

SUBSCRIPTION AGREEMENT

THIS subscription agreement (the "**Agreement**") dated November 7, 2007

BETWEEN:

NIR DIAGNOSTICS INC., a corporation incorporated under the laws of Ontario having an office at 44 Crawford Crescent, Campbellville, Ontario, L0P 1B0

(the "**Corporation**")

and

VENTABREN HOLDINGS LIMITED, a corporation incorporated under the laws of Ontario having its registered office at 181 University Avenue, Suite 1800, Toronto, Ontario, M5H 3M7

(the "**Subscriber**")

RECITALS:

A. The Corporation is offering to sell:

- I. a convertible secured debenture (the "**Convertible Debenture**"), in the principal amount of \$2,200,000.00, having a term of twenty-four (24) months from the date of Closing, bearing interest at the rate of 12% per annum, calculated and payable monthly in arrears, convertible on or prior to the second anniversary of Closing into common shares in the capital of the Corporation ("**Common Shares**") at the rate of one (1) Common Share for each \$0.15 of principal amount converted, and secured against the assets of the Corporation, in substantially the form attached to this Agreement as **Schedule "A"**; and
- II. 11,000,000 common share purchase warrants (the "**Warrants**"), being one warrant for each \$0.20 of principal amount of the Convertible Debenture, each Warrant entitling the holder to acquire one Common Share of the Corporation at a price of \$0.20 for twenty-four (24) months after Closing, in substantially the form attached to this Agreement as **Schedule "B"**;

(the Convertible Debentures and the Warrants being collectively referred to as the "**Offered Securities**")

B. The Subscriber has agreed to purchase the Offered Securities for \$2,200,000.00 (the "**Subscription Amount**").

NOW THEREFORE in consideration of the premises and of the terms and conditions set out in this Agreement, the parties agree as follows:

1. In this Agreement:

- (a) "**Agreement**" means this subscription agreement;

- (b) **"Business Day"** means any day other than Saturday, Sunday or a day on which chartered banks are closed for business in Toronto, Ontario;
 - (c) **"Closing"** means, subject to any extension granted by the Regulatory Authorities, December 3, 2007 or such earlier or later date as agreed to by the Corporation and the Subscriber;
 - (d) **"Common Shares"** has the meaning set out in the recitals to this Agreement;
 - (e) **"Convertible Debenture"** has the meaning set out in the recitals to this Agreement;
 - (f) **"Existing Debentures"** means:
 - (i) the convertible debentures, in the aggregate principal amount of \$834,400 issued on December 21, 2005 and maturing on June 21, 2008; and
 - (ii) the convertible debentures, in the aggregate principal amount of \$371,500, issued on January 19, 2006 and maturing on July 19, 2008;
 - (g) **"Offered Securities"** has the meaning set out in the recitals to this Agreement;
 - (h) **"Regulatory Authorities"** means the relevant securities regulatory authorities, including stock exchanges, having jurisdiction over the Corporation and the issuance of the Convertible Debenture and Warrants;
 - (i) **"Securities Rules"** means, collectively, all applicable securities laws in all of the provinces of Canada, the respective regulations, rules, rulings, decisions and orders made thereunder, and the applicable policy statements and prescribed forms issued by the Regulatory Authorities thereunder, including, but not limited to the Ontario Securities Commission and the TSXV or the TSX, as applicable;
 - (j) **"Subscription Amount"** has the meaning set out in the recitals to this Agreement;
 - (k) **"Subsidiaries"** means NIR Systems Inc. and 2037722 Ontario Inc. (both of which are inactive as at the date of this Agreement);
 - (l) **"TSX"** means the Toronto Stock Exchange;
 - (m) **"TSXV"** means the TSX Venture Exchange; and
 - (n) **"Warrants"** has the meaning set out in the recitals to this Agreement.
2. The Corporation represents and warrants to, and covenants with, the Subscriber at the date of this Agreement and acknowledges that the Subscriber is relying thereon, that:
- (a) the Common Shares issuable on conversion of the Convertible Debenture and the Common Shares issuable on the exercise of the Warrants are part of a class of shares of the Corporation that is presently, and will be at the time of issue to the Subscriber, listed and posted for trading on the TSXV or the TSX, and such Common Shares will, at the time of issue to the Subscriber, have been conditionally approved to be listed and posted for trading on the TSXV or the TSX. The Corporation will take or cause to be taken all steps necessary

to comply with all of the requirements of the TSXV or the TSX, as the case may be, in connection with the issuance to the Subscriber of the Convertible Debenture and Warrants pursuant to this Agreement and the Common Shares upon conversion of the Convertible Debenture and/or exercise of the Warrants and to permit such Common Shares to be listed and posted for trading on the TSXV or the TSX, as applicable;

- (b) the Common Shares to be issued to the Subscriber on the conversion of the Convertible Debenture will be, when issued, duly authorized, validly issued, fully paid, and non-assessable and the Common Shares issuable on the exercise of the Warrants will be, on payment of the exercise price and when issued, duly authorized, validly issued, fully paid, and non-assessable and will be free and clear of all trade restrictions (except as required by Section 11 and as may be imposed by operation of the applicable Securities Rules) and, except as may be created by the Subscriber, liens, charges or encumbrances of any kind whatsoever;
- (c) the Corporation will comply with the applicable provisions of *National Instrument 45-102 - Resale of Securities* ("**NI 45-102**") such that the Subscriber will be able to avail itself of a four month "hold period" in respect of the Convertible Debenture, the Warrants and the Common Shares issuable upon conversion of the Convertible Debenture and/or exercise of the Warrants;
- (d) on the date of the receipt by the Subscriber of the certificate or certificates representing the Convertible Debenture and Warrants, every consent, approval, authorization, order or agreement of all Regulatory Authorities that is required for the issuance of such securities and the delivery to the Subscriber for such certificate or certificates to be valid will have been obtained and will be in effect;
- (e) the Subscription Amount shall be refundable without interest or deduction if this Agreement is rejected by the Corporation;
- (f) the Corporation is a reporting issuer in the Provinces of Ontario, Alberta and British Columbia, is not in material default of any of the requirements of the applicable Securities Rules of those jurisdictions, and the Corporation is validly existing under the laws of its jurisdiction of incorporation, amalgamation or continuance, as the case may be, is in good standing with the corporate governmental authorities of such jurisdiction with respect to the filing of annual returns and such other filings as are necessary to maintain its corporate existence and that it has full corporate power to conduct its business as such business is now being conducted and to own and operate their property and assets;
- (g) the Subsidiaries are the only subsidiaries of the Corporation and as at the date of this Agreement, both of the Subsidiaries are inactive;
- (h) its shares trade on the TSXV under the symbol "NID";
- (i) except as set out on **Schedule "C"**, there are no claims, actions, suits, judgments, or proceedings pending against or affecting the Corporation which will or may have a material adverse effect upon the Corporation, nor does the Corporation know of any reasonable grounds for any such claims, actions, suits, judgments or proceedings;

- (j) the Corporation has the corporate power and capacity to enter into and perform this Agreement and to do all other acts which may be necessary to consummate the transactions contemplated by this Agreement;
 - (k) the Offered Securities are not being sold by the Corporation with knowledge of any material information about the Corporation's affairs that has not been publicly disclosed;
 - (l) the Corporation holds all licences and permits that are required for carrying on its business in the manner in which such business is being carried on and the Corporation has corporate power and capacity to own the assets owned by it and to carry on the business carried on by it and the Corporation is duly qualified to carry on business in all jurisdictions in which it carries on business;
 - (m) the Corporation has good and sufficient right and authority to enter into this Agreement and complete the transactions contemplated under this Agreement on the terms and conditions set forth in this Agreement;
 - (n) the execution and delivery of this Agreement, the performance of its obligations under this Agreement and the completion of its transactions contemplated under this Agreement will not conflict with, or result in the breach of or the acceleration of any indebtedness under, or constitute default under, the constating documents of the Corporation or any indenture, mortgage, agreement, lease, licence or other instrument of any kind whatsoever to which the Corporation is a party or by which it is bound, or any judgment or order of any kind whatsoever of any Court or administrative body of any kind whatsoever by which it is bound; and
 - (o) the Convertible Debenture will, when executed by the Corporation, represent a valid and binding charge against all of the assets of the Corporation.
3. The Subscriber represents and warrants to, covenants and agrees with, and acknowledges to the Corporation as follows (and acknowledges that the Corporation is relying thereon):
- (a) the Subscriber has knowledge in financial and business affairs, is capable of evaluating the merits and risks of an investment in the securities, and is able to bear the economic risk of such investment even if the entire investment is lost;
 - (b) the Subscriber will purchase the Offered Securities in the manner and at the times as provided in this Agreement;
 - (c) the Subscriber will execute and deliver, upon the request of the Corporation, all such further documents and instruments as may reasonably be required to carry out the full intent and meaning of this Agreement including a written certification, if required, to meet the prospectus exemptions being relied upon in any of British Columbia, Alberta or Ontario to purchase the Offered Securities;
 - (d) the Subscriber is an "accredited investor" as defined in *National Instrument 45-106 – Prospectus and Registration Exemptions* ("**NI 45-106**") and agrees to complete and return **Schedule "D"** to this Agreement as part of the documentation required by Section 9 hereof;

- (e) the issuance of the Offered Securities will be made pursuant to the securities exemption contained in section 2.3 of NI 45-106;
- (f) the Subscriber acknowledges that its mailing address is that as identified in the recitals to this Agreement and that it will immediately notify the Corporation in writing of any change in its mailing address, and that, subject to receipt of the written notice of change of address, documents mailed by the Corporation to the address identified in the recitals to this Agreement will be acknowledged as properly delivered;
- (g) the Subscriber is not a "U.S. Person" (as that term is defined in Regulation S promulgated under the United States Securities Act of 1933, which definition includes, but is not limited to, an individual resident in the United States, an estate or trust of which any executor or administrator or trustee, respectively, is a U.S. Person and any partnership or company organized or incorporated under the laws of the United States) and is not acquiring the Securities for the account of or benefit of a U.S. Person or a person in the United States;
- (h) the Subscriber acknowledges that the Subscription Amount shall be refundable without interest or deduction if this Agreement is rejected by the Corporation;
- (i) the Subscriber is a resident of Canada for the purposes of the *Income Tax Act* (Canada);
- (j) the Subscriber is purchasing the Offered Securities subscribed for pursuant to this Agreement as principal for its own account with investment intent and not for the benefit of any other person;
- (k) the Subscriber has informed itself of the Corporation's state of affairs and property interests;
- (l) the Subscriber has had an opportunity to ask and to have answered any and all questions relating to the business and affairs of the Corporation, the Offered Securities and the subscription made pursuant to this Agreement;
- (m) the Subscriber is not purchasing the Offered Securities as a result of having any material information about the Corporation's affairs that has not been generally disclosed;
- (n) the Subscriber acknowledges that because this subscription is being made pursuant to exemptions from the prospectus and registration requirements of the Securities Rules (the "**Exemptions**"):
 - (i) the Subscriber is restricted from using most of the protections, rights and remedies available under the Securities Rules;
 - (ii) the Subscriber may not receive information that might otherwise be required to be provided to the Subscriber under the applicable Securities Rules if the Exemptions were not being used; and
 - (iii) the Corporation is relieved from certain obligations that would otherwise apply under the applicable Securities Rules if the Exemptions were not being used;
- (o) the Subscriber acknowledges that no "offering memorandum" (as such term is defined by the Securities Rules) has been provided or delivered to it and the decision to subscribe for

Offered Securities and execute this Agreement has not been based upon any verbal or written representation made by or on behalf of the Corporation, or any employ or agent of the Corporation, other than the representations made in this Agreement, the Convertible Debenture and the Warrant;

- (p) the offer and sale of the Offered Securities was not accompanied by an advertisement or a general solicitation and the Subscriber was not induced to purchase the Offered Securities as a result of any advertisement or a general solicitation made by the Corporation;
- (q) the Subscriber has consulted its own independent advisors as to the income tax consequences and the suitability of purchasing the Offered Securities issuable pursuant to this Agreement and is not relying on any representations or warranties made by the Corporation or its advisors with respect to the income tax consequences and suitability of purchasing the Offered Securities;
- (r) upon the Corporation executing and delivering this Agreement, this Agreement will constitute a legal, valid and binding contract of the Subscriber enforceable against the Subscriber in accordance with its terms;
- (s) the Subscriber is a valid and subsisting corporation, has the necessary corporate power and capacity to execute and deliver this Agreement and to observe and perform its covenants and obligations under this Agreement and has taken all necessary corporate action in respect thereof, and neither the entering into of this Agreement nor the completion of the transactions contemplated by this Agreement conflicts with, or will conflict with, or results, or will result, in a breach or violation of any law applicable to the Subscriber, any constating documents of the Subscriber or any agreement to which the Subscriber is a party or by which the Subscriber is bound;
- (t) the Subscriber has been independently advised as to and is aware of the resale restrictions under the applicable Securities Rules, and is aware that the certificate representing the Convertible Debenture, Warrants and, if applicable, the Common Shares acquired on the conversion of the Convertible Debenture and the Common Shares acquired on the exercise of the Warrants will bear a legend as required by NI 45-102 and the rules of the TSXV will bear a legend substantially in the form of the following legend:

WITHOUT PRIOR WRITTEN APPROVAL OF THE TSX VENTURE EXCHANGE (THE "TSXV") AND COMPLIANCE WITH ALL APPLICABLE SECURITIES LEGISLATION, THE SECURITIES REPRESENTED BY THIS INSTRUMENT MAY NOT BE SOLD, TRANSFERRED, HYPOTHECATED OR OTHERWISE TRADED ON OR THROUGH THE FACILITIES OF THE TSXV OR OTHERWISE IN CANADA OR TO OR FOR THE BENEFIT OF A CANADIAN RESIDENT UNTIL [DATE THAT IS FOUR MONTHS AND A DAY AFTER THE DISTRIBUTION DATE.]

UNLESS PERMITTED UNDER SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY MUST NOT TRADE THE SECURITY BEFORE [INSERT THE DATE THAT IS 4 MONTHS AND A DAY AFTER THE DISTRIBUTION DATE]."

