

Account Number _____

Rep ID _____ Alternate Branch _____

CLIENT RBC EXPRESS CREDIT ACCOUNT AGREEMENT AND APPLICATION

This agreement consists of five pages. I have read and understand the terms of this agreement.

By signing this agreement I acknowledge that:

1. My securities may be loaned to you or loaned to others as provided under SEC Rule 15c3-3 and other applicable law.
2. I have received a copy of this agreement.
3. This agreement has not been altered or revised in any manner by me, and I agree to abide by its terms and conditions in their entirety.
4. I have received the Margin Disclosure Statement, attached.

This agreement contains a predispute arbitration clause on page four, paragraph 15.**CLIENT INFORMATION AND SIGNATURES**

Name and Address

Account Owner Signature	Date	Co-Owner Signature	Date
Print Name from Signature Above		Print Name from Signature Above	
Title, if applicable (e.g., President, Partner, Trustee, Custodian)		Title, if applicable (e.g., President, Partner, Trustee, Custodian)	
Phone Number		Phone Number	
Occupation		Occupation	
Employer		Employer	
Co-Owner Signature	Date	Co-Owner Signature	Date
Print Name from Signature Above		Print Name from Signature Above	
Title, if applicable (e.g., President, Partner, Trustee, Custodian)		Title, if applicable (e.g., President, Partner, Trustee, Custodian)	
Phone Number		Phone Number	
Occupation		Occupation	
Employer		Employer	
Financial Professional Signature	Date	Approved By: Authorized Firm/Supervisory Signature	Date

Investment and insurance products are not insured by the FDIC or any other federal government agency, are not deposits or other obligations of, or guaranteed by, a bank or any bank affiliate, and are subject to investment risks, including possible loss of the principal amount invested.



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ACCOUNT AGREEMENT

In consideration of your continuing or now and hereafter opening an account or accounts for the purchase and sale of securities and commodities for me, or in my name, I agree that all transactions with respect to any such account shall be subject to the following terms:

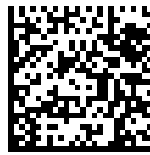
1. **STATUS OF RBC CAPITAL MARKETS, LLC ("RBC CM"), MEMBER NYSE/FINRA/SIPC, AS BROKER.** In purchasing or selling securities and commodities for me you shall act as my agent unless you notify me in writing prior to the settlement date or make the necessary disclosure on the confirmation that you are acting as a dealer for your own account or as an agent for some other party.
2. **STATUS OF RBC CM AS A SELF-CLEARING FIRM.** I understand that RBC CM is a self-clearing broker dealer and as such carries my account and clears and settles all trades in my account. As used in this agreement, the terms "you", "your" and other terms having a similar meaning shall be deemed to refer to RBC CM, except as such terms are used in the Margin Disclosure Statement on page five. As used in this agreement, the terms "Client", "I", "me", and other terms having a similar meaning shall be deemed to refer to the client.
3. **APPLICABLE RULES AND STATUTES.** All transactions made for me under this agreement shall be subject, where applicable, to the provisions of the Securities Exchange Act of 1934 and the Commodity Exchange Act, to all rules and regulations of the Securities and Exchange Commission, the Board of Governors of the Federal Reserve System and the Commodity Futures Trading Commission. They also shall be subject to the rules and regulations, customs and usages of the exchange or market where my orders are executed, as the same may be amended or supplemented from time to time.
4. **DESIGNATION OF ORDERS/SHORT SALES.** Every order I give you for the sale or purchase of securities or commodities contemplates an actual sale or purchase. I will deliver to you securities or commodities to cover all my sale orders and will receive and pay for on your demand all securities and commodities covered by my purchase orders. If I fail to deliver to you any securities or commodities which you have sold pursuant to my order, you are authorized to borrow the securities or commodities necessary to make delivery thereof, and in the event of your inability to borrow or otherwise obtain the commodities or securities, I shall be responsible for any loss you may sustain thereby. You shall have a reasonable time to deliver to me any securities or commodities which you have purchased for my account and for which I have paid in full. I understand that in the case of a short sale (delivery of borrowed shares), the short transaction may at any time be terminated by purchasing back the shares if the borrowed shares are recalled by the lender or otherwise become unavailable. Furthermore, I understand that you will not be responsible for any losses sustained by me as a result of short sale strategies that were terminated due to unavailable shares.
5. **GRANT OF SECURITY INTEREST AND AUTHORITY TO PLEDGE.** All monies, securities, commodities and other property of mine which you may at any time be holding or carrying for me (whether individually or jointly with others) shall be subject to a security interest in your favor as security for all of my obligations to you. At any time or from time to time at your discretion, without notice to me, you may apply or transfer any and all monies, securities, commodities and other property of mine out of and into any of my accounts with you (other than from regulated commodity accounts). You may pledge, repledge, hypothecate and rehypothecate any and all of my securities, commodities or other property which you may be holding or carrying for me (whether individually or jointly with others), to secure an amount equal to the amount due from me to you or a greater or lesser amount. You may do this without having in your possession or subject to your control other securities or commodities of the same kind and amount. You may also do this with my securities or commodities alone, or with my securities and commodities and those held by you for other clients, in which case my securities or commodities may be commingled with those held for other clients. You shall not be required to deliver to me the securities or commodities deposited or received but shall be required to deliver to me only securities and commodities of the same kind and amount.
6. **RBC EXPRESS CREDIT INTEREST RATE INFORMATION AND CREDIT DISCLOSURE.** I will pay interest on all credit extended to me or maintained for me by you for the purpose of purchasing, carrying or trading in securities or commodities or otherwise, computed on the basis of a 360 day year at an annual rate which will vary depending upon the size of my debit balance at the time the interest computation is made in accordance with your RBC Express Credit interest schedule, receipt of which is acknowledged. In any case, the rate of interest will not exceed that allowed by the substantive law of the State of Minnesota. I will also pay interest on the proceeds of sales paid to me prior to settlement date and interest on proceeds paid for securities which were not in good delivery. I will pay other charges as you may make to cover your facilities and extra services.

