ROYAL BANK OF CANADA Form FWP March 03, 2017

ISSUER FREE WRITING PROSPECTUS

Filed Pursuant to Rule 433

Registration Statement No. 333-208507

Dated March 3, 2017

Royal Bank of Canada Capped GEARS

\$• Securities Linked to the SPDR S&P Oil & Gas Exploration & Production ETF due on or about May 31, 2018 Investment Description

Capped GEARS (each, a "Security" and collectively, the "Securities") are unconditional, unsecured and unsubordinated debt securities issued by Royal Bank of Canada with returns linked to the performance of the SPDR S&P® Oil & Gas Exploration & Production ETF (the "Underlying"). If the Underlying Return (as defined below) is positive, we will repay the principal amount at maturity plus pay a return equal to 3 (the "Upside Gearing") times the Underlying Return, up to the Maximum Gain. If the Underlying Return is negative, we will pay less than the principal amount at maturity and you will lose 1% of the principal amount of your Securities for every 1% decline in the price of the Underlying, up to a loss of 100% of your investment. Investing in the Securities involves significant risks. The Securities do not pay dividends or interest. You may lose some or all of the principal amount. Any payment on the Securities, including any repayment of principal, is subject to our creditworthiness. If we were to default on our payment obligations, you may not receive any amounts owed to you under the Securities and you could lose your entire investment. The Securities will not be listed on any securities exchange. Non-U.S. holders will not be subject to withholding on dividend equivalent payments under Section 871(m) of the U.S. Internal Revenue Code. Please see the discussion below under "U.S. Federal Income Tax Consequences," which applies to the Securities.

Features Key Dates¹

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Enhanced Growth Potential Up to the Maximum Gain — At maturity, if the Underlying Return is positive, we will pay qyou the principal amount plus a return equal to the Upside Gearing times the Underlying Return up to the Maximum Gain.

Full Downside Market Exposure — If the Underlying Return is zero, we will pay the full principal amount at maturity. However, if the Underlying Return is negative, investors will be exposed to the full downside performance of the Underlying and we will pay less than the full principal amount, resulting in a loss of the principal amount that is proportionate to the percentage decline in the Underlying. Accordingly, you may lose some or all of the principal amount of the Securities. Any payment on the Securities, including any repayment of principal, is subject to our creditworthiness.

Trade Date¹ March 28, 2017 Settlement Date¹ March 31, 2017 Final Valuation Date² May 25, 2018 Maturity Date² May 31, 2018

Expected. In the event that we make any change to the expected Trade Date and Settlement Date, the Final Valuation Date and Maturity Date will be changed so that the stated term of the Securities remains approximately the same. Subject to postponement in the event of a market disruption event and as described under "General Terms of the

Securities — Payment at Maturity" in the accompanying product prospectus supplement no. UBS-EQUITY-1.

NOTICE TO INVESTORS: THE SECURITIES ARE SIGNIFICANTLY RISKIER THAN CONVENTIONAL DEBT INSTRUMENTS. THE ISSUER IS NOT NECESSARILY OBLIGATED TO REPAY THE FULL PRINCIPAL AMOUNT OF THE SECURITIES AT MATURITY, AND THE SECURITIES HAVE FULL DOWNSIDE MARKET RISK SIMILAR TO THE UNDERLYING. THIS MARKET RISK IS IN ADDITION TO THE CREDIT RISK INHERENT IN PURCHASING OUR DEBT OBLIGATION. YOU SHOULD NOT PURCHASE THE SECURITIES IF YOU DO NOT UNDERSTAND OR ARE NOT COMFORTABLE WITH THE SIGNIFICANT RISKS INVOLVED IN INVESTING IN THE SECURITIES.

YOU SHOULD CAREFULLY CONSIDER THE RISKS DESCRIBED UNDER "KEY RISKS" BEGINNING ON PAGE 5 OF THIS FREE WRITING PROSPECTUS AND UNDER "RISK FACTORS" BEGINNING ON PAGE PS-4 OF THE ACCOMPANYING PRODUCT PROSPECTUS SUPPLEMENT NO. UBS-EQUITY-1 BEFORE PURCHASING ANY SECURITIES. EVENTS RELATING TO ANY OF THOSE RISKS, OR OTHER RISKS AND UNCERTAINTIES, COULD ADVERSELY AFFECT THE MARKET VALUE OF, AND THE RETURN ON, YOUR SECURITIES. YOU COULD LOSE SOME OR ALL OF THE PRINCIPAL AMOUNT OF THE SECURITIES.

Security Offering

We are offering Capped GEARS Linked to the SPDR S&P® Oil & Gas Exploration & Production ETF ("XOP"). The return on the principal amount is subject to, and will not exceed, the predetermined Maximum Gain, which will be determined on the Trade Date. The Securities are offered at a minimum investment of 100 Securities at the Price to Public described below. The indicative Maximum Gain range for the Securities is listed below. The actual Maximum Gain and Initial Underlying Price for the Securities will be determined on the Trade Date.

Underlying	Upside Gearing	Maximum Gain	Initial Underlying Price	CUSIP	ISIN
SPDR S&P® Oil & Gas Exploration & Production ETF (XOP)	3	26.80% to 28.80%		78014E46	3US78014E4632

See "Additional Information About Royal Bank of Canada and the Securities" in this free writing prospectus. The Securities will have the terms specified in the prospectus dated January 8, 2016, the prospectus supplement dated January 8, 2016, product prospectus supplement no. UBS-EQUITY-1 dated January 4, 2017 and this free writing prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Securities or passed upon the accuracy or the adequacy of this free writing prospectus or the accompanying prospectus, prospectus supplement and product prospectus supplement no. UBS-EQUITY-1. Any representation to the contrary is a criminal offense.

	Price to Public	Fees and Commissions ⁽¹⁾	Proceeds to Us
Offering of the Securities	Total Per Security	Total Per Security	Total Per Security
Securities Linked to the SPDR S&P® Oil & Gas Exploration & Production ETF (XOP)	\$10.00	\$0.20	\$9.80

(1) UBS Financial Services Inc., which we refer to as UBS, will receive a commission that will depend on market conditions on the Trade Date. In no event will the commission received by UBS exceed \$0.20 per \$10 principal amount of the Securities. See "Supplemental Plan of Distribution (Conflicts of Interest)" on page 13 of this free writing prospectus.

The initial estimated value of the Securities as of the date of this document is \$9.7563 per \$10 in principal amount, which is less than the price to public. The pricing supplement relating to the Securities will set forth our estimate of the initial value of the Securities as of the Trade Date, which will not be more than \$0.20 less than this amount. 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. We describe our determination of the initial estimated value under "Key Risks" beginning on page 5, "Supplemental Plan of Distribution (Conflicts of Interest)" on page 13 and "Structuring the Securities" on page 13 of this free writing prospectus.

