate of return in this example is 12.98%.

Initial Estimated Value: The initial estimated value of the Securities as of December 30, 2022 was $98.32 per Security, which is less than the price to the public and is not an indication of the actual profit to the Bank or its affiliates. The actual value of the Securities at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. The initial estimated value of the Securities is an estimate only and is based on the value of the Bank's obligation to make the payments on the Securities. We describe our determination of the initial estimated value in more detail in the Pricing Supplement.

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