All amounts advanced and other balances due, together with interest and commissions, shall be due and payable on demand. I will at all times maintain such margins as you may require from time to time. You will not be liable to pay me interest on any credit balances owed me by you but all free credit balances in my accounts with you (except short accounts) shall be used to offset debit balances on which interest accrues.

The rate of interest charged to my account is equal to the Base Lending Rate plus a sliding scale of percentages according to the size of your debit balance. The Base Lending Rate is internally determined using Broker Call, Prime Rate as determined by commercial banks utilized by RBC CM, Fed Funds, RBC CM's cost of funds, and other commercially recognized rates of interest. These rates vary according to market conditions and RBC CM reserves the right to determine which rates, or combination of rates, will apply. The rates of interest charged to my RBC Express Credit account will be determined in accordance with the following schedule:

Average Debit Balance	Percentage Over Base Lending Rate*
\$0 to \$24,999	2.75%
\$25,000 to \$49,999	2.25%
\$50,000 to \$74,999	1.75%
\$75,000 to \$99,999	1.375%
\$100,000 to \$249,999	1.125%
\$250,000 and over	1.00%

*Please contact your financial professional for the current Base Lending Rate.



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RBC CM reserves the right, under certain circumstances, to charge my account with an interest rate higher than the above rates. In making this determination, factors such as account activity or purpose of borrowing will be considered.

The rate of interest will change without prior notice in accordance with changes in the Base Lending Rate. If my interest is to be increased for any other reason, I will be provided with at least 30 days written notice prior to the effective date of such change.

Interest is charged monthly, based on the average daily debit balance. If a rate change occurs during an interest period, the accrued interest to the date of such change will be shown on my Account statement.

Each month in which there has been activity in my account, I will receive my regular monthly statement, which will include a statement of interest charged. My regular monthly statement will cover a calendar month and will show each transaction as of the trade date. The statement of interest charged will show the period during which interest was charged to my account (the interest period) and will calculate interest from the settlement date for each transaction. The interest period will begin prior to the beginning of the calendar month covered by my monthly statement. Accordingly, in order to check the calculation of interest charged to my account, it may be necessary to refer to both my prior and current month's statements. The monthly statement of interest charged will show:

- (a) The current rate charged to me and any changes in the interest rate during the interest period.
- (b) The beginning and closing balances, with effective dates
- (c) The average daily debit balance on which interest is charged. This figure is obtained by adding the daily closing settlement balances in all general accounts. The net balance in any given account will be determined by adding the open balance, if any, to any debits created by purchases by me or payments to you and subtracting any credits created by sales or payments from me.
- (d) Any marked-to-the-market adjustments. Short sale credits are offset by similar debits inasmuch as RBC CM must borrow the same security in order to deliver it to the buyer. Accordingly, the credit generated by any short sales does not reduce the debit balance for purposes of computing interest until the short position is covered. If the shorted security appreciates in market price over the selling price, interest will be charged on the appreciation of the value. If the shorted security declines in price, interest will be reduced by the drop in value. This practice of adjusting the credit balance to correspond to the market value of the securities sold short is known as "marking-to the market".
- (e) The amount of interest, based upon the following formula:

$$\frac{\text{Average Daily Debit Balance}}{1} \times \frac{\text{Rate}}{100} \times \frac{\text{Number of Days Debit}}{\text{Balance Present}} \div 360$$

- (f) Total interest charged for the period.

If there is a decline in the market value of the securities which are collateral for my indebtedness to you, it may be necessary for you to request additional margin. Ordinarily, the request for additional margin will be made when the equity in the account falls below 30% of the market value of all securities in the account. (The equity is the excess market value of the securities in the account over the debit balance.) However, in all instances you retain the right to require additional margin at any time you deem it advisable. These margin calls can be met by delivery of either additional securities or cash.

7. AUTHORITY TO SELL, LIQUIDATE OR CANCEL. You shall have the right to require additional collateral or to liquidate any securities or any other property whenever in your sole discretion you consider it necessary for your protection including, but not limited to, the following:

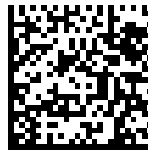
- The margin in my account does not meet your requirements.
- A petition in bankruptcy or for the appointment of a receiver has been filed by or against me.
- In the event of my death.

In the event of any of the above occurrences, you are authorized to:

- Close out any RBC Express Credit accounts.
- Buy any and all securities and commodities which may be short in such accounts.
- Close any or all outstanding contracts.
- Reduce or satisfy any indebtedness of mine to you by selling, at public or private sale, any or all of my securities, commodities or other property which may be in your possession or under your control.

All of the above may be done without advertising the same and without prior tender or notice to or demand upon me. Notwithstanding the previous sentence, if any of the securities or other property subject to this agreement are not of a type customarily sold in a recognized market and advance notice to me of the liquidation of such securities or other property is required by law, I agree that notice mailed to me at my most recent address contained in your records ten days before you take any such action is adequate notice. Sales or purchases may be made at your discretion on any exchange or other market where such business is usually transacted or at public auction or private sale, and you may be the purchaser for your own account. No specific tender, demand or notice, nor any failure on your part to exercise such right to reduce or satisfy any such indebtedness, shall invalidate the waiver of tender, demand and notice herein contained. After deducting all costs and expenses of such sales and purchases, including commissions and applicable charges, you shall apply the net proceeds to the payment of my obligations to you and I shall remain liable for any deficiency remaining in such accounts. I also agree to pay all reasonable costs of collection including, but not limited to, attorney's fees which you may incur.

8. DISCLOSURES REGARDING LIQUIDATIONS. I clearly understand that you are not obligated to give me notice of any margin deficiency. There may be circumstances which will necessitate the liquidation of securities and/or other property in my account without notice to me to ensure that minimum maintenance requirements are satisfied.



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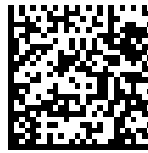
CLIENT RBC EXPRESS CREDIT ACCOUNT AGREEMENT AND APPLICATION