The Securities will not constitute deposits insured under the Canada Deposit Insurance Corporation Act or by the United States Federal Deposit Insurance Corporation or any other Canadian or United States government agency or instrumentality.

UBS Financial Services Inc. RBC Capital Markets, LLC

Additional Information About Royal Bank of Canada and the Securities

Royal Bank of Canada has filed a registration statement (including a prospectus) with the Securities and Exchange Commission, or SEC, for the offering to which this free writing prospectus relates. Before you invest, you should read the prospectus in that registration statement and the other documents relating to this offering that Royal Bank of Canada has filed with the SEC for more complete information about Royal Bank of Canada and this offering. You may obtain these documents without cost by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, Royal Bank of Canada, any agent or any dealer participating in this offering will arrange to send you the prospectus, the prospectus supplement, product prospectus supplement no. UBS-EQUITY-1 and this free writing prospectus if you so request by calling toll-free 866-609-6009.

You may revoke your offer to purchase the Securities at any time prior to the time at which we accept such offer by notifying the applicable agent. We reserve the right to change the terms of, or reject any offer to purchase, the Securities prior to their issuance. In the event of any changes to the terms of the Securities, we will notify you and you will be asked to accept such changes in connection with your purchase. You may also choose to reject such changes, in which case we may reject your offer to purchase.

You should read this free writing prospectus together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016, relating to our senior global medium-term notes, Series G, of which these Securities are a part, and the more detailed information contained in product prospectus supplement no. UBS-EQUITY-1 dated January 4, 2017. This free writing prospectus, together with the documents listed below, contains the terms of the Securities and supersedes all other prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, fact sheets, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in "Risk Factors" in the accompanying product prospectus supplement no. UBS-EQUITY-1, as the Securities involve risks not associated with conventional debt securities. If the terms discussed in this free writing prospectus differ from those discussed in the product prospectus supplement no. UBS-EQUITY-1, the prospectus supplement, or the prospectus, the terms discussed herein will control. You may access these on the SEC website at www.sec.gov as follows (or if such address has changed, by reviewing our filing for the relevant date on the SEC website):

"Product prospectus supplement no. UBS-EQUITY-1 dated January 4, 2017:

https://www.sec.gov/Archives/edgar/data/1000275/000114036117000487/form424b5.htm

"Prospectus supplement dated January 8, 2016:

http://www.sec.gov/Archives/edgar/data/1000275/000121465916008811/p14150424b3.htm "Prospectus dated January 8, 2016:

http://www.sec.gov/Archives/edgar/data/1000275/000121465916008810/j18160424b3.htm As used in this free writing prospectus, "we," "us" or "our" refers to Royal Bank of Canada.

Investor Suitability

The Securities may be suitable for you if, among other considerations:

- "You fully understand the risks inherent in an investment in the Securities, including the risk of loss of your entire initial investment.
- You can tolerate the loss of some or all of the principal amount of the Securities and are willing to make an investment that has similar downside market risk as a hypothetical investment in the Underlying.
- You believe that the price of the Underlying will appreciate over the term of the Securities and that the appreciation is unlikely to exceed the Maximum Gain.
- You understand and accept that your potential return is limited by the Maximum Gain and you would be willing to invest in the Securities if the Maximum Gain was set to the bottom of the range indicated on the cover page of this free writing prospectus (the actual Maximum Gain will be determined on the Trade Date).
- "You can tolerate fluctuations in the price of the Securities prior to maturity that may be similar to or exceed the downside fluctuations in the price of the Underlying.
- "You fully understand and accept the risks associated with the Underlying.
- "You do not seek current income from your investment and are willing to forgo dividends paid on the Underlying.
- "You are willing to hold the Securities to maturity and accept that there may be little or no secondary market for the Securities.
- You are willing to assume our credit risk for all payments under the Securities, and understand that if we default on our obligations, you may not receive any amounts due to you, including any repayment of principal.

The Securities may not be suitable for you if, among other considerations:

- "You do not fully understand the risks inherent in an investment in the Securities, including the risk of loss of your entire initial investment.
- You require an investment designed to provide a full return of principal at maturity.
- You cannot tolerate the loss of some or all of the principal amount of the Securities, and you are not willing to make an investment that has similar downside market risk as a hypothetical investment in the Underlying.
- "You believe that the price of the Underlying will decline over the term of the Securities, or you believe the price of the Underlying will appreciate over the term of the Securities by a percentage that exceeds the Maximum Gain.
- You seek an investment that has unlimited return potential without a cap on appreciation.
- "You would be unwilling to invest in the Securities if the Maximum Gain was set to the bottom of the range indicated on the cover page of this free writing prospectus (the actual Maximum Gain will be determined on the Trade Date).
- "You cannot tolerate fluctuations in the price of the Securities prior to maturity that may be similar to or exceed the downside fluctuations in the price of the Underlying.
- "You do not fully understand or accept the risks associated with the Underlying.
- "You seek current income from this investment or prefer to receive the dividends paid on the Underlying.
- You are unable or unwilling to hold the Securities to maturity or you seek an investment for which there will be an active secondary market.
- "You are not willing to assume our credit risk for all payments under the Securities, including any repayment of principal.

The suitability considerations identified above are not exhaustive. Whether or not the Securities are a suitable investment for you will depend on your individual circumstances, and you should reach an investment decision only after you and your investment, legal, tax, accounting, and other advisers have carefully considered the suitability of an investment in the Securities in light of your particular circumstances. You should also review carefully the "Key Risks" beginning on page 5 of this free writing prospectus and "Risk Factors" beginning on page PS-4 of the accompanying product prospectus supplement no. UBS-EQUITY-1 for risks related to an investment in the Securities. In addition, you should review carefully "The iShare§ MSCI Emerging Markets ETF" beginning on page 10 of this free writing prospectus for more information about the Underlying.

Indicative Terms of the Securities¹

Issuer: Royal Bank of Canada

Issue Price: \$10 per Security (subject to a minimum purchase of 100 Securities).

Principal

\$10 per Security.

Amount:

Term²:

Approximately 14 months

Underlying:

SPDR S&P® Oil & Gas Exploration & Production ETF

Upside Gearing:

Maximum Gain:

The Maximum Gain is expected to be between 26.80% and 28.80% (to be determined on the

Trade Date).

Trade Date).