- (u) the Subscriber acknowledges that this Agreement and the Schedules hereto require the Subscriber to provide certain personal information to the Corporation. Such information is being collected by the Corporation for the purposes of completing the sale of the Offered Securities, which includes, without limitation, determining the Subscriber's eligibility to purchase the Offered Securities under applicable Securities Rules, preparing and registering certificates representing the Offered Securities to be issued to the Subscriber and completing filings required by any Regulatory Authority. The Subscriber's personal information, including name, address, telephone number and any other information contained in this Agreement may be disclosed by the Corporation to: (a) Regulatory Authorities; (b) the Corporation's registrar and transfer agent, and (c) any of the other parties involved in the placement of the Offered Securities, including legal counsel and may be included in record books in connection with the placement of the Offered Securities. By executing this Agreement, the Subscriber is deemed to be consenting to the foregoing collection, use and disclosure of the Subscriber's personal information. The Subscriber also consents to the filing of copies or originals of any of the Subscriber's documents referred to in this Agreement as may be required to be filed with any Regulatory Authority in connection with the transactions contemplated in this Agreement. If the Subscriber is a resident of Ontario, the Subscriber acknowledges that the Ontario Securities Commission has authority to collect the information contained in this Agreement indirectly under authority granted pursuant to the *Securities Act* (Ontario) for the purposes of the administration and enforcement of the securities legislation in Ontario. The Subscriber is advised that he may contact the Administrative Assistant to the Director of Corporate Finance of the Ontario Securities Commission at Suite 1903, Box 55, 20 Queen Street West, Toronto, Ontario M5H 3S8, (416) 593-8086 for further information concerning the collection of personal information by the Ontario Securities Commission.
4. The representations, warranties and covenants of the Subscriber in this Agreement are made with the intent that they may be relied upon in determining the suitability of a purchaser of the Offered Securities and will be true and correct at the Closing. The Subscriber undertakes to immediately notify the Corporation of any change in any statement or other information relating to the Subscriber set forth in this Agreement which takes place prior to the Closing.
 5. The representations, warranties and covenants of the Corporation contained in this Agreement or in any certificate, document or instrument delivered to the Subscriber pursuant hereto will survive until Closing of the transactions contemplated by this Agreement.
 6. The obligations of the parties to complete the transactions contemplated in this Agreement are subject to the following conditions precedent which may be waived by the parties to this Agreement in writing, in whole or in part:
 - (a) Board of Directors approval by the Corporation;
 - (b) Delivery by the Corporation to the Subscriber of satisfactory evidence that the Existing Debentures have been repaid in full and that all security interests related to the Existing Debentures have been discharged;
 - (c) Execution and delivery of definitive valid, binding and enforceable Convertible Debenture, Warrants, a subordination and postponement of, or discharge of, security related to all BMO debts, and other required security relating to the intellectual property of the Corporation or

other documentation, including legal opinions, to the satisfaction of the Subscriber and its counsel, acting reasonably;

- (d) No material change in the business operations, assets or ownership of the Corporation;
 - (e) Conditional approval of the Offered Securities by the TSXV; and
 - (f) Approval of the shareholders of the Corporation in respect of the proposed private placement transaction.
7. The Subscriber hereby subscribes for the Offered Securities and agrees to pay the Subscription Amount.
 8. The Subscriber shall pay the Subscription Amount on Closing by means of bank draft, certified cheque or wire transfer of immediately available funds to or to the order of the Corporation. The Subscription Amount shall be refundable without interest or deduction if the Subscription is rejected by the Corporation. On Closing, the Corporation shall deliver to the Subscriber the Convertible Debenture and the Warrants and the Subscription Amount shall be released to the Corporation.
 9. The Subscriber must complete, sign and return two (2) executed copies of this Subscription Agreement together with the Subscription Amount and any further documentation the Subscriber is required to execute, to the Corporation at the address set out on page 1 of this Agreement on or before Closing.
 10. The Subscriber agrees to complete and return the TSXV's Corporate Placee Registration Form 4C, attached hereto as **Schedule "E"** as part of the documentation required under Section 9 of this Agreement.
 11. Except in accordance with the provisions of applicable Securities Rules, the Subscriber undertakes and agrees not to sell, transfer or assign the Convertible Debenture or the Warrants or the Common Shares acquired on the conversion of the Convertible Debenture or the Common Shares acquired on the exercise of the Warrants, unless same have been held for a period of four (4) months from Closing and THE CERTIFICATES FOR THE CONVERTIBLE DEBENTURE AND WARRANTS SHALL HAVE PRINTED THEREON A LEGEND INDICATING THE FOUR MONTH HOLD PERIOD AS REQUIRED BY NATIONAL INSTRUMENT 45-102 AND THE TSXV. The Offered Securities shall be deemed acquired as of the date of the Closing.
 12. The Subscriber agrees to make such filings in connection with this Agreement as may be required by law and requested by the Corporation from time to time.
 13. This Agreement is subject to the approval of all Regulatory Authorities.
 14. Neither the Subscriber nor the Corporation may set over or assign all or any part of its interest in or to this Agreement without the written consent of the other and any purported assignment without consent will be void.
 15. This Agreement shall enure to the benefit of and be binding upon the parties and their successors, personal representatives, and permitted assigns.
 16. This Agreement shall be governed by and interpreted according to the laws of Ontario.

17. Any notice to be given by any party to another will be deemed to be given when in writing and delivered on any Business Day to the address of the intended recipient, as set forth in this Agreement. A party may by notice to the other party change its address for notice to some other address and will so change its address for notice to an address that is adequate whenever its existing address for notice is not adequate both for delivery by hand and communication by facsimile.
18. All words and expressions used in this Agreement regardless of the number and gender shall be deemed to include the singular or plural and masculine, feminine, or body corporate as the context or the party may require.
19. For the purposes of this Agreement and the transactions contemplated hereunder, time is of the essence.
20. The parties to this Agreement shall execute and deliver such further documents and assurances and shall do all such things as may be necessary to carry out the full intent and meaning of this Agreement.
21. The Subscriber acknowledges that it has been encouraged to and should obtain independent legal, income tax and investment advice with respect to its subscription for the Convertible Debenture and Warrants and the Common Shares issuable upon conversion of the Convertible Debenture and/or exercise of the Warrants, including, but not limited to, the applicable resale restrictions and accordingly, has been independently advised as to the meaning of all terms contained herein relevant to the Subscriber for purposes of giving representations, warranties and covenants under this Agreement.
22. All customary fees and disbursements (plus all applicable taxes) of counsel for the Subscriber relating to the offering and sale of the Convertible Debenture and Warrants and the fees and expenses (plus all applicable taxes) of the Subscriber incurred in connection with performing due diligence shall be borne by the Corporation. The Corporation shall also be liable for the Subscriber's out-of-pocket expenses (not to exceed \$5,000 per annum) incurred in connection with the maintenance of the Convertible Debenture arrangement.

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IN WITNESS WHEREOF the parties have caused this Agreement to be duly executed as of the 7th day of November, 2007.

NIR DIAGNOSTICS INC.

By: “Duncan J. MacIntyre”
Name: Duncan J. MacIntyre
Title: President, CEO & Executive Vice
Chairman

By: “Stephen A. Curtis”
Name: Stephen A. Curtis
Title: CFO & Corporate Secretary

I/We have authority to bind the corporation.

VENTABREN HOLDINGS LIMITED

By: “John H. Labatt”
Name: John H. Labatt
Title: President

By: _____
Name:
Title:

I/We have authority to bind the corporation.

SCHEDULE "A"
FORM OF CONVERTIBLE DEBENTURE

CONVERTIBLE SECURED DEBENTURE

Made as of **[December 3, 2007]**
Between
VENTABREN HOLDINGS LIMITED
(the "**Holder**")
and
NIR DIAGNOSTICS INC.
(the "**Corporation**")

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**ERROR! UNKNOWN DOCUMENT PROPERTY
NAME.**

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SCHEDULE A – OFFICER'S CERTIFICATE

SCHEDULE B – PERMITTED ENCUMBRANCES

SCHEDULE C – LOCATION OF ASSETS

SCHEDULE D – PREDECESSOR NAMES AND TRADE NAMES

SCHEDULE E – INTELLECTUAL PROPERTY

SCHEDULE F – MATERIAL CONTRACTS

SCHEDULE G – LIST OF WARRANT HOLDERS

WITHOUT PRIOR WRITTEN APPROVAL OF THE TSX VENTURE EXCHANGE (THE "TSXV") AND COMPLIANCE WITH ALL APPLICABLE SECURITIES LEGISLATION, THE SECURITIES REPRESENTED BY THIS INSTRUMENT MAY NOT BE SOLD, TRANSFERRED, HYPOTHECATED OR OTHERWISE TRADED ON OR THROUGH THE FACILITIES OF THE TSXV OR OTHERWISE IN CANADA OR TO OR FOR THE BENEFIT OF A CANADIAN RESIDENT UNTIL [APRIL 4, 2008].

UNLESS PERMITTED UNDER SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY MUST NOT TRADE THE SECURITY BEFORE APRIL 4, 2008.

CONVERTIBLE SECURED DEBENTURE

Principal Amount: \$2,200,000 Maturity Date: **[December 3, 2009]**

This convertible secured debenture (the "**Debenture**") is made as of **[December 3, 2007]** between

VENTABREN HOLDINGS LIMITED

(the "**Holder**")

and

NIR DIAGNOSTICS INC.

(the "**Corporation**")

SECTION 1- PRINCIPAL AMOUNT, INTEREST AND REDEMPTION

1.1 Principal Amount

For value received, the Corporation, having its chief executive office at 44 Crawford Cres., Campbellville, Ontario, L0P 1B0, shall pay to or to the order of the Holder the principal sum of TWO MILLION TWO HUNDRED THOUSAND DOLLARS (\$2,200,000.00) in lawful money of Canada (the "**Principal Amount**") at the office of the Holder at 181 University Avenue, Suite 1800, Toronto, Ontario, M5H 3M7 or such other place as the Holder may designate on December 3, 2009 (the "**Maturity Date**"), unless earlier repayment is required or permitted under the terms and conditions of this Debenture and subject to the right or obligation of the Holder to receive Common Shares (as such term is defined in this Debenture) in lieu of receiving such sum or a portion thereof in accordance with the terms and conditions of this Debenture. In the event of a Change of Control (as such term is defined in this Debenture), all Obligations (as such term is defined in this Debenture) and all monies secured by this Debenture shall, at the option of the Holder, be due and payable on the date that such Change of Control is effective.

1.2 Interest

Subject to the provisions of Section 7.2, the Principal Amount outstanding from time to time shall bear interest from the date of this Debenture to the date of repayment in full at an annual rate of TWELVE PERCENT (12%). Interest on the Principal Amount outstanding from time to time shall be calculated and payable monthly in arrears on the last Business Day (as such term is defined in this Debenture) of each month.

1.3 Change of Control

(1) Notice. The Corporation shall provide the Holder with not less than sixty (60) days' prior written notice of a Change of Control or a proposed Change of Control (a "**Change of Control Notice**"). The

Corporation shall not issue a Redemption Notice within thirty (30) days after issuing a Change of Control Notice.

(2) Prepayment. Subject to the Holder exercising its conversion privilege as contemplated by Section 2.1, in the event of a Change of Control, all monies now or at any time from time to time hereafter owing by the Corporation to the Holder pursuant to this Debenture shall, at the option of the Corporation, be due and payable on the date that such Change of Control is effective and shall specify the prepayment in the Change of Control Notice. If the Corporation does not exercise its option under this Section 1.3(b), this Debenture shall, at the option of the Holder, be due and payable on the date that such Change of Control is effective.

1.4 Redemption Option

(1) Subject to Section 1.4(2), the Corporation may, on not less than sixty (60) days' prior written notice to the Holder (the "**Redemption Notice**"), redeem all of the Principal Amount owing pursuant to this Debenture together with accrued and unpaid interest thereon. In such event, the Corporation shall pay to the Holder, in cash or by the issuance of Common Shares (based on the Conversion Price pursuant to Section 2.1) or such combination thereof as the Holder, in its exclusive option, shall have designated in writing to the Corporation within fifty-nine (59) days following receipt of the Redemption Notice, the Principal Amount so redeemed together with accrued and unpaid interest thereon.

(2) Notwithstanding Section 1.4(1), no redemption shall be permitted if:

- (a) during the sixty (60) day period during which a Redemption Notice is outstanding, the Corporation is required to deliver a Change of Control Notice to the Holder; or
- (b) within thirty (30) days of receiving a Redemption Notice, the Holder delivers a Conversion Notice to the Corporation.

1.5 Limit on Rate of Interest

(1) Adjustment. If any provision of this Debenture, the Subscription Agreement or any of the Security Documents would obligate the Corporation to make any payment of interest or other amount payable to the Holder in an amount or calculated at a rate which would be prohibited by law or would result in a receipt by the Holder of interest at a criminal rate (as construed under the *Criminal Code* (Canada)), then notwithstanding that provision, that amount or rate shall be deemed to have been adjusted with retroactive effect to the maximum amount or rate of interest, as the case may be, as would not be so prohibited by law or result in a receipt by the Holder of interest at a criminal rate, the adjustment to be effected, to the extent necessary, as follows:

- (a) firstly, by reducing the amount or rate of interest required to be paid to the Holder under Section 1.2 or Section 7.2, as applicable; and
- (b) thereafter, by reducing any fees, commissions, premiums and other amounts required to be paid to the Holder which would constitute interest for purposes of section 347 of the *Criminal Code* (Canada).

(2) Reimbursement. Notwithstanding Section 1.5(1), and after giving effect to all adjustments contemplated thereby, if the Holder shall have received an amount in excess of the maximum permitted by the *Criminal Code* (Canada), then the Corporation shall be entitled, by notice in writing to the Holder

to obtain reimbursement from the Holder in an amount equal to the excess, and pending reimbursement, the amount of the excess shall be deemed to be an amount payable by the Holder to the Corporation.

(3) Actuarial Principles. Any amount or rate of interest referred to in this Section 1.5 shall be determined in accordance with generally accepted actuarial practices and principles as an effective annual rate of interest over the term that any Principal Amount owing under this Debenture remains outstanding. In the event of a dispute, a certificate of a Fellow of the Canadian Institute of Actuaries appointed by the Holder shall be conclusive for the purposes of that determination.

SECTION 2– CONVERSION

2.1 Conversion Privilege

Subject to the provisions of this Section 2.1, at any time and from time to time for as long as any Principal Amount remains outstanding, the Holder shall have the right, exercisable on or prior to the Maturity Date, to convert the whole or any part of the Principal Amount outstanding into fully paid and non-assessable Common Shares at a conversion rate of one (1) Common Share for each \$0.15 of the Principal Amount so converted (the "**Conversion Price**"), as adjusted, if applicable, in accordance with the terms of this Section 2. Conversion pursuant to this Section 2.1 may be effected by the surrender of this Debenture to the Corporation at the chief executive office of the Corporation, accompanied by a written instrument of surrender in form and substance satisfactory to the Corporation, acting reasonably (a "**Conversion Notice**"), signed by the Holder notifying the Corporation as to the exercise of the right of conversion and specifying the amount of the Principal Amount outstanding in respect of which this Debenture is converted and setting forth the name and address of the Person(s) in whose name(s) the Common Shares issuable upon such conversion are to be registered. The Corporation shall, within five (5) Business Days of the receipt of a Conversion Notice: (a) issue to the Holder or its nominee(s) a certificate or certificates representing the number of Common Shares into which all or any portion of the Principal Amount outstanding has been converted; and (b) in the event that any Principal Amount remains outstanding under this Debenture after giving effect to such conversion, issue a new debenture, in form identical to this Debenture and dated as of the date of this Debenture, in a principal amount equal to the remaining Principal Amount outstanding. The Common Shares shall be issued in accordance with Section 6.1(11) and shall be registered and delivered to the Holder at the address set forth in Section 8.9(1), or in accordance with the written instructions of the Holder to be delivered to the Corporation.