ACCOUNT AGREEMENT CONTINUED

- 9. DISCLOSURES REGARDING PROXY VOTING RIGHTS AND PAYMENTS IN LIEU OF DIVIDENDS OR INTEREST.** I clearly understand that, if I have a debit balance in my RBC Express Credit account, RBC CM has the right to hypothecate (pledge as collateral to another organization) or lend shares and other securities in my account to third parties. If a corporate vote takes place while shares are on loan, I may be unable to vote them. Further, when shares or other securities are on loan, payments received in lieu of dividends or interest may be subject to different tax treatment. For example, I may receive payments on shares instead of dividends that may cause me to lose the benefit of any preferential tax rate on qualified dividends. Similarly, I may receive payments on tax exempt securities instead of tax exempt interest that may cause me to be subject to tax on such income. I understand RBC CM cannot provide tax advice and I should seek advice from my own tax professional for this and other tax matters.
- 10. MARGIN DISCLOSURE STATEMENT.** An important Margin Disclosure Statement is attached to this Agreement. While the Margin Disclosure Statement does not amend or supersede the terms of the RBC Express Credit agreement, it does provide additional facts about purchasing securities on margin, and describes the risks involved with trading securities in an RBC Express Credit account. Before trading stocks in an RBC Express Credit account, I understand that I should carefully review the RBC Express Credit agreement and the attached Margin Disclosure Statement.
- 11. CONFIRMATIONS AND STATEMENTS.** I agree to notify you immediately upon receipt of my confirmation and/or monthly statement of any errors or misunderstandings with respect to my account. Unless I immediately object, verbally and in writing, confirmations of transactions and statements for my account shall be binding to me.
- 12. COMMUNICATIONS.** Notices and communications may be sent to me at my address given above or at such other address as I may hereafter give you in writing, and all communications so sent, whether by mail, telegraph, messenger or otherwise, shall be deemed given to me personally whether actually received or not.
- 13. REPRESENTATIONS BY CLIENT.** By signing above, I hereby represent that I am of legal age, and that I am not an employee of any exchange, or of any corporation of which any exchange owns a majority of the capital stock, or of a member of any exchange, or of a member firm or member corporation registered on any exchange, or of a bank, trust company, insurance company or of any corporation, firm or individual engaged in the business of dealing, either as a broker or as principal, in securities, bills of exchange, acceptances or other forms of commercial paper, and that I will promptly notify you in writing if I am now or will become so employed. I also represent that no other person has an interest in my account or accounts with you.
- 14. CLIENT'S OBLIGATION.** In the interest of better customer service and for our mutual protection, I agree to immediately report any trades or transactions that were executed without my authorization; any transactions which are not properly reflected on my confirmation or monthly statement; or any other activities or omissions by you or your agents or employees that I believe to be improper. Such communication will be directed to the Resident Manager of the office where my account is maintained.
- 15. AGREEMENT TO ARBITRATE CONTROVERSIES.** This agreement contains a predispute arbitration clause. By signing an arbitration agreement the parties agree as follows:
- All parties to this agreement are giving up the right to sue each other in court, including the right to a trial by jury, except as provided by the rules of the arbitration forum in which a claim is filed.
 - Arbitration awards are generally final and binding; a party's ability to have a court reverse or modify an arbitration award is very limited.
 - The ability of the parties to obtain documents, witness statements and other discovery is generally more limited in arbitration than in court proceedings.
 - The arbitrators do not have to explain the reason(s) for their award unless, in an eligible case, a joint request for an explained decision has been submitted by all parties to the panel at least 20 days prior to the first scheduled hearing date.
 - The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry.
 - The rules of some arbitration forums may impose time limits for bringing a claim in arbitration in some cases, a claim that is ineligible for arbitration may be brought in court.
 - The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this agreement.

The Client agrees that any controversy arising out of or relating directly or indirectly to this Agreement, or any investment by the Client hereunder, or with respect to transactions of any kind executed by or with RBC CM or any introducing broker for the Account (if applicable), or each of their officers, directors, agents, employees, or affiliates, or with respect to this Agreement or any other agreements entered in to with RBC CM or the introducing broker (if applicable) relating to the Accounts with RBC CM or the breach thereof, shall be settled by arbitration pursuant to the Federal Arbitration Act and in accordance with the rules, then in effect, of the Financial Industry Regulatory Authority ("FINRA"). Notice preliminary to, in conjunction with or incident to arbitration, may be sent to the Client by mail and personal service is hereby waived. Judgment upon any award rendered by the arbitrators may be entered in any court having jurisdiction thereof.

No person shall bring a putative or certified class action to arbitration, nor seek to enforce any pre-dispute arbitration against any person who has initiated in court a putative class action; or who is a member of a putative class who has not opted out of the class with respect to any claims encompassed by the putative class action until: (i) the request for class certification is denied; (ii) the class is decertified; or (iii) the Client is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this Agreement except to the extent stated herein.