If the Underlying Return is positive or zero, we will pay you:

Payment at

\$10 + (\$10 x the lesser of (i) Upside Gearing x Underlying Return and (ii) Maximum Gain)

Maturity

If the Underlying Return is negative, we will pay you:

(per \$10

 $$10 + ($10 \times Underlying Return)$

Security):

In this scenario, you will lose some or all of the principal amount of the Securities, in an amount

proportionate to the negative Underlying Return.

Underlying

Final Underlying Price - Initial Underlying Price

Return:

Initial Underlying Price

Initial

Underlying

The Closing Price of the Underlying on the Trade Date.

Price:

Final Underlying

Price:

The Closing Price of the Underlying on the Final Valuation Date.

Investment Timeline

Trade

The Maximum Gain is set. The Initial Underlying Price is determined.

Date:

The Final Underlying Price and Underlying Return are determined.

If the Underlying Return is positive or zero, we will pay you a cash payment per \$10 Security that provides you with your principal amount plus a return equal to the Underlying Return multiplied by the Upside Gearing, subject to the Maximum Gain. Your payment at maturity per \$10 Security will be

equal to:

Maturity

\$10 + (\$10 x the lesser of (i) Upside Gearing x Underlying Return and (ii) Maximum Gain)

Date:

If the Underlying Return is negative, we will pay you a cash payment that is less than the principal amount of \$10.00 per Security, resulting in a loss of principal that is proportionate to the percentage decline in the Underlying, and equal to:

\$10 + (\$10 x Underlying Return)

In this scenario, you will lose some or all of the principal amount of the Securities, in an amount proportionate to the negative Underlying Return.

INVESTING IN THE SECURITIES INVOLVES SIGNIFICANT RISKS. YOU MAY LOSE SOME OR ALL OF YOUR PRINCIPAL AMOUNT. ANY PAYMENT ON THE SECURITIES, INCLUDING ANY REPAYMENT OF PRINCIPAL, IS SUBJECT TO OUR CREDITWORTHINESS. IF WE WERE TO DEFAULT ON OUR PAYMENT

OBLIGATIONS, YOU MAY NOT RECEIVE ANY AMOUNTS OWED TO YOU UNDER THE SECURITIES AND YOU COULD LOSE YOUR ENTIRE INVESTMENT.

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Terms used in this free writing prospectus, but not defined herein, shall have the meanings ascribed to them in the product prospectus supplement.

In the event we make any change to the expected Trade Date and Settlement Date, the Final Valuation Date and Maturity Date will be changed to ensure that the stated term of the Securities remains approximately the same.

Key Risks

An investment in the Securities involves significant risks. Investing in the Securities is not equivalent to investing directly in the Underlying. These risks are explained in more detail in the "Risk Factors" section of the accompanying product prospectus supplement no. UBS-EQUITY-1. Investing in the Securities is not equivalent to investing directly in the Underlying or the securities held by the Underlying. We also urge you to consult your investment, legal, tax, accounting and other advisors before investing in the Securities.

Risks Relating to the Securities Generally

exceed the Maximum Gain.

Your Investment in the Securities May Result in a Loss of Principal: The Securities differ from ordinary debt securities in that we are not necessarily obligated to repay the full principal amount of the Securities at maturity. The return on the Securities at maturity is linked to the performance of the Underlying and will depend on whether, and "the extent to which, the Underlying Return is positive or negative. If the Final Underlying Price is less than the Initial Underlying Price, you will be fully exposed to any negative Underlying Return and we will pay you less than your principal amount at maturity, resulting in a loss of principal of your Securities that is proportionate to the percentage decline in the Underlying. Accordingly, you could lose the entire principal amount of the Securities.

The Upside Gearing Applies Only if You Hold the Securities to Maturity: The application of the Upside Gearing only applies at maturity. If you are able to sell your Securities prior to maturity in the secondary market, the price "you receive will likely not reflect the full effect of the Upside Gearing and the return you realize may be less than the

The Appreciation Potential of the Securities Is Limited by the Maximum Gain: If the Underlying Return is positive, we will pay you \$10 per Security at maturity plus an additional return that will not exceed the Maximum Gain, regardless of the appreciation in the Underlying, which may be significant. Therefore, you will not benefit from any appreciation of the Underlying in excess of an amount that, when multiplied by the Upside Gearing, exceeds the Maximum Gain and your return on the Securities may be less than your return would be on a hypothetical direct investment in the Underlying.

Upside Gearing times the return of the Underlying at the time of sale, even if that return is positive and does not

"No Interest Payments: We will not pay any interest with respect to the Securities.

An Investment in the Securities Is Subject to Our Credit Risk: The Securities are unsubordinated, unsecured debt obligations of the issuer, Royal Bank of Canada, and are not, either directly or indirectly, an obligation of any third ...party. Any payment to be made on the Securities, including any repayment of principal at maturity, depends on our ability to satisfy our obligations as they come due. As a result, our actual and perceived creditworthiness may affect the market value of the Securities and, in the event we were to default on our obligations, you may not receive any amounts owed to you under the terms of the Securities and you could lose your entire initial investment.

Your Return on the Securities May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity: The return that you will receive on the Securities, which could be negative, may be less than the return you ...could earn on other investments. Even if your return is positive, your return may be less than the return you could earn if you bought a conventional senior interest bearing debt security of ours with the same maturity date or if you invested directly in the Underlying. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money.

The Initial Estimated Value of the Securities Will Be Less than the Price to the Public: The initial estimated value that is set forth on the cover page of this document, and that will be set forth in the final pricing supplement for the Securities, will be less than the public offering price you pay for the Securities, does not represent a minimum price at which we, RBCCM or any of our other affiliates would be willing to purchase the Securities in any secondary market (if any exists) at any time. If you attempt to sell the Securities prior to maturity, their market value may be lower than the price you paid for them and the initial estimated value. This is due to, among other things, changes in the price of the Underlying, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to public of the underwriting discount, and our estimated profit and the costs relating to our hedging of the Securities. These factors, together with various credit, market and economic factors over the term of the Securities, are expected to reduce the price at which you may be able to sell the Securities in any secondary market and will affect the value of the Securities in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Securities prior to maturity may be less than the price

to public, as any such sale price would not be expected to include the underwriting discount and our estimated profit and the costs relating to our hedging of the Securities. In addition, any price at which you may sell the Securities is likely to reflect customary bid-ask spreads for similar trades. In addition to bid-ask spreads, the value of the Securities determined for any secondary market price is expected to be based on the secondary market rate rather than the internal borrowing rate used to price the Securities and determine the initial estimated value. As a result, the secondary market price will be less than if the internal borrowing rate was used. The Securities are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Securities to maturity. Our Initial Estimated Value of the Securities Is an Estimate Only, Calculated as of the Time the Terms of the Securities Are Set: The initial estimated value of the Securities is based on the value of our obligation to make the payments on the Securities, together with the mid-market value of the derivative embedded in the terms of the Securities. See "Structuring the Securities" below. Our estimate is based on a variety of assumptions, including our credit spreads, expectations as to dividends, interest rates and volatility, and the expected term of the Securities. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Securities or similar securities at a price that is significantly different than we do.