Upon receipt by the Corporation of a Conversion Notice, the Holder shall be entitled to be entered in the books of the Corporation as at the close of business on the date the Holder exercises its right of conversion as the holder of record of that number of Common Shares into which this Debenture is converted in accordance with the provisions of this Section 2.1.

2.2 Adjustments

(1) If at any time prior to the earlier of the Maturity Date and the date upon which the full Principal Amount under this Debenture has been converted pursuant to Section 2.1, the number of Common Shares issued and outstanding varies as a result of a stock dividend (other than a stock dividend constituting a dividend paid in the ordinary course), subdivision, consolidation or other similar reorganization of the Corporation or its share capital, the Holder shall thereafter be entitled, on conversion, to receive the number of Common Shares to which it was, before such subdivision, consolidation, or other reorganization of the Corporation or its share capital, entitled, as subdivided, consolidated or otherwise reorganized, and the Conversion Price shall be adjusted accordingly. Any such adjustment shall become

effective on the date and at the time that such subdivision, consolidation or other reorganization becomes effective.

(2) In case of (i) any reclassification of the Common Shares (other than as accounted for in Section 2.2(1)); (ii) any consolidation, merger or amalgamation of the Corporation with or into another Person or Persons; or (iii) the sale of the properties and assets of the Corporation as an entirety or substantially as an entirety to another Person or Persons in which the holders of the Common Shares are entitled to receive consideration, a substantial portion of which consists of securities, the securities deliverable by the Corporation upon any conversion of this Debenture thereafter shall be such number and kind of shares or other securities and property (or the applicable portion thereof) receivable on such reclassification, consolidation, merger, amalgamation or sale that the Holder would have been entitled to receive thereupon had the Holder been the registered holder of the number of Common Shares into which this Debenture might have been converted immediately prior thereto.

(3) In the event of any question or dispute arising with respect to the adjustments provided in this Section 2.2, such question or dispute shall be conclusively determined by a firm of chartered accountants mutually appointed by the Corporation and the Holder and such determination shall, absent manifest error, be binding upon the Corporation and the Holder.

2.3 No Requirement to Issue Fractional Common Shares

The Corporation shall not be required to issue fractional Common Shares upon the conversion of this Debenture or any part of this Debenture. If any fractional interest in a Common Share would, except for the provisions of this Section 2.3, be deliverable upon the conversion of any Principal Amount of this Debenture, the Corporation shall, in lieu of delivering any certificate of such fractional interest, satisfy such fractional interest by paying to the Holder an amount of lawful money of Canada (computed to the nearest cent) equal to the balance of the Principal Amount of the Debenture tendered for conversion.

SECTION 3– INTERPRETATION

3.1 Defined Terms

Unless expressly provided otherwise, where used in this Debenture, the following terms shall have the following meanings, respectively:

(1) **"Affiliate"** has the meaning specified in the *Business Corporations Act* (Ontario) as in effect at the date hereof and without reference to any amendments thereto after the date hereof.

(2) **"Associate"** has the meaning specified in the *Business Corporations Act* (Ontario) as in effect at the date hereof and without reference to any amendments thereto after the date hereof.

(3) **"Business Day"** means any day other than Saturday, Sunday or a day on which chartered banks are closed for business in Toronto, Ontario.

(4) **"Change of Control"** means any event whereby any Person(s), or any Person(s) acting jointly or in concert (as such phrase is used in the *Securities Act* (Ontario) as in effect at the date of this Debenture and without reference to any amendments thereto after the date of this Debenture) (other than the Holder or the Holder's Affiliates) with such Person(s), become(s) the direct or indirect beneficial owner(s) of 20% or more of the voting shares of the Corporation or securities exercisable or convertible into voting shares of the Corporation, save and except for a Permitted Change of Control.

- (5) **"Change of Control Notice"** has the meaning specified in Section 1.3(1).
- (6) **"Common Shares"** means:
- (a) common shares in the capital of the Corporation;
 - (b) any other securities into which those common shares may be converted, exchanged, reclassified, redesignated, subdivided, consolidated or otherwise changed from time to time;
 - (c) any securities of any successor corporation to or corporation continuing from the Corporation which those common shares or other securities may be changed into or become as a result of any amalgamation, continuance, merger, consolidation, plan of arrangement or reorganization, statutory or otherwise; and
 - (d) any securities received as a stock dividend or other distribution on or in respect of those common shares or other securities.
- (7) **"Contractual Rights"** has the meaning specified in Section 4.3.
- (8) **"Conversion Notice"** has the meaning specified in Section 2.1.
- (9) **"Conversion Price"** has the meaning specified in Section 2.1.
- (10) **"Debenture"** means this convertible secured debenture in the principal amount of \$2,200,000.00 issued by the Corporation to the Holder on the date hereof.
- (11) **"Encumbrance"** means any mortgage, lien, pledge, claim, restriction, assignment, charge, security interest, title retention agreement, hypothec, levy, execution, seizure, attachment, garnishment, right of distress, statutory trust or withholding obligation, or other encumbrance in respect of property of any nature or kind whatsoever howsoever arising (whether consensual, statutory or arising by operation of law or otherwise) and shall be construed in its widest possible terms and principles known under the law and includes arrangements known as sale and lease-back, sale and buy-back and sale with an option to buy-back.
- (12) **"Environmental Laws"** means all applicable federal, provincial, state, municipal or local laws, statutes, regulations or ordinances relating to the environment, occupational safety, health, product liability and transportation.
- (13) **"Environmental Order"** means any prosecution, Order, decision, notice, direction, report, recommendation or request issued, rendered or made by any governmental authority in connection with Environmental Laws.
- (14) **"ESOP"** means the Corporation's 2003 Stock Option Plan;
- (15) **"Event of Default"** has the meaning specified in Section 7.1.
- (16) **"Excluded Assets"** has the meaning specified in Section 4.1.

- (17) **"GAAP"** means, at any time, accounting principles generally accepted in Canada as recommended in the Handbook of the Canadian Institute of Chartered Accountants at the relevant time applied on a consistent basis.
- (18) **"Hazardous Substance"** means any substance or combination of substances which is hazardous, toxic, injurious or dangerous to Persons, property, air, land, water, flora, fauna or wildlife, and includes but is not limited to any contaminants, pollutants, dangerous substances, liquid wastes, industrial wastes, hauled liquid wastes, toxic substances, hazardous wastes, hazardous materials or hazardous substances as defined in or pursuant to any Environmental Laws or Environmental Orders pursuant thereto.
- (19) **"Instrument"** means this Debenture, the Subscription Agreement and any of the Security Documents or any other agreement or instrument (whether now existing, presently arising or created in the future) delivered by the Corporation to the Holder.
- (20) **"Intellectual Property"** means all right, title, interest and benefit of the Corporation in and to any registered or unregistered world-wide trademarks, trade or brand names, service marks, copyrights, copyright applications, designs, inventions, patents, patent applications, patent rights, licences, sub-licences, franchises, formulas, processes, know-how, technology, source code, object code, computer programs and other computer software in whatever media and other intellectual or industrial property of the Corporation or its Subsidiaries or pertaining to the Corporation's or its Subsidiaries' respective businesses.
- (21) **"Licence Agreements"** means all agreements pursuant to which the Corporation has obtained rights or an option to acquire rights or has granted to a Person rights or an option to acquire rights to use any Intellectual Property owned by a Person or the Corporation, respectively.
- (22) **"Material Contracts"** has the meaning specified in Section 5.1(28).
- (23) **"Maturity Date"** has the meaning specified in Section 1.1.
- (24) **"Obligations"** means all monies now or at any time and from time to time hereafter owing or payable by the Corporation to the Holder under this Debenture (whether now existing, presently arising or created in the future), whether direct or indirect, absolute or contingent, matured or not, whether arising from agreement or dealings between the Holder and the Corporation or from any agreement or dealings with any third Person by which the Holder may be or become in any manner whatsoever a creditor or other obligee of the Corporation or however otherwise arising hereunder and whether the Corporation be bound alone or with another or others and whether as principal or surety.
- (25) **"Occupants"** means the Corporation, its Subsidiaries, its tenants and other occupants of any Premises.
- (26) **"Order"** means any order, notice, direction, report, recommendation or decision rendered by any governmental or other regulatory agency.
- (27) **"Ordinary Course"** means, with respect to an action taken by a Person, that such action is consistent with the past practices of the Person and is taken in the ordinary course of the normal day-to-day operations of the Person.
- (28) **"Parties"** means the Holder, the Corporation and any other Person who may become a party to this Debenture; and **"Party"** means any one of them.

- (29) **"Permitted Change of Control"** means an event whereby any Person, or Persons acting jointly or in concert with such Person, acquires, directly or indirectly, 20% or more of the voting shares of the Corporation or securities exercisable or convertible into voting shares of the Corporation pursuant to a bona fide arm's length amalgamation, merger or acquisition transaction involving the Corporation which is approved at the sole discretion of the Holder;
- (30) **"Permitted Encumbrances"** has the meaning ascribed thereto on **Schedule "B"**.
- (31) **"Person"** means an individual, partnership, corporation, trust, unincorporated association, joint venture, governmental agency or other entity.
- (32) **"PPSA"** means the *Personal Property Security Act* (Ontario).
- (33) **"Premises"** means any premises owned or occupied by the Corporation or its Subsidiaries from time to time.
- (34) **"Principal Amount"** has the meaning specified in Section 1.1.
- (35) **"Receiver"** shall include one or more of a receiver, receiver-manager or receiver and manager, or interim receiver appointed under the *Bankruptcy and Insolvency Act* (Canada) of all or a portion of the undertaking, property and assets of the Corporation, appointed by the Holder pursuant to this Debenture by or under any judgment or order of a court.
- (36) **"Release"** includes abandon, add, deposit, discharge, disperse, dispose, dump, emit, empty, escape, leach, leak, migrate, pour, pump, release or spill.
- (37) **"Secured Property"** means all property and assets of the Corporation subjected to the security interest granted under Section 4.1.
- (38) **"Securities Laws"** means, collectively, all applicable securities laws in all of the provinces of Canada, the respective regulations, rules, rulings, decisions and orders made thereunder, and the applicable policy statements and prescribed forms issued by the securities regulatory authorities thereunder, including, but not limited to the Ontario Securities Commission and the TSXV or the TSX, as applicable.
- (39) **"Security Documents"** means, collectively, this Debenture and all other agreements and other instruments delivered to the Holder by the Corporation or its Subsidiaries (whether now existing or presently arising) for the purpose of establishing, perfecting, preserving or protecting any security held by the Holder in respect of any Obligations.
- (40) **"Security Interest"** has the meaning specified in Section 4.1(1).
- (41) **"Subscription Agreement"** means the subscription agreement dated **November 7, 2007** between the Corporation and the Holder.
- (42) **"Subsidiary"** has the meaning specified in the *Securities Act* (Ontario) as in effect at the date hereof and without reference to any amendments thereto after the date hereof and, with respect to the Corporation, means NIR Systems Inc. and 2037722 Ontario Inc. (both of which are inactive as at the date of this Debenture).

- (43) "**Tax Act**" means the *Income Tax Act* (Canada).
- (44) "**TSX**" means the Toronto Stock Exchange.
- (45) "**TSXV**" means the TSX Venture Exchange.
- (46) "**Warrants**" means common share purchase warrants of the Corporation.

3.2 Interpretation

- (1) "**This Debenture**", "**hereto**", "**hereby**", "**hereunder**", "**herein**", and similar expressions refer to the whole of this convertible subordinated debenture of the Corporation and not to any particular Section, subsection or other portion hereof.
- (2) All references herein to the Tax Act shall refer to such act and the regulations thereunder as the same may be amended or replaced from time to time.
- (3) Except as expressly provided herein, terms which are defined in the PPSA shall have the same meanings where used herein.
- (4) Words importing the singular number only include the plural and vice versa and words importing gender shall include all genders.
- (5) All financial or accounting determinations, reports and statements provided for in this Debenture shall be made or prepared in accordance with GAAP and shall be made and prepared on a consolidated basis.
- (6) The division of this Debenture into Sections and subsections and the insertion of headings and a table of contents are for convenience of reference only and shall not affect the construction or interpretation of this Debenture.
- (7) References to sums of money herein are to Canadian dollars.
- (8) Time is of the essence hereof.
- (9) Where the word "**including**" or "**includes**" is used in this Debenture, it means "**including (or includes) without limitation**".
- (10) For the purposes of this Debenture, the rules in section 251 of the Tax Act (as in effect at the date hereof and without reference to any amendments thereto after the date hereof) shall be applied to determine whether (i) two or more Persons are dealing at "**arm's length**" and (ii) Persons are "**related**".

3.3 Governing Law

This Debenture shall be governed by and interpreted and enforced in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein. Each of the Parties irrevocably submits to the non-exclusive jurisdiction of the courts of the Province of Ontario with respect to any matter arising out of or relating to this Debenture and agrees that all claims in respect of such matters may be heard and determined in such courts.

SECTION 4 – SECURITY

4.1 Charge

(1) For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and to secure the due payment and performance of the Obligations, but subject to the Permitted Encumbrances and to the exceptions set forth in Section 4.2 and Section 4.3, the Corporation hereby creates a security interest (the "**Security Interest**") in and grants, mortgages, assigns, transfers, pledges and charges as and by way of a first charge to and in favour of the Holder and its successors and assigns the whole of the undertaking of the Corporation and all of its property and assets, real and personal, movable and immovable, tangible and intangible, of every nature and kind whatsoever, wheresoever situate, both present and future, including all customer contracts.

(2) The Corporation and the Holder hereby acknowledge that: (i) value has been given; (ii) the Corporation has rights in the Secured Property (other than after-acquired property); and (iii) the security interest created under this Debenture attaches immediately when this Debenture is executed by the Corporation and the Corporation and the Holder have not agreed to postpone the time of attachment of the security granted under this Debenture. The Security granted under this Debenture shall attach to any particular property intended to be subject to it as soon as the Corporation has rights in such property.

4.2 Exceptions as to Leases

The last day of any term of years reserved by any lease or sublease, verbal or written, or any agreement therefor, now held or hereafter acquired by the Corporation is specifically excepted out of the Secured Property, but the Corporation shall stand possessed of any such reversion upon trust to assign and dispose thereof as the Holder may direct. Where the giving of a charge or security interest on any real or personal property held by the Corporation under lease requires the consent of the lessor of such property, the giving of the charge or security interest hereunder on such property shall not take effect until such consent is obtained or legally dispensed with but the suspension of the effect of the charge or security interest on such property shall not affect the charge or security interest on any other property of the Corporation.