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- 16. AMENDMENTS/SEVERABILITY.** No provision of this agreement may be waived or amended except in writing and signed by an authorized officer of RBC CM. I agree that you may amend this agreement upon written notice to me. This agreement shall be continuous and shall survive any temporary or intermittent closing out or reopening of any account with you and shall transfer to and be binding upon your successors and assigns and my administrators, executors and assigns. If any provision or condition of this agreement is held to be invalid or unenforceable by any court, or regulatory or self-regulatory agency or body, such invalidity or unenforceability shall attach only to such provision or condition. The validity of the remaining provisions or conditions shall not be affected thereby and this agreement shall be carried out as if any such invalid or unenforceable provision or condition were not contained herein.
- 17. RECORDING OF TELEPHONE CONVERSATIONS.** For our mutual protection and to avoid misunderstandings, I understand that you and or agents may from time to time record our telephone conversations by electronic recording equipment.
- 18. GOVERNING LAW.** Except as otherwise provided in paragraph 13, this agreement and its enforcement will be governed by the laws of the State of Minnesota exclusive of that state's conflicts of choice-of-law provisions.
- 19. HEADINGS ARE DESCRIPTIVE.** The heading of each provision hereof is for descriptive purposes only and shall not be deemed to modify or qualify any of the rights or obligations set forth in each such provision.
- 20. CONSENT FOR CASH SWEEP PROGRAM.** By selecting an Automatic Sweep Investment option, I acknowledge that I am granting affirmative consent to have free credit balances in my Account included in the RBC Cash Sweep program and have received the general terms and conditions of the products available through the Cash Sweep program, and such products and terms and conditions may be changed from time to time by RBC CM. RBC CM may change my Automatic Sweep Investment option, including changes between money market funds and FDIC insured products, upon appropriate notice and in accordance with applicable regulations. Please see "Program Banks" under RBC Insured Deposits on our public website at <https://www.rbcclearingandcustody.com/en-us/legal>.

Margin Disclosure Statement



PLEASE RETAIN A COPY OF THIS DOCUMENT
FOR YOUR RECORDS

Your brokerage firm is furnishing this document to you to provide some basic facts about purchasing securities on margin, and to alert you to the risks involved with trading securities in a margin account. Before trading stocks in a margin account, you should carefully review the margin agreement provided by your firm. Consult your firm regarding any questions or concerns you may have with your margin accounts.

When you purchase securities, you may pay for the securities in full or you may borrow part of the purchase price from your brokerage firm. If you choose to borrow funds from your firm, you will open a margin account with the firm. The securities purchased are the firm's collateral for the loan to you. If the securities in your account decline in value, so does the value of the collateral supporting your loan, and, as a result, the firm can take action, such as issue a margin call and/or sell securities or other assets in any of your accounts held with the firm, in order to maintain the required equity in the account.

It is important that you fully understand the risks involved in trading securities on margin. These risks include the following:

- **You can lose more funds than you deposit in the margin account.** A decline in the value of securities that are purchased on margin may require you to provide additional funds to the firm that has made the loan to avoid the forced sale of those securities or other securities or assets in your account(s).
- **The firm can force the sale of securities or other assets in your account(s).** If the equity in your account falls below the maintenance margin requirements, or the firm's higher "house" requirements, the firm can sell the securities or other assets in any of your account held at the firm to cover the margin deficiency. You also will be responsible for any short fall in the account after such a sale.

- **The firm can sell your securities or other assets without contacting you.** Some investors mistakenly believe that a firm must contact them for a margin call to be valid, and that the firm cannot liquidate securities or other assets in their accounts to meet the call unless the firm has contacted them first. This is not the case. Most firms will attempt to notify their customers of margin calls, but they are not required to do so. However, even if a firm has contacted a customer and provided a specific date by which the customer can meet a margin call, the firm can still take necessary steps to protect its financial interests, including immediately selling the securities without notice to the customer.
- **You are not entitled to choose which securities or other assets in your account(s) are liquidated or sold to meet a margin call.** Because the securities are collateral for the margin loan, the firm has the right to decide which security to sell in order to protect its interests.
- **The firm can increase its "house" maintenance margin requirements at any time and is not required to provide you advance written notice.** These changes in firm policy often take effect immediately and may result in the issuance of a maintenance margin call. Your failure to satisfy the call may cause the member to liquidate or sell securities in your account(s).
- **You are not entitled to an extension of time on a margin call.** While an extension of time to meet margin requirements may be available to customers under certain conditions, a customer does not have a right to the extension.

Investment and insurance products offered through RBC Capital Markets, LLC are not insured by the FDIC or any other federal government agency, are not deposits or other obligations of, or guaranteed by, a bank or any bank affiliate, and are subject to investment risks, including possible loss of the principal amount invested.