The value of the Securities at any time after the Trade Date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Securities in any secondary market, if any, should be expected to differ materially from the initial estimated value of your Securities and the amount that will be paid at maturity.

Owning the Securities Is Not the Same as Owning the Underlying or the Stocks Comprising the Underlying's Underlying Index: The return on your Securities may not reflect the return you would realize if you actually owned ... the Underlying or stocks included in the Underlying's underlying index. As a holder of the Securities, you will not have voting rights or rights to receive dividends or other distributions or other rights that holders of the Underlying or these stocks would have, and any such dividends will not be incorporated in the determination of the Underlying Return.

The Policies of the Underlying's Investment Adviser Could Affect the Amount Payable on the Securities and Their "Market Value: The policies of the Underlying's investment adviser concerning the management of the Underlying, additions, deletions or substitutions of the securities

held by the Underlying could affect the market price of shares of the Underlying and, therefore, the amount payable on the Securities on the maturity date and the market value of the Securities before that date. The amount payable on the Securities and their market value could also be affected if the Underlying investment adviser changes these policies, for example, by changing the manner in which it manages the Underlying, or if the Underlying investment adviser discontinues or suspends maintenance of the Underlying, in which case it may become difficult to determine the market value of the Securities. The Underlying's investment adviser has no connection to the offering of the Securities and has no obligations to you as an investor in the Securities in making its decisions regarding the Underlying.

Historical Prices of the Underlying Should Not Be Taken as an Indication of Its Future Prices During the Term of the Securities: The trading prices of the Underlying will determine the value of the Securities at any given time. "However, it is impossible to predict whether the price of the Underlying will rise or fall, and trading prices of the common stocks held by the Underlying will be influenced by complex and interrelated political, economic, financial and other factors that can affect the issuers of those stocks, and therefore, the price of the Underlying.

The Underlying and its Underlying Index Are Different: The performance of the Underlying may not exactly replicate the performance of the underlying index, because the Underlying will reflect transaction costs and fees that are not included in the calculation of the underlying index. It is also possible that the performance of the Underlying index due to the temporary unavailability of certain securities in the secondary market, the performance of any derivative instruments contained in the Underlying or due to other circumstances. The Underlying may use futures contracts, options, swap agreements, currency forwards and repurchase agreements in seeking performance that corresponds to the underlying index and in managing cash flows.

During periods of market volatility, securities underlying the Underlying may be unavailable in the secondary market, market participants may be unable to calculate accurately the net asset value per share of the Underlying and the liquidity of the Underlying may be adversely affected. This kind of market volatility may also disrupt the ability of market participants to create and redeem shares of the Underlying. Further, market volatility may adversely affect, sometimes materially, the prices at which market participants are willing to buy and sell shares of the Underlying. As a result, under these circumstances, the market value of shares of the Underlying may vary substantially from the net asset value per share of the Underlying. For all of the foregoing reasons, the performance of the Underlying may not correlate with the performance of its underlying index as well as the net asset value per share of the Underlying, which could materially and adversely affect the value of the Securities in the secondary market and/or reduce your payment at maturity.

Management Risk: The Underlying is not managed according to traditional methods of "active" investment management, which involve the buying and selling of securities based on economic, financial and market analysis and investment judgment. Instead, the Underlying, utilizing a "passive" or indexing investment approach, attempts to approximate the investment performance of its underlying index by investing in a portfolio of securities that generally replicate the underlying index. Therefore, unless a specific security is removed from the underlying index, the Underlying generally would not sell a security because the security's issuer was in financial trouble. In addition, the Underlying is subject to the risk that the investment strategy of the Underlying's investment advisor may not produce the intended results.

The Stocks Included in the Underlying Index Are Concentrated in One Sector: All of the stocks included in the XOP's underlying index are issued by companies in the oil and gas exploration and production sector. As a result, the stocks that will determine the performance of the underlying index, which the Underlying seeks to replicate, are ...concentrated in one sector. Although an investment in the Securities will not give holders any ownership or other direct interests in the stocks comprising the underlying index, the return on an investment in the Securities will be subject to certain risks associated with a direct equity investment in companies in the oil and gas exploration and production sector. Accordingly, by investing in the Securities, you will not benefit from the diversification which could result from an investment linked to companies that operate in multiple sectors.

"Risks Associated with the Energy Sector: The Underlying invests in companies that develop and produce crude oil and natural gas and provide drilling and other energy resources production and distribution related services. Stock prices for these types of companies are affected by supply and demand both for their specific product or service and for energy products and services in general. The price of oil and gas, exploration and production spending,

government regulation, world events and economic conditions will likewise affect the performance of these companies. The stock prices of oil service companies could be subject to wide fluctuations in response to a variety of factors, including the ability of the OPEC to set and maintain production levels and pricing, the level of production in non-OPEC countries, the demand for oil and gas, which is negatively impacted by economic downturns, the policies of various governments regarding exploration and development of oil and gas reserves, advances in exploration and development technology and the political environment of oil-producing regions. Correspondingly, securities of companies in the energy field are subject to swift price and supply fluctuations caused by events relating to international politics, energy conservation, the success of exploration projects, and tax and other governmental regulatory policies. Weak demand for the companies' products or services or for energy products and services in general, as well as negative developments in these other areas, would adversely impact the performance of the Underlying.

Lack of Liquidity: The Securities will not be listed on any securities exchange. RBCCM intends to offer to purchase the Securities in the secondary market, but is not required to do so. Even if there is a secondary market, it may not "provide enough liquidity to allow you to trade or sell the Securities easily. Because other dealers are not likely to make a secondary market for the Securities, the price at which you may be able to trade your Securities is likely to depend on the price, if any, at which RBCCM is willing to buy the Securities.

Potential Conflicts: We and our affiliates play a variety of roles in connection with the issuance of the Securities, "including hedging our obligations under the Securities. In performing these duties, the economic interests of the calculation agent and other affiliates of ours are potentially adverse to your interests as an investor in the Securities. Potentially Inconsistent Research, Opinions or Recommendations by RBCCM, UBS or Their Affiliates: RBCCM, UBS, and our respective affiliates may publish research, express opinions or provide recommendations that are "inconsistent with investing in or holding the Securities, and which may be revised at any time. Any such research, opinions or recommendations could affect the price of the Underlying, and therefore, the market value of the Securities.