4.3 Exception for Contractual Rights

The charges and security interests hereby created do not and shall not extend to, and Secured Property shall not include, any agreement, right, franchise, licence or permit (the "**Contractual Rights**") to which the Corporation is a party or of which the Corporation has the benefit, to the extent that the creation of the charges and security interests herein would constitute a breach of the terms of or permit any person to terminate the Contractual Rights, but the Corporation shall hold its interest therein in trust for the Holder and shall assign such Contractual Rights to the Holder forthwith upon obtaining the consent of the other party thereto. The Corporation agrees that it shall use reasonable best efforts to obtain any consent required to permit any Contractual Rights to be subjected to the charges and security interests hereby created.

4.4 Habendum

TO HAVE AND TO HOLD the Secured Property and all of the rights hereby conferred unto the Holder, its successors and assigns forever, but subject nevertheless to the provisions and with the powers herein set forth.

4.5 Charge Valid Irrespective of Advance of Money

The charges and security interests hereby created shall have effect and be deemed to be effective whether or not the monies or obligations hereby secured or any part thereof shall be advanced or owing or in existence before or after or upon the date of this Debenture and neither the giving of this Debenture nor any advance of funds hereunder shall oblige the Holder to advance any additional funds.

4.6 Supplemental Indentures

The Corporation shall from time to time on demand by the Holder execute and deliver such further deeds or indentures supplemental hereto, which shall thereafter form part hereof, for the purpose of charging, or securing in favour of the Holder any property now owned or hereafter acquired by the Corporation and falling within the description of the Secured Property, for correcting or amplifying the description of any property hereby charged or secured or intended so to be, or for any other purpose not inconsistent with the terms of this Debenture.

4.7 Continuing Security

Any and all payments made at any time in respect of the Obligations and the proceeds realized from any security held therefor (including monies realized from the enforcement of this Debenture) may be applied (and reapplied from time to time notwithstanding any previous application) to such part or parts of the Obligations as the Holder sees fit in its sole discretion. The Holder may hold as additional security hereunder any increase or profits or other proceeds realized from the Secured Property (including money) for such period of time as the Holder, acting reasonably, sees fit.

4.8 Defeasance

This Debenture and the charge and security interest created under this Debenture in favour of the Holder shall remain in full force and effect until the Corporation, its successors or assigns or any of them has made or caused to be made due irrevocable payment or performance in full of all Obligations, without any reduction or abatement, and all taxes, rates, levies, charges or assessments payable by the Corporation upon the Secured Property or in respect thereof no matter by whom or by what authority imposed which the Holder shall have paid or shall have been rendered liable to pay, notwithstanding the repayment or satisfaction from time to time of the whole or any part of the Obligations. Upon such payment or performance of all Obligations, then everything in this Debenture shall be absolutely null and void and the Holder shall on request therefor by the Corporation surrender this Debenture to the Corporation.

4.9 Release of Security

This Debenture may be terminated by written agreement made between the Holder and the Corporation or by notice in writing given by the Corporation to the Holder at any time when all of the Obligations have been fully satisfied and performed by the Corporation. Upon termination of this Debenture, the Holder shall, at the request and expense of the Corporation, make and do all such acts and things and execute and deliver all such financing statements, instruments, agreements and documents as the Corporation reasonably considers necessary or desirable to discharge the security interest created hereunder, to release and discharge the Secured Property therefrom and to record such release and discharge in all appropriate offices of public record.

SECTION 5– REPRESENTATIONS AND WARRANTIES

5.1 General Representations and Warranties

The Corporation represents and warrants to the Holder as follows:

- (1) **Secured Property.** All material Secured Property which exists as of the date of this Debenture is located in the Province of Ontario.
- (2) **Consumer Goods.** None of the Secured Property now owned or hereafter acquired is now or shall at any time be Consumer Goods as defined in the PPSA.
- (3) **Authority.** The Corporation has good right and lawful authority to grant, assign, transfer, mortgage and charge the Secured Property as provided for in this Debenture.
- (4) **Incorporation and Status.** The Corporation is a corporation continued and subsisting under the laws of Ontario. The Corporation has the corporate power and capacity to own or lease its properties and assets and to carry on its business as presently carried on by it and to enter into this Debenture and to do all acts and things as are required or contemplated hereunder to be done, observed and performed by it.
- (5) **Authorization, Execution and Delivery.** The Corporation has taken all necessary corporate action to authorize the execution and delivery of this Debenture and such other documents to which it is a party as are contemplated in this Debenture. On execution and delivery hereof, this Debenture will constitute a valid and legally binding obligation of the Corporation enforceable in accordance with its terms, subject to bankruptcy, insolvency, liquidation, reorganization, reconstruction and other similar laws generally affecting enforceability of creditors' rights.
- (6) **No Contravention.** The execution and delivery of this Debenture and the performance by the Corporation of its obligations hereunder (i) does not violate any law, rule or regulation applicable to the Corporation or any provision of the articles, by-laws, constating documents or other organizational documents of the Corporation, (ii) constitute a breach of any existing contractual or other obligation of the Corporation or contravene any licence or permit to which the Corporation is subject, and (iii) will not result in or permit the acceleration of the maturity of any indebtedness or other obligation of the Corporation.
- (7) **No Consents Required.** No authorization, consent or approval of, or filing with or notice to, any Person is required in connection with the execution, delivery or performance of this Debenture by the Corporation, except as have been obtained or made.
- (8) **Title to Assets.** Subject to Permitted Encumbrances, the Corporation has good title to or a valid leasehold interest in or license to its assets, free and clear of all Encumbrances.
- (9) **Securities Laws.** The Corporation is a reporting issuer in the Provinces of Ontario, Alberta and British Columbia and is not in default in any material respect of any of the provisions or requirements of the applicable Securities Laws of those jurisdictions and has completed on a proper and timely basis all necessary filings under all applicable Securities Laws. The Common Shares of the Corporation trade on the TSXV under the symbol "NID".
- (10) **Taxes and Assessments.** The Corporation has filed all tax returns and other documents required to be filed by it under any applicable taxing legislation and has paid all taxes, licence fees or other charges that are due and payable and has paid all assessments and reassessments and all other taxes

(including federal and provincial sales taxes, governmental charges, penalties, interest and fines, due and payable on or before the date hereof).

(11) **Compliance with Laws.** The Corporation is conducting its business in compliance in all material respects with all applicable laws, rules, regulations, orders, judgements, writs, injunctions, decrees, determinations or awards of each jurisdiction in which its business is carried on and holds necessary licences, permits, approvals, consents, certificates, registrations and authorizations, whether governmental, regulatory or otherwise, to enable its business to be carried on as now conducted and its property and assets to be owned, leased and operated, and the same are validly existing and in good standing.

(12) **Validity and Priority of Security.** Subject only to Permitted Encumbrances, this Debenture and the Security Documents create a valid first priority, charge, lien and security interest on the personal property and assets of the Corporation, including Intellectual Property, purported to be mortgaged, charged or subject to a security interest thereby.

(13) **No Litigation.** There is no action, suit, proceeding or investigation (whether or not purportedly by or on behalf of the Corporation) pending or, to the best of the knowledge, information and belief of the Corporation, threatened against or affecting the Corporation or before or by any federal, provincial, municipal or other governmental department, commission, board, bureau or agency or before any arbitrator, domestic or foreign, which would, if determined adversely to the Corporation, in any way materially adversely affect the Corporation, or the business, operations, assets or condition (financial or otherwise) of the Corporation, or which questions the validity of any action taken or to be taken by the Corporation.

(14) **No Defaults or Events of Default.** No event has occurred and is continuing, and no circumstance exists which has not been waived, and which constitutes an Event of Default hereunder or a default or event of default in respect of any Material Contract or commitment to which the Corporation or any of its Subsidiaries is now a party or is otherwise bound, entitling any other party thereto to accelerate the maturity of amounts of principal owing thereunder, or terminate any such commitment, agreement or instrument, or which could reasonably be expected to have a material adverse effect on the business, Secured Property and or operations of the Corporation and or its Subsidiaries.

(15) **Non-Dilution.** No Person now has any agreement, option or right capable of becoming an agreement or option for the pledge, purchase, subscription or issuance from the Corporation or any of its Subsidiaries of any securities, issued or unissued, which will cause a Change of Control.

(16) **No Foreign Business.** Neither the Corporation nor any of its Subsidiaries carry on any business, employ any employees, or own any material assets outside Canada or the United States of America. The Corporation may expand its business to other jurisdictions in the future.

(17) **Subsidiaries.** The Corporation does not own any shares or voting securities of any Person, directly or indirectly, other than the Subsidiaries identified in this Debenture.

(18) **Guarantees.** Neither the Corporation nor any of its Subsidiaries has guaranteed the obligations of any Person for borrowed money.

(19) **Location of Assets.** Schedule C, Part A contains the legal description of all real property owned by the Corporation. Set out in Schedule C, Part B is a list of all real property locations leased by the Corporation. Set out in Schedule C, Part C is a list of all real property locations in which any material

asset owned by the Corporation is located and which locations are neither owned nor leased by the Corporation.

(20) **No Required Disposition.** There is no existing agreement, option, right or privilege capable of becoming an agreement or option pursuant to which the Corporation would be required to sell or otherwise dispose of any of its personal property, including, without limitation, Intellectual Property.

(21) **Predecessor Names and Trade Names.** Since the date of its incorporation, the Corporation has not used nor does it now use any name other than its current corporate name and any other names set out in Schedule D annexed hereto.

(22) **Partnership.** The Corporation is not in partnership with any Person nor is the Corporation any of its Subsidiaries, if any, a participant in any joint venture.

(23) **Labour Matters.** To the best of the Corporation's knowledge, there are no strikes or other labour disputes against the Corporation that are pending or threatened. All payments due from the Corporation on account of workers compensation, social security, employment insurance, employee health plans and insurance of every kind and employee income tax source deductions and vacation pay have been paid. The Corporation does not have any obligation under any collective bargaining agreement nor, to the best of the Corporation's knowledge, is there any organizing activity involving the Corporation by any labour union or group of employees. All employee and employer contributions under any pension plan operated by the Corporation have been made and the fund or funds established under such plans are funded in accordance with applicable regulatory requirements and there exists no going concern unfunded liabilities or solvency deficiencies thereunder.

(24) **Employees and Consultants.** There has not been and there are no complaints or any claims or charges outstanding or, to the knowledge of the Corporation, anticipated relating to the employment of any of the employees of the Corporation or engagement of any of the consultants to the Corporation. To the knowledge of the Corporation, no employee or consultant of the Corporation has any present intention of terminating his, her or its employment or engagement with the Corporation nor does the Corporation have any present intention of terminating the employment or engagement of any such Person. The granting of the rights to the Holder under this Debenture, the Subscription, the Warrants (alone or in the aggregate) and the exercise by the Holder of conversion rights under this Debenture or upon the exercise of the Warrants by the Holder in whole or in part do not and will not (alone or together with another event) result in any amounts being payable to an employee or consultant in respect of termination pay, severance or notice of termination, golden parachute or payment due upon a change of control or otherwise under such agreement or arrangement with any employee of the Corporation for which such right has not been waived in writing by such employee or consultant, in a form satisfactory to the Holder, acting reasonably.

(25) **Accuracy of Information.** All factual information previously or contemporaneously furnished to the Holder by or on behalf of the Corporation in writing for purposes of or in connection with this Agreement or any transaction contemplated hereby, including, without limitation, any financial statement, budget, balance sheet or business plan, is true and accurate in every material respect and such information is not incomplete by the omission of any material fact necessary to make such information not misleading.

(26) **Solvency.** The Corporation is not bankrupt and is generally able to pay its debts as they become due and will be able to do so after giving effect to the transactions contemplated in this Agreement.

(27) **Intellectual Property.**

- (a) The Corporation or its Subsidiaries, if any, solely, pursuant to a Licence Agreement or Licence Agreements, own or license all Intellectual Property necessary for the conduct in all material respects of its business as now conducted without any conflict known to the Corporation with the rights of others, and in each case free from any Encumbrance except for Permitted Encumbrances. All such Intellectual Property of the Corporation or its Subsidiaries, if any, is new and original. No Intellectual Property of the Corporation or its Subsidiaries, if any, has been dedicated to the public. Set out in Schedule E, Part A is a list of all registered or applied for patents, patent applications, trademarks, trade names, copyrights, licenses and rights with respect to the Intellectual Property owned by the Corporation and its Subsidiaries, if any.
- (b) Any Intellectual Property that is not owned by the Corporation or its Subsidiaries, if any, is used with the consent of or licence from the rightful owner through the Licence Agreements set forth in Schedule E, Part B hereto, other than licenses arising from the purchase of "off the shelf" or other standard products; such Licence Agreements are valid and subsisting and in good standing and there are no defaults thereunder by the Corporation or, if applicable, its Subsidiaries. The Corporation has all rights necessary to use the Intellectual Property described in the Licence Agreements set out in Schedule E, Part B hereto, free from any Encumbrance, except for Permitted Encumbrances.
- (c) The Corporation conducts its business without infringement of any Intellectual Property. No claim has been asserted or, to the best of the knowledge of the Corporation, has been threatened or is pending by any Person against the Corporation challenging or questioning the use or infringement of any Intellectual Property.

(28) **Material Contracts.** Schedule F sets out a complete list of all contracts to which the Corporation is a party or is bound that, individually or in the aggregate, are material to the business, operations, properties, assets, conditions, or prospects, financial or otherwise, of the Corporation ("**Material Contracts**"). Each Material Contract: (i) is valid and binding upon the Corporation and, to the best of the knowledge of the senior officers of the Corporation, the other parties thereto; (ii) is in full force and effect; (iii) has not been materially breached by the Corporation or, to the knowledge of the senior officers of the Corporation, any other party thereto, nor is there any event or condition which, with the passage of time, would constitute a material default or a material breach by the Corporation or any third party; and (iv) contains no liquidated damages, penalty, indemnification or similar provision. No party to any of the Material Contracts has indicated, nor does the Corporation have any reasonable basis to believe that any party to any of the Material Contracts will indicate, that it intends to cancel, withdraw, modify or amend any of same. The Corporation has performed all material obligations required to be performed by it on or prior to the date hereof under each of the Material Contracts, and the Corporation is not aware of any facts from which it would reasonably conclude that the Corporation will not be able to perform all material obligations required to be performed by it subsequent to the date hereof under each of the same. True and complete copies of all Material Contracts have been delivered to the Holder or its counsel.

5.2 Survival of Representations and Warranties

The representations and warranties in this Debenture and in any certificates or documents delivered to the Holder pursuant hereto shall not merge and shall continue in full force and effect for the benefit of the Holder following the date of this Debenture for as long as any amounts are owing by the Corporation to the Holder under this Debenture.