- "... "Uncertain Tax Treatment: Significant aspects of the tax treatment of an investment in the Securities are uncertain. You should consult your tax adviser about your tax situation.
- Potential Royal Bank of Canada and UBS Impact on Price: Trading or other transactions by Royal Bank of Canada,
- ...UBS and our respective affiliates in the Underlying or the securities included in the Underlying's underlying index, or in futures, options, exchange-traded funds or other derivative products on the Underlying or those securities, may adversely affect the market value of the Underlying and, therefore, the market value of the Securities.

The Probability That the Underlying Will Fall Below the Initial Underlying Price on the Final Valuation Date Will Depend on the Volatility of the Underlying: "Volatility" refers to the frequency and magnitude of changes in the price of the Underlying. Greater expected volatility with respect to the Underlying reflects a higher expectation as of the "Trade Date that the Underlying could close below its Initial Underlying Price on the Final Valuation Date, resulting in the loss of some or all of your investment. However, an Underlying's volatility can change significantly over the term of the Securities. The price of the Underlying could fall sharply, which could result in a significant loss of principal.

The Terms of the Securities at Issuance and Their Market Value Prior to Maturity Will Be Influenced by Many Unpredictable Factors: Many economic and market factors will influence the terms of the Securities at issuance and their value prior to maturity. These factors are similar in some ways to those that could affect the value of a combination of instruments that might be used to replicate the payments on the Securities, including a combination of a bond with one or more options or other derivative instruments. For the market value of the Securities, we expect that, generally, the price of the Underlying on any day will affect the value of the Securities more than any other single factor. However, you should not expect the value of the Securities in the secondary market to vary in proportion to changes in the price of the Underlying. The value of the Securities will be affected by a number of other factors that may either offset or magnify each other, including:

"the price of the Underlying;

"the actual and expected volatility of the price of the Underlying;

- .. the time remaining to maturity of the Securities:
- "the dividend rates on the securities held by the Underlying;
- ..interest and yield rates in the market generally, as well as in each of the markets of the securities held by the Underlying;
- "a variety of economic, financial, political, regulatory or judicial events;
- ..the occurrence of certain events with respect to the Underlying that may or may not require an adjustment to the terms of the Securities; and
- "our creditworthiness, including actual or anticipated downgrades in our credit ratings."

Some or all of these factors will influence the terms of the Securities at issuance as well as the price you will receive if you choose to sell the Securities prior to maturity. The impact of any of the factors set forth above may enhance or offset some or all of any change resulting from another factor or factors. You may have to sell the Securities at a substantial discount from the principal amount if, for example, the price of the Underlying is at, below or not sufficiently above, its Initial Underlying Price.

The Anti-Dilution Protection for the Underlying Is Limited: The calculation agent will make adjustments to the Initial Underlying Price and the Final Underlying Price for certain events affecting the shares of the Underlying. "However, the calculation agent will not be required to make an adjustment in response to all events that could affect the Underlying. If an event occurs that does not require the calculation agent to make an adjustment, the value of the Securities and the Payment at Maturity may be materially and adversely affected.

Hypothetical Examples and Return Table at Maturity

Hypothetical terms only. Actual terms may vary. See the cover page for actual offering terms.

The following table and hypothetical examples below illustrate the payment at maturity per \$10.00 Security for a hypothetical range of Underlying Returns from -100.00% to +100.00% and assume a hypothetical Initial Underlying Price of \$100.00 and a hypothetical Maximum Gain of 26.80% (the low end of the range set forth above), and reflect the Upside Gearing of 3. The hypothetical Payment at Maturity examples set forth below are for illustrative purposes only and may not be the actual returns applicable to a purchaser of the Securities. The actual payment at maturity will be determined based on the Final Underlying Price on the Final Valuation Date. You should consider carefully whether the Securities are suitable to your investment goals. The numbers appearing in the table below have been rounded for ease of analysis.

Example 1 – On the Final Valuation Date, the Underlying closes 2% above the Initial Underlying Price. Because the Underlying Return is positive, we will pay you an amount based upon the lesser of the Underlying Return times the Upside Gearing and the hypothetical Maximum Gain. Since the Underlying Return of 2% times the Upside Gearing is less than the hypothetical Maximum Gain, we will pay you at maturity a cash payment of \$10.60 per \$10 principal amount Security, calculated as follows:

 $$10 + ($10 \times 2\% \times 3) = $10 + $0.60 = 10.60

Example 2 – On the Final Valuation Date, the Underlying closes 40% above the Initial Underlying Price. Because the Underlying Return is positive, we will pay you an amount based upon the lesser of the Underlying Return times the Upside Gearing and the hypothetical Maximum Gain. Since the Underlying Return of 40% times the Upside Gearing is greater than the hypothetical Maximum Gain, we will pay you at maturity a cash payment of \$12.68 per \$10 principal amount Security, calculated as follows:

 $10 + (10 \times 26.80\%) = 10 + 2.68 = 12.68$

Example 3 – On the Final Valuation Date, the Underlying closes 40% below the Initial Underlying Price. Because the Underlying Return is -40%, which is negative, we will pay you at maturity a cash payment of \$6.00 per \$10 principal amount Security (a 40% loss on the principal amount), calculated as follows:

 $$10 + ($10 \times -40\%) = $10 - $4.00 = 6.00

Hypothetical Final Underlying Price (\$)	Hypothetical Underlying Return ¹	Hypothetical Payment at Maturity (\$)	Total Return
•		• ` `	on Securities ²
\$200.00	100.00%	\$12.68	26.80%
\$175.00	75.00%	\$12.68	26.80%
\$150.00	50.00%	\$12.68	26.80%
\$140.00	40.00%	\$12.68	26.80%
\$130.00	30.00%	\$12.68	26.80%
\$120.00	20.00%	\$12.68	26.80%
\$110.00	10.00%	\$12.68	26.80%
\$108.93	8.93%	\$12.68	26.80%
\$104.00	4.00%	\$11.20	12.00%
\$102.00	2.00%	\$10.60	6.00%
\$100.00	0.00%	\$10.00	0.00%
\$90.00	-10.00%	\$9.00	-10.00%
\$80.00	-20.00%	\$8.00	-20.00%
\$75.00	-25.00%	\$7.50	-25.00%
\$70.00	-30.00%	\$7.00	-30.00%
\$60.00	-40.00%	\$6.00	-40.00%
\$50.00	-50.00%	\$5.00	-50.00%
\$25.00	-75.00%	\$2.50	-75.00%
\$0.00	-100.00%	\$0.00	-100.00%

⁽¹⁾ The Underlying Return excludes any cash dividend payments.

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(2) The "total return" is the number, expressed as a percentage, that results from comparing the payment at maturity per \$10 principal amount Security to the purchase price of \$10 per Security.

What Are the Tax Consequences of the Securities?

U.S. Federal Income Tax Consequences

Set forth below, together with the discussion of U.S. federal income tax in the accompanying product prospectus supplement, prospectus supplement, and prospectus, is a summary of the material U.S. federal income tax consequences relating to an investment in the Securities. The following summary supplements and to the extent inconsistent with supersedes the discussion under the section entitled "Supplemental Discussion of U.S. Federal Income Tax Consequences" in the accompanying product prospectus supplement, the section entitled "Certain Income Tax Consequences" in the accompanying prospectus supplement, and the section entitled "Tax Consequences" in the accompanying prospectus, which you should carefully review prior to investing in the Securities.

In the opinion of our counsel, Morrison & Foerster LLP, it would generally be reasonable to treat a security with terms described berein as a pre-paid cash-settled derivative contract in respect of the Underlying for U.S. federal

In the opinion of our counsel, Morrison & Foerster LLP, it would generally be reasonable to treat a security with terms described herein as a pre-paid cash-settled derivative contract in respect of the Underlying for U.S. federal income tax purposes, and the terms of the Securities require a holder and us (in the absence of a change in law or an administrative or judicial ruling to the contrary) to treat the Securities for all tax purposes in accordance with such characterization. If the Securities are so treated, subject to the discussion in the accompanying product prospectus supplement concerning the potential application of the "constructive ownership" rules under Section 1260 of the Code, a holder should generally recognize capital gain or loss upon the sale or maturity of the Securities in an amount equal to the difference between the amount a holder receives at such time and the holder's tax basis in the Securities. Capital gain recognized by an individual U.S. holder is generally taxed at preferential rates where the property is held for more than one year and is generally taxed at ordinary income rates where the property is held for one year or less. The deductibility of capital losses is subject to limitations.

Alternative tax treatments are also possible and the Internal Revenue Service might assert that a treatment other than that described above is more appropriate. In addition, the Internal Revenue Service has released a notice that may affect the taxation of holders of the Securities. According to the notice, the Internal Revenue Service and the Treasury Department are actively considering whether the holder of an instrument such as the Securities should be required to accrue ordinary income on a current basis. It is not possible to determine what guidance they will ultimately issue, if any. It is possible, however, that under such guidance, holders of the Securities will ultimately be required to accrue income currently and this could be applied on a retroactive basis. The Internal Revenue Service and the Treasury Department are also considering other relevant issues, including whether additional gain or loss from such instruments should be treated as ordinary or capital and whether the special "constructive ownership rules" of Section 1260 of the Internal Revenue Code might be applied to such instruments. Holders are urged to consult their tax advisors concerning the significance, and the potential impact, of the above considerations.

Individual holders that own "specified foreign financial assets" may be required to include certain information with respect to such assets with their U.S. federal income tax return. You are urged to consult your own tax advisor regarding such requirements with respect to the Securities.

A "dividend equivalent" payment is treated as a dividend from sources within the United States and such payments generally would be subject to a 30% U.S. withholding tax if paid to a non-U.S. holder. Under U.S. Treasury Department regulations, payments (including deemed payments) with respect to equity-linked instruments ("ELIs") that are "specified ELIs" may be treated as dividend equivalents if such specified ELIs reference an interest in an "underlying security," which is generally any interest in an entity taxable as a corporation for U.S. federal income tax purposes if a payment with respect to such interest could give rise to a U.S. source dividend. However, the IRS has issued guidance that states that the U.S. Treasury Department and the IRS intend to amend the effective dates of the U.S. Treasury Department regulations to provide that withholding on dividend equivalent payments will not apply to specified ELIs that are not delta-one instruments and that are issued before January 1, 2018. Based on our determination that the Securities are not delta-one instruments, non-U.S. holders should not be subject to withholding on dividend equivalent payments, if any, under the Securities. However, it is possible that the Securities could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the Underlying or the Securities, and following such occurrence the Securities could be treated as subject to withholding on dividend equivalent payments. Non-U.S. holders that enter, or have entered, into other transactions in respect of the Underlying or the Securities should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the Securities and their other transactions. If any payments are treated as dividend equivalents subject to

withholding, we (or the applicable paying agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

Please see the discussion under the section entitled "Supplemental Discussion of U.S. Federal Income Tax Consequences" in the accompanying product prospectus supplement for a further discussion of the U.S. federal income tax consequences of an investment in the Securities.

Canadian Federal Income Tax Consequences

For a discussion of the material Canadian federal income tax consequences relating to an investment in the Securities, please see the section entitled "Tax Consequences—Canadian Taxation" in the accompanying prospectus, which you should carefully review prior to investing in the Securities.

Information About the Underlying

Included on the following pages is a brief description of the Underlying. This information has been obtained from publicly available sources. Set forth below is a table that provides the quarterly high and low closing prices for the Underlying. We obtained the closing price information set forth below from the Bloomberg Professional® service ("Bloomberg") without independent verification. You should not take the historical prices of the Underlying as an indication of future performance.

The Underlying is registered under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the Investment Company Act of 1940, as amended (the "Investment Company Act"). Companies with securities registered under the Exchange Act and the Investment Company Act are required to file financial and other information specified by the SEC periodically. Information filed by the Underlying with the SEC can be reviewed electronically through a web site maintained by the SEC. The address of the SEC's web site is http://www.sec.gov. Information filed with the SEC by the issuer of the Underlying under the Exchange Act can be located by reference to its SEC Central Index Key number provided below. In addition, information filed with the SEC can be inspected and copied at the Public Reference Section of the SEC, 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Copies of this material can also be obtained from the Public Reference Section, at prescribed rates. Information from outside sources is not incorporated by reference in, and should not be considered part of, this free writing prospectus or any accompanying prospectus or prospectus supplement. We have not independently reviewed the accuracy or completeness of the information contained in outside sources.