SECTION 6 – COVENANTS OF THE CORPORATION

6.1 General Covenants

At all times and subject to the negative covenants set forth in Section 6.2 of this Debenture, the Corporation covenants and agrees for so long as this Debenture is in force and any portion of the Obligations remains unpaid, unfulfilled and/or unsatisfied as follows:

(1) **To Pay Costs.** The Corporation shall pay all reasonable costs, charges and expenses of or incurred by the Holder: (i) in inspecting the Secured Property or in or about taking, recovering or keeping possession of any of the Secured Property or in any other proceedings taken in enforcing the remedies provided herein or otherwise in relation to this Debenture or the Secured Property, or by reason of non-payment of the monies hereby secured; (ii) in connection with any sale proceedings hereunder, whether such sale proceedings prove abortive or not; (iii) in connection with any Receiver with respect to, and all expenditures made by the Holder or any Receiver in the course of, doing anything hereby permitted to be done by the Holder or such Receiver; and (iv) in connection with any monitor, consultant or other agent or representative of the Holder retained to assist the Holder in investigating compliance with, or enforcing its remedies under, this Debenture. All such costs and expenses and other monies payable hereunder, together with interest thereon at the highest rate applicable to any Obligations, shall be payable on demand and shall constitute a charge on the Secured Property. Without limiting the generality of the foregoing, such costs shall extend to and include any reasonable legal costs incurred by or on behalf of the Holder as between solicitor and his own client;

(2) **To Pay Certain Debts.** The Corporation shall and shall cause its Subsidiaries to punctually pay and discharge every obligation, the failure to pay or discharge of which might result in any lien or charge or right of distress, forfeiture, termination or sale or any other remedy being enforced against the Secured Property and provide to the Holder when required satisfactory evidence of such payment and discharge, but the Corporation may, on giving the Holder such security (if any) as the Holder may require, refrain from paying or discharging any obligation the liability for which is being contested in good faith;

(3) **To Maintain Corporate Existence and Security.** The Corporation shall and shall cause each of its Subsidiaries (other than NIR Systems Inc. and 2037722 Ontario Inc., which are inactive) to:

- (a) maintain its corporate existence;
- (b) use all commercially reasonable efforts to preserve all its rights, licences, powers, privileges, franchises and goodwill;
- (c) observe and perform all of its obligations and comply in all material respects with all conditions under leases, licences and other agreements to which it is a party or upon or under which any of the Secured Property is held;
- (d) carry on and conduct its business in a proper and efficient manner so as to preserve and protect the Secured Property and income therefrom;
- (e) keep proper books of account with correct entries of all transactions in relation to its business;
- (f) repair and keep in repair and good order and condition, ordinary wear and tear excepted, all property, including the Secured Property, the use of which is necessary or advantageous in connection with its business;

- (g) use commercially reasonable best efforts to collect all accounts receivable in the Ordinary Course of business;
- (h) ensure that it is in material compliance with all valid requirements of law and of any governmental or municipal authority relative to the Secured Property or the carrying on by the Corporation and its Subsidiaries of their respective businesses, except to the extent that non-compliance with such laws does not materially and adversely affect (A) the business, operations, results of operations, affairs, financial or other condition, assets, properties, liabilities or prospects of the Corporation (considered as a whole) or (B) the ability of the Corporation to perform its obligations under the Instruments;
- (i) immediately notify the Holder in writing of any proposed change of name or business name of the Corporation or a Subsidiary of the Corporation or of the Corporation's or any of its Subsidiaries' chief place of business;
- (j) immediately notify the Holder in writing if any part of the Secured Property and the books of account and other records of the Corporation is located in a jurisdiction other than Ontario;
- (k) pay or cause to be paid all taxes, rates, government fees and dues levied, assessed or imposed upon it or its property as and when the same become due and payable save and except where (A) it contests in good faith the validity thereof by proper legal proceedings and for which adequate provision for payment has been made and/or (B) it has payment plans in place with the applicable government authority with respect to past withholdings, in which case it will pay or cause to be paid all such amounts in accordance therewith;
- (l) forthwith notify the Holder of any default in payment of an amount exceeding \$50,000.00 in respect of one event of default or series of defaults over a six (6) month period, in connection with any indebtedness or guarantee;
- (m) advise the Holder forthwith upon becoming aware of any Event of Default hereunder and deliver to the Holder upon request a certificate in form and substance satisfactory to the Holder signed by a senior officer certifying that no Event of Default has occurred or, if such is not the case, specifying all Events of Default and their nature and status together with a detailed description of the steps taken by the Corporation to cure such Event of Default;
- (n) promptly cure or cause to be cured any defects in the execution or delivery of any Instrument and any defects in the validity or enforceability of any security hereunder and at its expense duly execute and deliver or cause to be duly executed or delivered all documents as the Holder may reasonably consider necessary or desirable for such purposes;
- (o) immediately notify the Holder in writing upon becoming aware of any intended Change of Control and upon the completion of any Change of Control;
- (p) immediately notify the Holder in writing upon any material adverse change in the condition, financial or otherwise, of its property, assets or business which material adverse change would require public disclosure under the applicable Securities Laws; and

- (q) at its cost and expense, upon the request of the Holder, duly execute and deliver, or cause its Subsidiaries to duly execute and deliver, to the Holder such documents and do or cause to be done such acts as may be necessary or desirable in the reasonable opinion of the Holder to carry out the purposes of this Debenture.

(4) **Inspection by the Holder.** The Corporation shall and shall cause its Subsidiaries to, at the expense of the Corporation, allow any employees or authorized representatives, agents or designees/legal and financial advisors of the Holder upon reasonable written notice to the Corporation whether or not such times are during normal business hours so as not to unduly interfere with the business to enter the premises of the Corporation or its Subsidiaries or any other premises where the Secured Property is located in order to inspect the Secured Property and to inspect the books and records of the Corporation and make extracts therefrom, and shall, at the expense of the Corporation, permit the Holder or such representatives, agents or designees reasonably acceptable to the Corporation prompt access to such other Persons as the Holder may reasonably deem necessary or desirable for the purposes of inspecting or verifying any matters relating to any part of the Secured Property or the books and records of the Corporation or its Subsidiaries, provided that any information so obtained shall be kept confidential, save as required to be disclosed by the Holder in exercising its rights hereunder. The Corporation shall and shall cause its Subsidiaries to, at the expense of the Corporation, provide access to the Holder and its representatives, agents or designees and shall provide such information and co-operation as is requested by the Holder, including in connection with the preparation of any offering memoranda or other disclosure document;

(5) **To Deliver Information:**

- (a) The Corporation shall deliver to the Holder within sixty (60) days of each financial quarter ending on December 31, March 31 and June 30, one copy of its unaudited consolidated quarterly financial statements, signed by an authorized officer on behalf of the Corporation, together with a certificate signed by the chief financial officer of the Corporation or another senior officer satisfactory to the Holder in the form of **Schedule "A"** attached hereto;
- (b) The Corporation shall deliver to the Holder within 120 days after the end of each fiscal year of the Corporation, the audited annual consolidated financial statements of the Corporation prepared in accordance with GAAP including, without limitation, a balance sheet, statement of income and retained earnings and a statement of changes in financial position, together with all supporting schedules;
- (c) The Corporation shall provide to the Holder and its representatives, agents and designees such other information concerning its financial position, business and operations which the Holder or such representative, agents or designees may from time to time reasonably request;
- (d) The Corporation shall promptly notify the Holder if it or any of its Subsidiaries:
 - (i) receives notice or otherwise becomes aware of any violation or potential violation of any Environmental Laws or Environmental Orders which may have occurred or been committed or is about to occur or be committed;
 - (ii) receives notice or otherwise becomes aware that any administrative or judicial complaint or Order has been issued or filed or is about to be issued or filed against any of the Occupants or their representatives alleging violations of any

Environmental Laws or Environmental Orders or requiring the taking of any action in connection with any Hazardous Substance;

- (iii) learns of the enactment of any Environmental Laws or the issuance of any Environmental Orders which may have a material adverse effect on the Premises or the operations or the condition, financial or otherwise, of any of the Occupants; or
- (iv) knows of or suspects that any Hazardous Substance has been brought onto any part of the Premises or that there is any actual, threatened or potential Release of any Hazardous Substance on, from, in or under any part of the Premises;

(6) **Notice of Litigation and Damage.** The Corporation will give written notice to the Holder forthwith of: (i) all claims, actions, suits, orders, inquiries or proceedings, judicial or administrative, pending or threatened by or against the Corporation or any of its Subsidiaries against or by any Person or before any court or any federal, provincial, municipal or other government department, commission, board, bureau, agency or instrumentality, domestic or foreign (including any securities regulatory authority or stock exchange) in an amount greater than \$50,000.00, in respect of one event of default or series of defaults over a six (6) month period, (ii) all damage to or loss or destruction of any property comprising part of the Secured Property with a value in excess of \$50,000.00 in respect of one event of default or series of defaults over a six (6) month period; and (iii) any event of default under any Material Contract including any material agreement with respect to indebtedness for borrowed money or any material purchase money obligation, and any event which, upon the notice or lapse of time or both, would constitute such an event of default, that would permit the holder of such indebtedness or obligation to accelerate the maturity thereof; and will supply the Holder with all information reasonably requested in respect of any of the foregoing;

(7) **Capital Expenditures.** The Corporation shall make all capital expenditures substantially in accordance with the Corporation's annual business plan for the financial year of the Corporation in which the expenditure is made or as otherwise authorized by the Corporation's board of directors;

(8) **To Insure.** The Corporation shall keep and shall cause its Subsidiaries to keep insured the Secured Property with responsible insurers as are appropriate to the business and assets of the Corporation in such amounts and against such risks as are customarily carried and insured against by prudent owners of comparable businesses and assets. The Corporation shall, whenever from time to time requested by the Holder, provide the Holder or cause its Subsidiaries to provide the Holder with satisfactory evidence of such insurance and any renewal thereof which shall at all times be subject to charging clauses in a form approved by the Holder, acting reasonably, and shall cause the Holder to be shown as a loss payee under the policy or policies of such insurance. Evidence satisfactory to the Holder of the renewal of every policy of insurance shall be left with the Holder at least seven (7) days before the termination thereof;

(9) **To Furnish Proofs.** The Corporation shall forthwith on the happening of any loss or damage furnish or cause to be furnished at its own expense all necessary proofs and do all necessary acts to enable the Holder to obtain payment of any and all available insurance monies which, in the discretion of the Holder, acting reasonably, may be applied in reinstating the insured property or be paid to the Corporation or be applied in payment of the monies owing hereunder, whether due or not then due, or paid partly in one way and partly in another;

(10) **Reservation of Common Shares.** The Corporation covenants with the Holder that it will at all times reserve and keep available out of its authorized share capital (if the number thereof is or becomes

limited) and solely for the purpose of the issue upon conversion of this Debenture as provided in Section 2.1 and upon exercise of the Warrants such number of Common Shares as shall then be issuable upon the conversion of this Debenture and upon the exercise of the Warrants;

(11) **Authorization of Securities.** The Corporation shall ensure that the Common Shares issued upon conversion pursuant to this Debenture of any Principal Amount shall be duly authorized and issued as fully paid and non-assessable securities in the capital of the Corporation;

(12) **Pre-Emptive Rights.** Subject to the share issuances pursuant to ESOP, share issuances pursuant to stock dividends paid in the ordinary course and the provisions of applicable Securities Laws:

- (a) If any shares or securities convertible into shares of the Corporation are authorized or otherwise proposed to be issued (the "**Offered Securities**"), the Corporation shall provide written notice to the Holder of the proposal to issue such securities, together with the description, purchase price and number of Offered Securities proposed to be issued, not less than ten (10) days prior to sending any notice regarding Offered Securities to any Person.
- (b) The Holder shall be entitled to subscribe for such number of the Offered Securities as nearly as may be in proportion to the percentage of Common Shares which are held by it at the date of the notice (on an as converted basis) with respect to the Debenture and not the Warrants unless exercised. If the Holder desires to subscribe for Offered Securities in addition to its proportion, it shall, in its subscription, specify the number of additional Offered Securities which it desires to purchase. The Holder shall not be bound to take any Offered Securities in addition to the number it so desires.
- (c) In the event that it is not possible to issue Offered Securities as provided in this Section without division of any shares into fractions, any shares shall be divided as nearly as may be in the proportions outlined in this Section and any balance shall be divided in such manner as may be determined by the board of directors of the Corporation.
- (d) In the event that all or part of the Offered Securities are not subscribed for within a period of ten (10) days after the same are offered to the Holder pursuant to the provisions of this Section, the Corporation may, during the following period of 45 days for a non-brokered private placement and 60 days for a brokered private placement, offer all or any of the Offered Securities not taken up by the Holder to any other Person, but the price at which the Offered Securities may be allotted and sold shall not be less than the subscription price offered to the Holder and the terms shall be no less favourable than those offered to the Holder pursuant to this Section.

(13) **Additional Financings.** Subject to the provisions of applicable Securities Laws:

- (a) In the event that the Corporation requires additional funds at any time prior to the earlier of (i) the Maturity Date; or (ii) such time as the full Principal Amount outstanding under this Debenture has been repaid and/or converted pursuant to Section 2.1, the Corporation shall send a written notice to the Holder advising of its financing requirements together with a description of the proposed terms and conditions thereof and offering the Holder the opportunity to loan the funds to, in the case of a debt financing, or invest the funds in, in the case of an equity financing, the Corporation on such terms and conditions.

- (b) In the event that the Holder does not agree in writing to advance to the Corporation all or part of the additional funds required by the Corporation within a period of ten (10) days after receipt of the Corporation's written notice pursuant to the provisions of this Section, the Corporation may, during the following period of 45 days for a non-brokered private placement and 60 days for a brokered private placement, obtain the balance of the funds required from another Person on terms and conditions no less favourable than those offered to the Holder pursuant to this Section, failing which the Holder shall once again have a right of first refusal exercisable on the basis set out in this Section.