SPDR S&P® Oil & Gas Exploration and Production ETF

We have derived the following information regarding the Underlying from publicly available documents. We have not independently verified the accuracy or completeness of the following information. We are not affiliated with the Underlying and the Underlying will have no obligations with respect to the Securities. This pricing supplement relates only to the Securities and does not relate to the shares of the Underlying or any securities held by the underlying index. Neither we nor our affiliates participate in the preparation of the publicly available documents described below. Neither we nor our affiliates have made any due diligence inquiry with respect to the Underlying in connection with the offering of the Securities. There can be no assurance that all events occurring prior to the date of this free writing prospectus, including events that would affect the accuracy or completeness of the publicly available documents described below, that would affect the trading price of the shares of the Underlying have been or will be publicly disclosed. Subsequent disclosure of any events or the disclosure of or failure to disclose material future events concerning the Underlying could affect the price of the shares of the Underlying after the pricing date, and therefore could affect the payment at maturity.

The selection of the Underlying is not a recommendation to buy or sell the shares of the Underlying. Neither we nor any of our affiliates make any representation to you as to the performance of the shares of the Underlying. The SPDR S&P® Oil & Gas Exploration & Production ETF

The Underlying is an investment portfolio maintained and managed by SSFM. The Underlying trades on the NYSE Arca under the ticker symbol "XOP." The inception date of the Underlying is June 19, 2006. Prior to January 8, 2007, the Underlying was known as the SPDR® Oil & Gas Exploration & Production ETF.

The Underlying seeks to provide investment results that correspond generally to the price and yield performance, before fees and expenses, of the underlying index. The underlying index represents the oil and gas exploration and production sub-industry portion of the S&P Total Market Index ("S&P TMI"), an index that measures the performance of the U.S. equity market. The Underlying is composed of companies that are in the oil and gas sector exploration and production.

The Underlying utilizes a "replication" investment approach in attempting to track the performance of the underlying index. The Underlying typically invests in substantially all of the securities which comprise the underlying index in approximately the same proportions as the underlying index. The Underlying will normally invest at least 80% of its total assets in common stocks that comprise the underlying index.

The information above was compiled from the SPDR® website. We have not independently investigated the accuracy of that information. Information contained in the SPDR® website is not incorporated by reference in, and should not be considered a part of, this document.

S&P® Oil & Gas Exploration & Production Select Industry® Index

We have derived all information contained in this document regarding the underlying index, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information. Such information reflects the policies of, and is subject to change by, S&P.

The underlying index is an equal-weighted index that is designed to measure the performance of the oil and gas exploration and production sub-industry portion of the S&P TMI. The S&P TMI includes all U.S. common equities listed on the NYSE (including NYSE Arca), the NYSE MKT, the NASDAQ Global Select Market, and the NASDAQ Capital Market. Each of the component stocks in the underlying index is a constituent company within the oil and gas exploration and production sub-industry portion of the S&P TMI.

To be eligible for inclusion in the underlying index, companies must be in the S&P TMI and must be included in the relevant Global Industry Classification Standard (GICS) sub-industry. The GICS was developed to establish a global standard for categorizing companies into sectors and industries. In addition to the above, companies must satisfy one of the two following combined size and liquidity criteria:

- float-adjusted market capitalization above US\$500 million and float-adjusted liquidity ratio above 90%; or
- float-adjusted market capitalization above US\$400 million and float-adjusted liquidity ratio above 150%.

All U.S. companies satisfying these requirements are included in the underlying index. The total number of companies in the underlying index should be at least 35. If there are fewer than 35 stocks, stocks from a supplementary list of highly correlated sub-industries that meet the market capitalization and liquidity thresholds above are included in order of their float-adjusted market capitalization to reach 35 constituents. Minimum market capitalization requirements may be relaxed to ensure there are at least 22 companies in the underlying index as of each rebalancing effective date.

Eligibility factors include:

Market Capitalization: Float-adjusted market capitalization should be at least US\$400 million for inclusion in the underlying index. Existing index components must have a float-adjusted market capitalization of US\$300 million to remain in the underlying index at each rebalancing.

Liquidity: The liquidity measurement used is a liquidity ratio, defined as dollar value traded over the previous 12-months divided by the float-adjusted market capitalization as of the underlying index rebalancing reference date. Stocks having a float-adjusted market capitalization above US\$500 million must have a liquidity ratio greater than 90% to be eligible for addition to the underlying index. Stocks having a float-adjusted market capitalization between US\$400 and US\$500 million must have a liquidity ratio greater than 150% to be eligible for addition to the underlying index. Existing index constituents must have a liquidity ratio greater than 50% to remain in the underlying index at the quarterly rebalancing. The length of time to evaluate liquidity is reduced to the available trading period for IPOs or spin-offs that do not have 12 months of trading history.

Takeover Restrictions: At the discretion of S&P, constituents with shareholder ownership restrictions defined in company bylaws may be deemed ineligible for inclusion in the underlying index. Ownership restrictions preventing entities from replicating the index weight of a company may be excluded from the eligible universe or removed from the underlying index.

Turnover: S&P believes turnover in index membership should be avoided when possible. At times, a company may appear to temporarily violate one or more of the addition criteria. However, the addition criteria are for addition to the underlying index, not for continued membership. As a result, an index constituent that appears to violate the criteria for addition to the underlying index will not be deleted unless ongoing conditions warrant a change in the composition of the underlying index.

Historical Information

The following table sets forth the quarterly high, low and period-end Closing Prices of the Underlying, as reported by Bloomberg. The historical performance of the Underlying should not be taken as an indication of its future performance. We cannot give you assurance that the performance of the Underlying will result in the return of any of your initial investment.

Quarter Begin	Quarter End	Quarterly Closing High	Quarterly Closing Low	Quarterly Period-End Close
1/1/2008	3/31/2008	\$55.83	\$44.79	\$53.73
4/1/2008	6/30/2008	\$71.31	\$54.44	\$70.15
7/1/2008	9/30/2008	\$70.93	\$42.68	\$44.83
10/1/2008	12/31/2008	\$43.38	\$22.97	\$29.20
1/1/2009	3/31/2009	\$33.48	\$23.41	\$26.60
4/1/2009	6/30/2009	\$38.25	\$27.54	\$31.72
7/1/2009	9/30/2009	\$39.61	\$28.51	\$38.62
10/1/2009	12/31/2009	\$43.36	\$36.91	\$41.21
1/1/2010	3/31/2010	\$44.07	\$39.22	\$42.13
4/1/2010	6/30/2010	\$45.82	\$38.57	\$38.99
7/1/2010	9/30/2010	\$42.85	\$38.05	\$42.26
10/1/2010	12/31/2010	\$52.71	\$42.18	\$52.69
1/1/2011	3/31/2011	\$64.50	\$52.75	\$64.50
4/1/2011	6/30/2011	\$64.97	\$54.71	\$58.78
7/1/2011	9/30/2011	\$65.24	\$42.80	\$42.80
10/1/2011	12/31/2011	\$57.56	\$39.99	\$52.69
1/1/2012	3/31/2012	\$61.34	\$52.67	\$56.91
4/1/2012	6/30/2012	\$57.85	\$45.20	\$50.40
7/1/2012	9/30/2012	\$59.35	\$48.73	\$55.69
10/1/2012	12/31/2012	\$57.38	\$50.69	\$54.07
1/1/2013	3/31/2013	\$62.10	\$55.10	\$60.49
4/1/2013	6/30/2013	\$62.61	\$54.71	\$58.18
7/1/2013	9/30/2013	\$66.47	\$58.62	\$65.89
10/1/2013	12/31/2013	\$72.74	\$65.02	\$68.53
1/1/2014	3/31/2014	\$71.83	\$64.04	\$71.83
4/1/2014	6/30/2014	\$83.45	\$71.19	\$82.28
7/1/2014	9/30/2014	\$82.08	\$68.83	\$68.83
10/1/2014	12/31/2014	\$66.84	\$42.75	\$47.86
1/1/2015	3/31/2015	\$53.94	\$42.55	\$51.66
4/1/2015	6/30/2015	\$55.63	\$46.43	\$46.66
7/1/2015	9/30/2015	\$45.22	\$31.71	\$32.84
10/1/2015	12/31/2015	\$40.53	\$28.64	\$30.22
1/1/2016	3/31/2016	\$30.96	\$23.60	\$30.35
4/1/2016	6/30/2016	\$37.50	\$29.23	\$34.81
7/1/2016	9/30/2016	\$39.12	\$32.75	\$38.46
10/1/2016	12/31/2016	\$43.42	\$34.73	\$41.42
1/1/2017	2/28/2017*	\$42.21	\$37.86	\$37.86

^{*} This free writing prospectus includes information for the first calendar quarter of 2017 for the period from January 1, 2017 through February 28, 2017. Accordingly, the "Quarterly Closing High," "Quarterly Closing Low" and "Quarterly Period-End Close" data indicated are for this shortened period only and do not reflect complete data for the first calendar quarter of 2017.

The graph below illustrates the performance of the Underlying from January $1,\,2008$ to February $28,\,2017$.

HISTORIC PERFORMANCE IS NOT AN INDICATION OF FUTURE PERFORMANCE.

Source: Bloomberg L.P. We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets.

Supplemental Plan of Distribution (Conflicts of Interest)

We have agreed to indemnify UBS and RBCCM against liabilities under the Securities Act of 1933, as amended, or to contribute payments that UBS and RBCCM may be required to make relating to these liabilities as described in the prospectus supplement and the prospectus. We will agree that UBS may sell all or a part of the Securities that it will purchase from us to investors at the price to public listed on the cover hereof, or its affiliates at the price indicated on the cover of the pricing supplement, the document that will be filed under Rule 424(b)(2) containing the final pricing terms of the Securities.

UBS may allow a concession not in excess of the underwriting discount set forth on the cover of the pricing supplement to its affiliates for distribution of the Securities.

Subject to regulatory constraints and market conditions, RBCCM intends to offer to purchase the Securities in the secondary market, but it is not required to do so.

We or our affiliates may enter into swap agreements or related hedge transactions with one of our other affiliates or unaffiliated counterparties in connection with the sale of the Securities and RBCCM and/or an affiliate may earn additional income as a result of payments pursuant to the swap or related hedge transactions. See "Use of Proceeds and Hedging" beginning on page PS-13 of the accompanying product prospectus supplement no. UBS-EQUITY-1. The value of the Securities shown on your account statement may be based on RBCCM's estimate of the value of the Securities if RBCCM or another of our affiliates were to make a market in the Securities (which it is not obligated to do). That estimate will be based upon the price that RBCCM may pay for the Securities in light of then prevailing market conditions, our creditworthiness and transaction costs. If so specified in the pricing supplement related to the Securities, for a period of approximately eight months after the issue date of the Securities, the value of the Securities that may be shown on your account statement may be higher than RBCCM's estimated value of the Securities at that time. This is because the estimated value of the Securities will not include the underwriting discount and our hedging costs and profits; however, the value of the Securities shown on your account statement during that period may be a higher amount, potentially reflecting the addition of the underwriting discount and our estimated costs and profits from hedging the Securities. Any such excess is expected to decrease over time until the end of this period. After this period, if RBCCM repurchases your Securities, it expects to do so at prices that reflect their estimated value. This period may be reduced at RBCCM's discretion based on a variety of factors, including but not limited to, the amount of the Securities that we repurchase and our negotiated arrangements from time to time with UBS. For additional information as to the relationship between us and RBCCM, please see the section "Plan of Distribution—Conflicts of Interest" in the prospectus dated January 8, 2016.

Structuring the Securities

The Securities are our debt securities, the return on which is linked to the performance of the Underlying. As is the case for all of our debt securities, including our structured notes, the economic terms of the Securities reflect our actual or perceived creditworthiness at the time of pricing. In addition, because structured notes result in increased operational, funding and liability management costs to us, we typically borrow the funds under these Securities at a rate that is more favorable to us than the rate that we might pay for a conventional fixed or floating rate debt security of comparable maturity. Using this relatively lower implied borrowing rate rather than the secondary market rate is a factor that is likely to result in a higher initial estimated value of the Securities at the time their terms are set than if the secondary market rate was used. Unlike the estimated value included on the cover of this document or in the final pricing supplement relating to the Securities, any value of the Securities determined for purposes of a secondary market transaction may be based on a different borrowing rate, which may result in a lower value for the Securities than if our initial internal borrowing rate were used.

In order to satisfy our payment obligations under the Securities, we may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) on the issue date with RBCCM or one of our other subsidiaries. The terms of these hedging arrangements take into account a number of factors, including our creditworthiness, interest rate movements, the volatility of the Underlying, and the tenor of the Securities. The economic terms of the Securities and their initial estimated value depend in part on the terms of these hedging arrangements.

The lower implied borrowing rate is a factor that reduces the economic terms of the Securities to you. The initial offering price of the Securities also reflects the underwriting commission and our estimated hedging costs. These

factors result in the initial estimated value for the Securities on the Trade Date being less than their public offering price. See "Key Risks—The Initial Estimated Value of the Securities Will Be Less than the Price to the Public" above. Terms Incorporated in Master Note

The terms appearing above under the caption "Indicative Terms of the Securities" and the provisions in the accompanying product prospectus supplement no. UBS-EQUITY-1 dated January 4, 2017 under the caption "General Terms of the Securities," are incorporated into the master note issued to DTC, the registered holder of the Securities.