6.2 Negative Covenants.

At all times, the Corporation hereby covenants and agrees for so long as this Debenture is in force and any portion of the Obligations remains unpaid, unfulfilled and/or unsatisfied to adhere to the following covenants unless waived in writing by the Holder:

- (1) **No Additional Debt.** Neither the Corporation nor its Subsidiaries shall, without the prior written consent of the Holder, incur any additional indebtedness other than trade payables incurred in the Ordinary Course of its business;
- (2) **Security Interests.** Except with respect to Permitted Encumbrances, the Corporation shall not, without the prior written consent of the Holder, grant any Encumbrance over any of the Secured Property;
- (3) **Not to Sell.** The Corporation and its Subsidiaries shall not, without the prior written consent of the Holder, remove, destroy, lease, transfer, assign, sell or otherwise dispose of any of the Secured Property, including without limitation the Intellectual Property, other than in the Ordinary Course of its business operations;
- (4) **Not to Make Certain Changes.** The Corporation shall not without the prior written consent of the Holder:
 - (a) allow, consent or acquiesce to any liquidation, winding-up, reorganization, continuation or dissolution, whether voluntary or involuntary, of the Corporation or any Subsidiary of the Corporation;
 - (b) make an assignment for the benefit of any creditors of the Corporation or any of its Subsidiaries;
 - (c) sell, lease, exchange or otherwise dispose of or permit the disposal of all or substantially all of the assets of the Corporation or of any of its Subsidiaries, or sell, lease, exchange or otherwise dispose of any such assets out of the Ordinary Course of business operations of the Corporation or its Subsidiaries;
 - (d) grant or grant the right to a third party to grant an exclusive license in and to in any material aspect of its Intellectual Property or any license or grant of the right to a third party in and to all or any part of the Intellectual Property out of the Ordinary Course of business;
 - (e) create, acquire, dissolve, sell or otherwise dispose of any Subsidiary;
 - (f) engage in, or permit any Subsidiary of the Corporation to engage in, any commercial transactions with Persons not dealing at arm's length with the Corporation or any of its

Subsidiaries, other than (A) on terms and conditions which would be offered to an arm's length party and (B) with the approval of a committee of the board of directors of the Corporation consisting solely of independent directors;

- (g) amalgamate, consolidate or merge or enter into any agreement to amalgamate, consolidate or merge the Corporation or any Subsidiary of the Corporation with any corporation, partnership, joint venture, firm or syndicate or enter into a partnership, joint venture or syndicate with any other Person or permit or commence the corporate reorganization of the Corporation or any Subsidiary of the Corporation or purchase the assets or securities of any Person outside the Ordinary Course of business or permit any Subsidiary of the Corporation to do any of the foregoing;
- (h) sell any shares held by the Corporation in any Subsidiary of the Corporation or permit any Subsidiary of the Corporation to sell any shares of its Subsidiaries;
- (i) make or permit a material change to the business of the Corporation or any of the Corporation's Subsidiaries as presently carried on;
- (j) engage in, or permit any Subsidiary of the Corporation to engage in, any sale-leaseback or similar transactions except in the Ordinary Course of its business;
- (k) pay salaries, wages, benefits, bonuses, directors' fees or other remuneration to any executive officer (as such term is defined in Form 51-102F6 of National Instrument 51-102) or to any Person not dealing at arm's length with any such Person beyond rates approved by the Corporation's board of directors;
- (l) incorporate or acquire any corporation that would be a Subsidiary of the Corporation;
- (m) engage in, or permit any Subsidiary of the Corporation to engage in, any financings which are not recorded on the balance sheet and in the financial records of the Corporation or such Subsidiary of the Corporation;
- (n) make or commit to any form of distribution or reduction of the profits of the Corporation or of its capital or of any Subsidiary of the Corporation or of its capital including: (A) any declaration or payment of any dividend (including stock dividends) on any present or future shares; (B) any payment to purchase, redeem, retire or acquire any shares, or any option, warrant or other right to acquire any shares, or apply or set apart any assets therefor; (C) any bonuses to shareholders beyond rates approved by the Corporation's board of directors; (D) any loans to shareholders of the Corporation or (E) any payment of any bonuses or management fees save and except for payments pursuant to written contracts approved by the Corporation's board of directors;
- (o) purchase, establish or acquire in any manner any new business undertaking, including, but not limited to, any acquisition, merger, joint venture or corporate reorganization;
- (p) enter into any transaction, or permit any Subsidiary of the Corporation to do so, outside the Ordinary Course of business operations of the Corporation or its Subsidiaries, as applicable;

- (q) make any loans or grant any financial assistance to or make any investments in any other Person or permit any Subsidiary of the Corporation to do so other than the giving of trade credit;
- (r) except for share issuances pursuant to the ESOP, the Warrants listed on Schedule G or the Debenture:
 - (i) create, allot, reserve for issuance or issue any shares in its capital, or enter into any agreement, or grant any option, right or privilege, whether pre-emptive, contractual or otherwise for the purchase of shares or securities convertible into shares of the Corporation,
 - (ii) change its capital structure, or
 - (iii) enter into any agreement, or make any offer, to do so or permit any Subsidiary of the Corporation to do any of the foregoing with respect to the capital or capital structure of such Subsidiary;
- (s) remove any of the Secured Property or any of the property or books of account or other records of the Corporation or any Subsidiary of the Corporation from the jurisdiction where same are presently located;
- (t) amend its articles or by-laws, or permit any Subsidiary of the Corporation to do so; or
- (u) repay any amount owing under any shareholder loan or any loan from any Person not at arm's length to the Corporation.

6.3 Covenants of the Corporation re Use of Proceeds

(1) The Corporation hereby represents, warrants and covenants that it does not intend to use and will not use any of the money received from the Holder in connection with this Debenture for any of the following purposes:

- (a) reinvestment outside Canada, payment of expenses incurred by Subsidiaries based outside Canada and any acquisitions of business carried on primarily outside Canada unless approved in writing by the Holder;
- (b) carrying on a business outside Canada;
- (c) the repayment of any loan owing to a shareholder of the Corporation; or
- (d) commissions or fees (other than legal fees in connection with the offering of the Debentures).

(2) The Corporation hereby covenants that it will, subject to the other restrictions contained in this Section 6.3, use the money received from the Holder in connection with this Debenture (less any legal fees incurred in connection herewith) to: (i) fund the redemption of all existing debentures of the Corporation (other than the Debentures); and (ii) fund general working capital.

(3) Unless waived by the Holder (at its exclusive option), the Corporation agrees for so long as this Debenture is in force and any portion of the Obligations remains unpaid, unfulfilled and/or unsatisfied, to

apply the proceeds of any disposition of assets made out of the Ordinary Course of the Corporation's business to the Obligations.

6.4 Additional Covenants of the Corporation

At all times, the Corporation hereby covenants and agrees for so long as this Debenture is in force and any portion of the Obligations remains unpaid, unfulfilled and/or unsatisfied to:

- (1) Advise the Holder if and when any decision is made to take any action, or upon becoming aware of any action or inaction or other event or circumstance that will result in the Corporation ceasing to be a reporting issuer for the purposes of all applicable Securities Laws;
- (2) Do all such things and make all such filings necessary to maintain its status as a reporting issuer (that is not included in any list of defaulting reporting issuers maintained by the Ontario Securities Commission under the *Securities Act* (Ontario)) for the purposes of the *Securities Act* (Ontario) and an electronic filer under National Instrument 13-101 *System for Electronic Document Analysis and Retrieval* (SEDAR);
- (3) Immediately notify the Holder in writing if the Common Shares of the Corporation cease to be listed on the TSXV or the TSX or if it receives notice from the TSXV or the TSX that any investigation, action or proceeding has been initiated that may result in the delisting of such shares;
- (4) Do all such things and make all such filings necessary to ensure that the Common Shares remain listed on the TSXV or the TSX and are not at any time subject to any trading halt or suspension either by the TSXV or the TSX;
- (5) To use its commercially reasonable efforts to seek appropriate protection for its Intellectual Property and in particular to pay all fees and take all steps necessary in a prompt and diligent manner to keep and maintain all Intellectual Property that is material to the business or operations of the Corporation in force, updated, valid and enforceable and to maintain the confidential, proprietary nature of all trade secrets, know how and other unregistered Intellectual Property. The Corporation shall update Schedule E for the Holder every six (6) months from and after the Closing Date and, in addition, shall advise the Holder of all new filings or applications for registrations of Intellectual Property within ten (10) Business Days of the date thereof.
- (6) Use its commercially reasonable efforts to apply for all available research and other tax credits which may be available with respect to the Intellectual Property as soon as reasonably possible after the date hereof;
- (7) Carry on and conduct, and will cause to be carried on and conducted, the business presently carried on by the Corporation, consisting primarily of research and development of handheld medical devices;
- (8) Claim all input tax credits in a timely fashion;
- (9) Use its commercially reasonable efforts to enforce all of its rights under all Material Contracts; and
- (10) Do all such things necessary to ensure that the Common Shares issued upon the conversion of this Debenture are listed on the TSXV or the TSX, as applicable, including compliance with the rules of such stock exchange.

SECTION 7 – EVENTS OF DEFAULT AND REMEDIES

7.1 Events of Default

The occurrence of any of the following events shall constitute an Event of Default under this Debenture:

- (1) if default occurs in payment or performance when due of any principal, interest or other Obligation under this Debenture and such default continues for five (5) Business Days after the date of receipt by the Corporation of written notice from the Holder setting forth such default;
- (2) if default occurs in performance of any financial covenant of the Corporation in favour of the Holder under this Debenture and remains unremedied for the 2 fiscal quarters of the Corporation subsequent thereto;
- (3) if default occurs in performance of any other covenant of the Corporation in favour of the Holder under this Debenture and remains unremedied for a period of five (5) Business Days after the date of receipt by the Corporation of written notice from the Holder setting forth such default (unless the Holder, having regard to the subject matter of the default, shall have agreed to a longer period, and in such event, within the period agreed to by the Holder);
- (4) if an event of default occurs in payment or performance of any obligation in favour of any Person which would entitle the holder to accelerate repayment of the borrowed money, and such default is not waived in writing;
- (5) if, after the expiry of all cure periods, an event of default occurs in payment or performance of any obligation in favour of any Person from whom the Corporation or any Subsidiary of the Corporation has borrowed money which would entitle the holder to accelerate repayment of the borrowed money in an amount greater than \$50,000.00 in respect of one event of default or series of defaults over a six (6) month period, and such default is not waived in writing;
- (6) if (i) the Corporation commits an act of bankruptcy or becomes insolvent within the meaning of any bankruptcy or insolvency legislation applicable to it or files an assignment in bankruptcy or (ii) a petition or other process for the bankruptcy of the Corporation is filed or instituted and remains undismissed or unstayed for a period of ten (10) days or any of the relief sought in such proceeding (including the entry of an order for relief against it or the appointment of a receiver, trustee, custodian or other similar official for it or any substantial part of its property) shall occur;
- (7) if any act, matter or thing is done toward, or any action or proceeding is launched or taken to terminate the corporate existence of the Corporation, whether by winding-up, surrender of charter or otherwise;
- (8) if the Corporation ceases to carry on its business or makes or proposes to make any sale of its assets in bulk or any sale of its assets out of the Ordinary Course of its business other than as permitted herein;
- (9) if the Corporation assigns or attempts to assign its rights under this Debenture or any of the Security Documents or Instrument or any interest herein or therein to a third party without the prior consent of the Holder;

- (10) if any proposal is made or any petition is filed by or against the Corporation under any law having for its purpose the extension of time for payment, composition or compromise of the liabilities of the Corporation or other reorganization or arrangement respecting its liabilities or if the Corporation gives notice of its intention to make or file any such proposal or petition including an application to any court to stay or suspend any proceedings of creditors pending the making or filing of any such proposal or petition;
- (11) if any receiver, administrator or manager, receiver-manager or interim receiver of the property, assets or undertaking of the Corporation or a substantial part thereof is appointed pursuant to the terms of any trust deed, trust indenture, debenture or similar instrument or by or under any judgment or order of any court;
- (12) if any balance sheet or other financial statement or other document provided to the Holder pursuant to this Debenture is false or misleading in any material respect;
- (13) if any proceedings are taken by or on behalf of a Person to enforce any Encumbrance affecting any of the Secured Property or if a distress or any similar process be levied or enforced there against and is not satisfied or dismissed within thirty (30) days;
- (14) if any judgment or order for the payment of money in excess of \$50,000.00 in respect of one event of default or series of defaults over a six (6) month period, shall be rendered against the Corporation or any Subsidiary of the Corporation and either: (i) enforcement proceedings shall have been commenced by any creditor upon such judgment or order; or (ii) there shall be any period of thirty (30) consecutive days during which a stay of enforcement of such judgment or order, by reason of a pending appeal or otherwise, shall not be in effect;
- (15) if any action is taken or power or right be exercised by any governmental body which would reasonably be expected to have a material adverse effect on the Corporation, its business, operations, properties or assets;
- (16) if any representation or warranty made by the Corporation herein or in any other Instrument or in any other certificate, statement or report furnished in connection with or pursuant to this Debenture is found to be false or incorrect in any way so as to make it materially misleading when made or when deemed to have been made;
- (17) if any event occurs with respect to any Subsidiary of the Corporation which, if a like event had occurred with respect to the Corporation, would have constituted an Event of Default;
- (18) if any insurance on the properties or assets of the Corporation or any Subsidiary, lapses and such coverage shall not be reinstated within five (5) Business Days of such lapse;
- (19) if the Holder has exercised its option under Section 1.3 and the Debenture has not been repaid in five (5) Business Days after receipt by the Corporation of written notice from the Holder setting forth such default; or
- (20) if the Holder exercises its option under Section 1.3 and the Debenture has not been repaid in fifteen (15) Business Days from the date the Debenture is payable under Section 1.3.

7.2 Consequences of an Event of Default

Upon the occurrence and during the continuance of any Event of Default:

- (1) all Obligations and all monies secured hereby shall at the option of the Holder, by notice in writing to the Corporation, become forthwith due and payable and all of the rights and remedies hereby conferred in respect of the Secured Property shall become immediately enforceable and any and all additional and collateral security for payment of this Debenture shall become immediately enforceable;
- (2) the Principal Amount, overdue interest and all other amounts due by the Corporation to the Holder shall bear interest from the date of such Event of Default at an annual rate of TWENTY PERCENT (20%); and
- (3) the Holder may, in addition to any other remedies available to the Holder, require the Corporation to satisfy its obligations to the Holder by issuing to the Holder the number of Common Shares equal to the then outstanding Principal Amount divided by 95% of the lesser of the market price or the Conversion Price.

7.3 Enforcement

- (1) Upon the occurrence and during the continuance of any Event of Default, the Holder may, in writing, declare that the security hereof has become enforceable and the Holder shall have the following rights and powers:
 - (a) to enter upon and take possession of all or any part of the Secured Property;
 - (b) to hold, use, preserve and maintain the Secured Property and make such replacements thereof and additions thereto as it deems advisable;
 - (c) to collect any proceeds arising in respect of the Secured Property;
 - (d) to collect, realize upon or sell or otherwise deal with accounts;
 - (e) to appoint a Receiver of the Secured Property;
 - (f) to institute proceedings in any court of competent jurisdiction for sale or foreclosure of the Secured Property;
 - (g) to file proofs of claim and other documents to establish claims in any proceeding relating to the Corporation;
 - (h) to undertake any other remedy or proceeding authorized or permitted under the PPSA or otherwise by law or equity;
 - (i) to pay or otherwise satisfy in whole or in part any Encumbrances which, in the Holder's opinion, rank in priority to the security hereof;
 - (j) to appoint an agent or other representative for the collection of accounts receivable of the Corporation; and
 - (k) after entry by its officers or agents or without entry, to sell, lease or otherwise dispose in any way whatsoever of all or any part of the Secured Property either en bloc or separately at public auction or by tender or by private agreement and at such time or times and on such terms and conditions as the Holder in its absolute discretion may determine and

without any notice to or concurrence of the Corporation except as may be required by applicable law.

(2) The security of this Debenture may be realized and the rights enforced by any remedy or in any manner permitted by this Debenture or by law or equity and no remedy for the realization of the security hereof shall be exclusive of or dependent upon any other remedy and all or any remedies may from time to time be exercised independently or in any combination.

(3) In addition to the remedies of the Holder set forth above, the Holder may, whenever an Event of Default has occurred and is continuing exercise the following rights and powers:

- (a) require the Corporation, at the Corporation's expense, to assemble the Secured Property (to the extent reasonably practicable) at a place or places designated by notice in writing given by the Holder to the Corporation;
- (b) require the Corporation, by notice in writing given by the Holder to the Corporation, to disclose to the Holder the location or locations of the Secured Property;
- (c) repair, process, modify, complete or otherwise deal with (in whole or in part) the Secured Property and prepare for the disposition (in whole or in part) of the Secured Property, whether on the premises of the Corporation or otherwise;
- (d) carry on all or any part of the business or businesses of the Corporation and, to the exclusion of all others including the Corporation, enter upon, occupy and use all or any of the premises, buildings, plant, undertaking and other property of or used by the Corporation for such time as the Holder sees fit, free of charge, and the Holder shall not be liable to the Corporation for any act, omission or negligence in so doing or for any rent, charges, depreciation or damages incurred in connection therewith or resulting therefrom;
- (e) borrow for the purpose of carrying on the business of the Corporation or for the maintenance, preservation or protection of the Secured Property and mortgage, charge, pledge or grant a security interest in the Secured Property, whether or not in priority to the Security Documents, to secure repayment;
- (f) advance the Holder's own money to the Corporation, in any case upon such terms as the Holder may deem reasonable and upon the security hereof; and
- (g) demand, commence, continue or defend any judicial or administrative proceedings for the purpose of protecting, seizing, collecting, realizing or obtaining possession or payment of the Secured Property, and give valid and effectual receipts and discharges therefor and compromise or give time for the payment or performance of all or any part of the accounts or any other obligation of any third party to the Corporation.

7.4 Disposition

(1) Without limiting the generality of the foregoing in connection with the exercise of remedies of the Holder under this Section 7, the Holder may:

- (a) make any sale, lease or other disposition of the Secured Property either for cash or upon credit or partly for one and partly for the other upon such conditions as to terms of payment as it in its absolute discretion may deem proper;
- (b) rescind or vary any contract for sale, lease or other disposition that the Holder may have entered into pursuant hereto and resell, release or redispense of the Secured Property with or under any of the powers conferred herein; and
- (c) stop, suspend or adjourn any sale, lease or other disposition from time to time and to hold the same adjourned without further notice.

(2) Upon any such sale, lease or other disposition, the Holder shall be accountable only for money actually received by it. The Corporation shall be accountable for any deficiency and the Holder shall be accountable for any surplus. The Holder may deliver to the purchaser or purchasers of the Secured Property or any part thereof good and sufficient conveyances or deeds for the same free and clear of any claim by the Corporation. The purchaser or lessee receiving any disposition of the Secured Property or any part thereof need not inquire whether default under this Debenture has actually occurred but may as to this and all other matters rely upon a statutory declaration the Holder or an officer thereof, as the case may be, which declaration shall be conclusive evidence as between the Corporation and any such purchaser or lessee, and the purchaser or lessee need not look to the application of the purchase money, rent or other consideration given upon such sale, lease or other disposition, which shall not be affected by any irregularity of any nature or kind relating to the crystallizing or enforcing of the security hereof or the taking of possession of the Secured Property or the sale, lease or other disposition thereof.

7.5 Powers of Receiver

Any Receiver appointed as aforesaid shall have the power without legal process:

- (1) to take possession of the Secured Property or any part thereof wherever the same may be found;
- (2) to carry on the business of the Corporation or any part thereof in the name of the Corporation or of the Receiver, and
- (3) to exercise on behalf of the Holder all of the rights and remedies herein granted to the Holder;

and without in any way limiting the foregoing the Receiver shall have all the powers of a receiver appointed by a court of competent jurisdiction. Any Receiver appointed by the Holder shall act as agent for the Holder for the purposes of taking possession of the Secured Property, but otherwise and for all other purposes (except as provided below), as agent for the Corporation. The Receiver may sell, lease, or otherwise dispose of Secured Property as agent for the Corporation or as agent for the Holder, as the Holder may determine in its discretion. The Corporation agrees to ratify and confirm all actions of the Receiver acting as agent for the Corporation, and to release and indemnify the Receiver in respect of all such actions (except for or in respect of fraud, gross negligence or wilful misconduct). The Holder, in appointing or refraining from appointing any Receiver shall not incur liability to the Receiver, the Corporation or otherwise and shall not be responsible for any act or omissions of such Receiver or for any loss resulting therefrom.

7.6 Application of Monies

Subject to the requirements of the PPSA, all monies actually received by the Holder or by the Receiver in enforcing the security of this Debenture shall be applied, subject to the proper claims of any other Person:

- (1) first, to pay or reimburse the Holder and any Receiver the reasonable costs, charges, expenses and advances payable by the Corporation in accordance herewith;
- (2) second, in or toward the payment to the Holder of all other monies owing hereunder or secured hereby in such order as the Holder in its sole discretion may determine; and
- (3) third, any surplus shall be paid to the Corporation or its assigns or as a court of competent jurisdiction may direct.

7.7 Powers of Directors and Officers

Upon the Holder declaring as aforesaid that the security hereof has become enforceable or the Corporation receiving notice from the Holder of the taking of possession of any of the Secured Property or of the appointment of a Receiver, all the powers, functions, rights and privileges of the directors and officers of the Corporation with respect to the property, business and undertaking of the Corporation shall cease except to the extent specifically continued at any time by the Holder in writing.

7.8 Care and Custody of Secured Property

The Holder shall not be bound to collect, dispose of, realize, protect or enforce any of the Corporation's right, title and interest in and to the Secured Property or to institute proceedings for the purpose thereof and, without limiting the generality of the foregoing, the Holder shall not be required to take any steps necessary to preserve rights against prior parties in respect of any Secured Property. The Holder shall have no obligation to keep Secured Property in its possession identifiable. The Holder may after an Event of Default: (a) notify any Person obligated on an account or on chattel paper or any obligor on an instrument to make payment thereunder to the Holder whether or not the Corporation was theretofore making collections thereon; and (b) assume control of any proceeds arising from the Secured Property.

7.9 Dealing with the Secured Property

The Holder shall not be obliged to exhaust its recourse against the Corporation or any other Person or Persons or against any other security it may hold in respect of the Obligations before realizing upon or otherwise dealing with the Secured Property in such manner as the Holder may consider desirable. The Holder may grant extensions or other indulgences, take and give up securities, accept compositions, grant releases and discharges and otherwise deal with the Corporation and with other parties, sureties or securities as the Holder may see fit without prejudice to the Obligations or the rights of the Holder in respect of the Secured Property. The Holder shall not be: (a) liable or accountable for any failure to collect, realize or obtain payment in respect of the Secured Property; (b) bound to institute proceedings for the purpose of collecting, enforcing, realizing or obtaining payment of the Secured Property or for the purpose of preserving any rights of the Holder, the Corporation or any other parties in respect thereof; (c) responsible for any loss occasioned by any sale or other dealing with the Secured Property or by the retention of or failure to sell or otherwise deal therewith; or (d) bound to protect the Secured Property from depreciating in value or becoming worthless.

7.10 Standards of Sale

Without prejudice to the ability of the Holder to dispose of the Secured Property in any manner which is commercially reasonable, the Corporation acknowledges that a disposition of Secured Property by the Holder which takes place substantially in accordance with the following provisions shall be deemed to be commercially reasonable:

- (1) Secured Property may be disposed of in whole or in part;
- (2) Secured Property may be disposed of by public auction, public tender or private contract, with or without advertising and without any other formality;
- (3) any purchaser or lessee of such Secured Property may be a customer of the Holder;
- (4) a disposition of Secured Property may be on such terms and conditions as to credit or otherwise as the Holder, in its sole discretion, may deem advantageous; and
- (5) the Holder may establish an upset or reserve bid or price in respect of Secured Property.

SECTION 8 – GENERAL

8.1 Waiver

No waiver of any provision of this Debenture is binding unless it is in writing and signed by all the parties to this Debenture entitled to grant the waiver. No failure to exercise, and no delay in exercising, any right or remedy, under this Debenture will be deemed to be a waiver of that right or remedy. No waiver of any breach of any provision of this Debenture will be deemed to be a waiver of any subsequent breach of that provision.

8.2 Other Securities

The rights of the Holder hereunder shall not be prejudiced nor shall the liabilities of the Corporation or of any other Person be reduced in any way by the taking of any other security of any nature or kind whatsoever either at the time of execution of this Debenture or at any time hereafter.

8.3 No Merger or Novation

Neither the taking of any judgment nor the exercise of any power of seizure or sale shall operate to extinguish the liability of the Corporation to pay the monies hereby secured nor shall the same operate as a merger of any covenant herein contained or of any other Obligation, nor shall the acceptance of any payment or other security constitute or create any novation.

8.4 Power of Attorney

The Corporation, for valuable consideration, from and after the occurrence and during the continuance of an Event of Default, irrevocably appoints the Holder and its officers from time to time or any of them to be the attorneys of the Corporation in the name of and on behalf of the Corporation to execute such deeds, transfers, conveyances, assignments, assurances and things which the Corporation ought to execute and do under the covenants and provisions herein contained and which are necessary or appropriate in the exercise of all or any of the powers hereby conferred on the Holder. The Corporation hereby releases the Holder and its officers, employees, agents and designees from any liabilities arising from any act or acts under this power of attorney and in furtherance thereof, whether of omission or

commission, except as a result of their own fraud, gross negligence or wilful misconduct as determined pursuant to a final non-appealable order of a court of competent jurisdiction.

8.5 Access

The Corporation hereby grants to the Holder and its employees and agents to unrestricted access (for so long as this Debenture is in force and any portion of the Obligations remains unpaid, unfulfilled and/or unsatisfied), subject to the rights of tenants, to enter, upon reasonable written notice to the Corporation (whether or not during normal business hours so as not to unduly interfere with the business), any of the Premises to conduct audits, testing and monitoring with respect to Hazardous Substances and to remove and analyze a Hazardous Substance at the cost and expense of the Corporation (which cost and expense shall be secured hereby).

8.6 Environmental Indemnity

The Corporation shall indemnify the Holder and hold the Holder harmless against and from all losses, costs, damages and expenses which the Holder may sustain, incur or be or become liable at any time whatsoever for, by reason of or arising from the past, present or future existence, clean-up, removal or disposal of any Hazardous Substance at or from the Premises or compliance with Environmental Laws or Environmental Orders relating thereto, including any clean-up, decommissioning, restoration or remediation of the Premises and other affected lands or property (and this indemnification shall survive the satisfaction, release or extinguishment of the indebtedness secured hereby).

8.7 Amalgamation

The Corporation acknowledges that if it amalgamates with any other corporation or corporations: (a) the Secured Property and the lien created hereby shall extend to and include all the property and assets of each of the amalgamating corporations and the amalgamated corporation and to any property or assets of the amalgamated corporation thereafter owned or acquired; (b) the term "Corporation", where used herein shall extend to and include each of the amalgamating corporations and the amalgamated corporation; and (c) the term "Obligations", where used herein shall extend to and include the Obligations of each of the amalgamating corporations and the amalgamated corporation.

8.8 Holder May Remedy Default

If the Corporation fails to do anything hereby required to be done by it the Holder may, but shall not be obliged to, do such thing and all sums thereby expended by the Holder shall be payable forthwith by the Corporation, shall be secured hereby and shall have the benefit of the lien hereby created, but no such performance by the Holder shall be deemed to relieve the Corporation from any default hereunder.

8.9 Notices

Any notice, direction or other communication to be given under this Debenture shall be in writing and given by delivering it or sending it by facsimile or other similar form of recorded communication addressed:

(1) to the Holder at:

181 University Avenue
Suite 1800
Toronto, Ontario

M5H 3M7
Attention: John Labatt
Facsimile: ●

with a copy to:
Gardiner Roberts LLP
Suite 3100, Scotia Plaza
40 King Street West
Toronto, Ontario
M5H 3Y2
Attention: Arlene O'Neill
Facsimile: 416-865-6636

(2) to the Corporation at:

44 Crawford Crescent
Campbellville, Ontario
L0P 1B0

Attention: Chief Financial Officer
Facsimile: 905-854-5729

with a copy to:
Stikeman Elliott LLP
5300 Commerce Court West
199 Bay Street
Toronto, Ontario
M5L 1B9
Attention: Curtis Cusinato
Facsimile: 416-947-0866

Any such communication shall be deemed to have been validly and effectively given: (i) if personally delivered, on the date of such delivery if such date is a Business Day and such delivery was made prior to 4:00 p.m. (Toronto time) and otherwise on the next Business Day; or (ii) if transmitted by facsimile or similar means of recorded communication on the Business Day following the date of transmission. Any Party may change its address or facsimile number for service from time to time by notice given in accordance with the foregoing and any subsequent notice shall be sent to such Party at its changed address and/or facsimile number.

8.10 Receipt

The Corporation hereby acknowledges receipt of a true copy of this Debenture and a copy of the financing statement registered under the PPSA in respect of the security created hereby.

8.11 Invalidity of any Provisions

If any provision of this Debenture or the security contemplated hereunder is or becomes illegal, invalid or unenforceable in any jurisdiction, the illegality, invalidity or unenforceability of that provision will not affect: (a) the legality, validity or enforceability of the remaining provisions of this Debenture or such security; or (b) the legality, validity or enforceability of that provision in any other jurisdiction. No

such illegality, invalidity or unenforceability shall affect the obligation of the Corporation to repay the Obligations.

8.12 Indemnification

The Corporation agrees to indemnify the Holder from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind or nature whatsoever (except by reason of the fraud, gross negligence or wilful misconduct of the Holder or any of its agents, advisors or employees) which may be imposed on, incurred by, or asserted against the Holder and arising by reason of any action (including any action referred to herein) or inaction or omission to do any act required of the Corporation.

8.13 Discharge of Debenture

The Corporation shall be released and discharged under this Debenture upon (a) the Principal Amount outstanding under this Debenture and all other amounts owing hereunder having been paid or satisfied in full, or (b) the issuance of Common Shares on the conversion of the entire Principal Amount outstanding under and pursuant to the terms and conditions of this Debenture and the payment of all amounts owing hereunder having been duly and effectually made in accordance with the provisions hereof, or (c) the issuance of Common Shares on the conversion of part of the Principal Amount outstanding under and pursuant to the terms and conditions of this Debenture and the payment of all other amounts owing hereunder (including the balance of the Principal Amount) having been duly and effectually made in accordance with the provisions hereof. In any such case, the Holder will promptly, at its expense, release and discharge the right and interest of the Holder in the Secured Property under the Security Documents.

8.14 Actions on Days other than Business Days

In any case where any action is required, permitted or contemplated to be taken under this Debenture on a day which is not a Business Day, such action need not be made or taken on such date but may be made or taken on the next succeeding day that is a Business Day with the same force and effect as if made or taken on the day otherwise provided.

8.15 Assignment, Successors and Assigns, etc.

(1) This Debenture may be assigned by the Holder, in whole or in part, upon written notice to, but without the consent of, the Corporation, provided that:

- (a) Any assignment made hereunder shall become effective when the Corporation has been notified thereof by the Holder and the Corporation has received an acknowledgement from the assignee to be bound by this Debenture and the other Security Documents. Any such assignee shall be treated as a party to this Debenture for all purposes of this Debenture and the other Security Documents and shall be entitled to the full benefit hereof and thereof and shall be subject to the obligations of the Holder to the same extent as if it were an original party in respect of the rights assigned to it and obligations assumed by it, and the Holder in making such assignment shall be released and discharged accordingly; and
- (b) The Corporation shall not register any transfer of this Debenture if it has reasonable grounds to believe that such transfer is otherwise not in accordance with applicable law (including Securities Laws).

(2) This Debenture may not be assigned by the Corporation without the prior written consent of the Holder, which may be arbitrarily withheld.

(3) This Debenture and all its provisions shall enure to the benefit of the Holder, its successors and assigns and shall be binding upon the Corporation, its successors and permitted assigns. The Holder is the Person entitled to receive the money payable hereunder and to give a discharge hereof. Presentment, notice of dishonour, protest and notice of protest hereof are hereby waived.

8.16 Amendments

This Debenture may only be amended by a written agreement signed by each of the Parties.

8.17 Counterparts

This Debenture may be executed in separate counterparts, each of which when so executed and delivered shall be deemed to be an original and all of such counterparts shall together constitute one and the same instrument. Any Party may execute this Debenture by facsimile signature.

8.18 Further Assurances

Each Party shall from time to time promptly execute and deliver all further documents and take all further action necessary or desirable to give effect to the provisions and intent of this Debenture.

[the remainder of this page is intentionally blank]

The parties have executed this Debenture as of the date first written above.

VENTABREN HOLDINGS LIMITED

By: _____
Name:
Title:

By: _____
Name:
Title:

I/We have authority to bind the Holder.

NIR DIAGNOSTICS INC.

By: _____
Name:
Title:

By: _____
Name:
Title:

I/We have authority to bind the Corporation.

SCHEDULE "B"
FORM OF WARRANT

Share Purchase Warrants
Void After **[December 3, 2009]**

SHARE PURCHASE WARRANT
NIR DIAGNOSTICS INC.

THIS IS TO CERTIFY THAT, for value received, Ventabren Holdings Limited (the "**Warrant Holder**"), having its registered office at 181 University Avenue, Suite 1800, Toronto, Ontario, M5H 3M7, shall have the right to purchase from NIR DIAGNOSTICS INC. (the "**Corporation**"), upon and subject to the terms and conditions referred to in this share purchase warrant certificate (the "**Certificate**"), one (1) fully paid and non-assessable common share in the capital of the Corporation (individually, a "**Warrant Share**"; collectively, the "**Warrant Shares**") for each one (1) warrant (individually, a "**Warrant**"; collectively, the "**Warrants**") represented by this Certificate at the price of \$0.20 per Warrant Share (the "**Exercise Price**") in lawful money of Canada at any time up to 5:00 p.m. (Toronto time) on **[December 3, 2009]** (the "**Expiry Date**"). This Certificate represents and entitles the Warrant Holder to subscribe for and purchase up to **[11,000,000]** Warrant Shares. Upon expiration, the Warrants shall be of no value if unexercised.

Subject to the terms and conditions annexed to this Certificate, which terms and conditions shall be incorporated in this Certificate, the right to purchase Warrant Shares may only be exercised by the Warrant Holder on or before the Expiry Date by: (a) duly completing and executing the subscription form attached to this Certificate; (b) surrendering this Certificate to the Corporation at 44 Crawford Cres., Campbellville, ON; and (c) paying the Exercise Price for the Warrant Shares subscribed for by way of bank draft or certified cheque or wire transfer of immediately available funds to or to the order of "NIR Diagnostics Inc.".

Upon surrender and payment, the Corporation will issue to the Warrant Holder the number of Warrant Shares subscribed for. Within five (5) business days of surrender and payment the Corporation will mail to the Warrant Holder a certificate evidencing the Warrant Shares subscribed for. If the Warrant Holder subscribes for a lesser number of Warrant Shares than the number of shares permitted by this Certificate, the Corporation shall forthwith cause to be delivered to the Warrant Holder a further warrant certificate in respect of the Warrant Shares referred to in this Certificate but not subscribed for.

THE WARRANT HOLDER, BY ACCEPTANCE OF THIS CERTIFICATE, AGREES THAT THE WARRANTS REPRESENTED BY THIS CERTIFICATE AND ALL RIGHTS UNDER THIS CERTIFICATE ARE NON TRANSFERABLE EXCEPT IN ACCORDANCE WITH THE PROVISIONS OF THE NATIONAL INSTRUMENT 45-102 AND ANY WARRANTSHARES ACQUIRED BY THE WARRANT HOLDER PURSUANT TO THIS CERTIFICATE MUST NOT BE SOLD BY THE WARRANT HOLDER UNTIL [APRIL 4, 2008].

WITHOUT PRIOR WRITTEN APPROVAL OF THE TSX VENTURE EXCHANGE (THE "TSXV") AND COMPLIANCE WITH APPLICABLE SECURITIES LEGISLATION, ANY WARRANT SHARES ACQUIRED BY THE WARRANT HOLDER PURSUANT TO THIS CERTIFICATE MAY NOT BE SOLD, TRANSFERRED, HYPOTHECATED OR OTHERWISE TRADED ON OR THROUGH THE FACILITIES OF THE TSXV OR OTHERWISE IN CANADA OR TO OR FOR THE BENEFIT OF A CANADIAN RESIDENT UNTIL [APRIL 4, 2008].

IN WITNESS WHEREOF THE CORPORATION has caused this Certificate to be issued by its duly authorized agent as of the _____ day of _____, 2007.

NIR DIAGNOSTICS INC.

By: _____
Authorized Signing Officer

**TERMS AND CONDITIONS OF SHARE PURCHASE WARRANTS
OF NIR DIAGNOSTICS INC.**

1. This Certificate shall be signed by the President or a Vice-President or by the Secretary or an Assistant Secretary of the Corporation holding office at the time of signing and notwithstanding any change in any of the persons holding said offices between the time of actual signing and the delivery of this Certificate and notwithstanding that the President or Vice-President or Secretary or Assistant Secretary signing may not have held office at the date of the delivery of this Certificate shall be valid and binding upon the Corporation.
2. All unexercised Warrants shall be void and of no value or effect after the Expiry Date.
3. If the Warrant Holder desires to exercise some or all of the Warrants, the Warrant Holder shall deliver this Certificate to the Corporation at its head office together with a subscription form duly signed by the Warrant Holder for the number of Warrant Shares which the Warrant Holder is entitled and desires to purchase and the Exercise Price for such Warrant Shares applicable at the time of the delivery of the Warrant Shares so desired to be purchased calculated in accordance with the provisions of this Certificate.
4. The Exercise Price of the Warrant Shares subscribed for under the Warrants shall be paid by way of bank draft or certified cheque or wire transfer of immediately available funds to or to the order of "NIR Diagnostics Inc.".
5. Upon delivery of the subscription form for the Warrant shares and the Exercise Price for such Warrant Shares, the Corporation shall cause to be issued to the Warrant Holder the number of Warrant Shares to be issued and the Warrant Holder shall become a shareholder of the Corporation in respect of such Warrant Shares with effect from the date of such delivery and payment and shall be entitled to delivery of a certificate or certificates evidencing such Warrant Shares and the Corporation shall cause such certificate or certificates to be mailed to the Warrant Holder at the address specified in such subscription form within five (5) business days of such delivery and payment.
6. The holding of Warrants shall not constitute the Warrant Holder thereof a shareholder of the Corporation nor entitle it to any right or interest in respect thereof except as provided in this Certificate.
7. The Corporation covenants and agrees that until the Expiry Date while any of the Warrants shall be outstanding, it shall reserve and there shall remain unissued out of its authorized capital a sufficient number of shares to satisfy the right of the Warrant Holder to exercise all unexercised Warrants. All Warrant Shares which shall be issued upon the exercise of Warrants shall be issued as fully paid and non-assessable shares and the Warrant Holders shall not be liable to the Corporation or its creditors in respect thereof.
8. The Corporation covenants and agrees that so long as any of the Warrants are outstanding it will not up to and including thirty (30) days preceding the expiry date:
 - (a) give rateably to holders of its shares rights to subscribe for additional shares; or
 - (b) pay any dividend on any outstanding shares in the capital of the Corporation payable in shares in the capital of the Corporation or any dividend on shares of the same class as those then issuable pursuant to the Warrants; or

- (c) subdivide, re-divide, consolidate, change or reclassify any shares in the capital of the Corporation; or
- (d) increase its authorized capital; or
- (e) consolidate, amalgamate or merge the Corporation with any other company or corporation; or
- (f) sell or lease the whole or substantially the whole of the assets of the Corporation to any other company or corporation,

until it shall have given at least fifteen (15) days' notice of its intention so to do and of the particulars of the right to subscribe for additional shares and/or of such dividend and/or of such subdivision, re-division, consolidation, change or reclassification or increase in authorized capital and/or of the general terms of such consolidation, amalgamation, merger or sale or lease, by notice to the Warrant Holder. The Corporation further covenants and agrees that it will not during the period of such notice as aforesaid close its share transfer books or take any other corporate action which might deprive the Warrant Holder of the opportunity of exercising its right to participate as a shareholder in any such rights or dividends or such other proposed action as aforesaid; provided always that nothing contained in this clause shall be deemed to affect the right of the Corporation to do or take part in any of the things referred to above in this clause nor to pay cash dividends on the shares of any class or classes in its capital from time to time outstanding nor (subject to the provisions of clause 6 hereof) to issue any of its authorized but unissued shares in its capital or be deemed to require the Corporation to give any notice of intention to pay any such cash dividends on any shares other than shares of the same class as those then issuable pursuant to the Warrants or to issue any of such unissued shares.

9. In the event of any subdivision, re-division or change or subdivisions, re-divisions or changes of the shares of the Corporation at any time while any Warrant are outstanding into a greater number of shares, the Corporation shall thereafter deliver at the time of purchase of Warrant Shares under the Warrants, in lieu of the number of Warrant Shares in respect of which the right to purchase is then being exercised, such greater number of shares of the Corporation as would result from said subdivision, re-division or change or subdivisions, re-divisions or changes had the right of purchase been exercised before such subdivision, re-division or change or subdivisions, re-divisions or changes without the Warrant Holder making any additional payment or giving any other consideration therefor.

In the event of any consolidation or consolidations of the shares of the Corporation at any time while any Warrants are outstanding into a lesser number of shares, the Corporation shall thereafter deliver, and the Warrant Holder under the Warrants shall accept, at the time of purchase of Warrant Shares under the Warrants, in lieu of the number of Warrant Shares in respect of which the right to purchase is then being exercised, such lesser number of shares of the Corporation as would result from such consolidation or consolidations had the right of purchase been exercised before such consolidation or consolidations.

In the event of any reclassification or reclassifications of the shares of the Corporation at any time while any Warrants are outstanding, the Corporation shall thereafter deliver at the time of purchase of Warrant Shares under the Warrants the number of shares of the Corporation of the appropriate class or classes resulting from said reclassification or reclassifications as the subscriber would have been entitled to receive in respect of the number of Warrant Shares in respect of which the right to

purchase is then being exercised had the right of purchase been exercised before such reclassification or reclassifications.

If the Corporation, at any time while any Warrants are outstanding, shall pay any stock dividend or stock dividends upon shares of the Corporation of the class or classes in respect of which the right to purchase is then given under the Warrants, then the Corporation shall thereafter deliver at the time of purchase of Warrant Shares under the Warrants, in addition to the number of Warrant Shares in respect of which the right of purchase is then being exercised, the additional number of shares of the appropriate class or classes as would have been payable on the shares of the Corporation so purchased if the shares so purchased had been outstanding on the record date for the payment of the said stock dividend.

The adjustment in the number of shares issuable pursuant to the rights attaching to the Warrants provided for in this paragraph 9 shall be cumulative.

On the happening of each and every such event the applicable provisions of the Warrants and each of them shall, *ipso facto*, be deemed to be amended accordingly and the Corporation shall take all necessary action so as to comply with such provisions as so amended.

10. The Corporation shall not be required to deliver certificates for shares while the share transfer books of the Corporation are properly closed, having regard to the provisions of paragraph 9 of this Certificate, prior to any meeting of shareholders or for the payment of dividends or for any other purpose and in the event of the surrender of any Warrants in accordance with the provisions of this Certificate and the making of any subscription and payment for the Warrant Shares called for thereby during any such period, delivery of certificates for the Warrant Shares may be postponed for not exceeding five (5) business days after the date of the re-opening of said share transfer books. Provided however that any such postponement of delivery of certificates shall be without prejudice to the right of the Warrant Holder to exercise its Warrants and make payment during such period to receive such certificates for the Warrant Shares called for after the share transfer books shall have been re-opened.
11. The Warrant Holder may subscribe for and purchase any lesser number of Warrant Shares than the number of Warrant Shares expressed in this Certificate. In the case of any subscription for a lesser number of Warrant Shares than expressed in this Certificate the Warrant Holder shall be entitled to receive a new share purchase warrant certificate in respect of the balance of the Warrant Shares not then subscribed for.
12. If this Certificate is stolen, lost, mutilated or destroyed, the Corporation may, on such terms as it may in its discretion impose, issue and countersign a new share purchase warrant certificate of like denomination, tenor and date as this Certificate so stolen, lost, mutilated or destroyed.
13. The Warrant Holder shall have the power from time to time while the Warrants are outstanding:
 - (a) to sanction any modification, abrogation, alteration or compromise of the rights of the Warrant Holder against the Corporation which shall be agreed to by the Corporation; and/or
 - (b) to assent to any modification of or change in or omission from the provisions contained in this Certificate or any instrument ancillary or supplemental hereto which shall be agreed to by the Corporation.

14. All notices to be sent hereunder shall be deemed to be validly given to the Warrant Holder if delivered personally or if sent by registered letter through the post addressed to such holders at the address noted on the face page of this Certificate, or such new address as provided by the Warrant Holder to the Corporation from time to time, and such notice shall be deemed to have been given, if delivered personally when so delivered, and if sent by post on the first business day next following the posting thereof.
15. The Certificate will be construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein and will be treated in all respects as an Ontario contract.