ANNUAL INFORMATION FORM	
GEMINA LABORATORIES LTD.	
3800 Westbrook Mall, Suite 142	
Vancouver, British Columbia, V6S 2L9	
Telephone: 604-562-4546 E-Mail: investor@geminalabs.com	
For the year ended 31 January, 2022	
Dated 30 May, 2022	

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#### **EXPLANATORY NOTES AND CAUTIONARY STATEMENTS**

In this annual information form (this "AIF" or "Annual Information Form"), unless the context otherwise requires, the "Company" or "Gemina" refers to Gemina Laboratories Ltd. This AIF applies to the business activities and operations of the Company for the financial year ended 31 January, 2022. Unless otherwise indicated, the information in this AIF is given as of 31 May, 2022.

This AIF contains company names, product names, trade names, trademarks and service marks of the Company and other organizations, all of which are the property of their respective owners.

This AIF contains references to Canadian dollars and United States dollars. References in this AIF to "Cdn\$" are to Canadian dollars. References in this AIF to "USD\$" are to US dollars. Any references to "\$" not preceded by "Cdn" or "US" are to Canadian dollars. On 30 May, 2022 the closing exchange rate for US dollars to Canadian dollars, as quoted by the Bank of Canada was USD\$1.00:CAD\$1.27 (CAD\$1.00:USD\$0.79).

#### Cautionary Statement Regarding Forward-Looking Information

This AIF and the Company's other public disclosure contain "forward-looking information" within the meaning of applicable Canadian securities laws ("forward-looking information") concerning the Company's business plans, including, but not limited to, anticipated results and developments in the Company's operations in future periods and other matters that may occur in the future. In certain cases, forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "budget", "target", "scheduled", "estimates", "forecasts", "intends", "anticipates", "determine", "continue", "projects", "potential", "proposed" or "believes", or variations or the negative of such words and phrases, or statements that certain actions, events or results "may", "could", "whether to", "would", "should", "likely", "might" or "will be taken", "occur" or "be achieved" or the negative of these terms or comparable terminology. Forward-looking information contained in this AIF includes, but is not limited to, statements regarding:

- the competitive and business strategies of the Company;
- market prices, values and other economic indicators;
- receipt and timing of governmental approvals;
- the timing and value of the Company's initial revenues;
- the performance of the Company's business and operations;
- the intention to grow the business, operations and potential activities of the Company;
- the competitive conditions of the industry;
- whether the Company will continue to be in compliance with regulatory requirements;
- the Company's intention to build valuable intellectual property and the anticipated benefits therefrom;
- analyses and other information based on expectations of future performance and planned products;
- possible events, conditions or financial performance that is based on assumptions about future economic conditions and courses of action;
- timing, costs and potential success of future activities on the Company's facilities and projects;
- future outlook and goals;
- whether the Company will have sufficient working capital and its ability to raise additional financing required in order to develop its business and continue operations;
- effects of COVID-19; and
- planned expenditures and budgets and the execution thereof.

Forward-looking information is not a guarantee of future performance and is based upon a number of estimates and assumptions of management in light of management's experience and perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances, including, without limitation, assumptions about:

- possible events, conditions or financial performance that is based on assumptions about future economic conditions and courses of action;
- general economic, financial market, regulatory and political conditions in which the Company operates;
- general demand and consumer interest in the Company's products;
- competition;
- anticipated and unanticipated costs;
- the ability of the Company to obtain the necessary financing on acceptable terms;
- the accuracy of budgeted costs and expenditures;
- government regulation of the healthcare industry;
- the timely receipt of any required governmental, regulatory and third-party approvals, license and permits on favourable terms and any required renewals of the same;
- political and regulatory stability;
- requirements under applicable laws;
- stability in financial and capital markets;
- the ability of the Company to obtain qualified staff and in a timely and cost-efficient manner;
- expectations regarding the level of disruption as a result of COVID-19;
- the changeable nature of the COVID-19 pandemic; and
- the ability of the Company to conduct operations in a safe, efficient and effective manner.

While the Company considers these assumptions to be reasonable, the assumptions are inherently subject to significant business, social, economic, political, regulatory, competitive and other risks and uncertainties, contingencies and other factors that could cause actual actions, events, conditions, results, performance or achievements to be materially different from those projected in the forward-looking information. Many assumptions are based on factors and events that are not within the control of the Company and there is no assurance they will prove to be correct.

Furthermore, by their very nature, forward-looking information involves a variety of known and unknown risks, uncertainties and other factors which may cause the actual plans, intentions, events, results, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information. Such risks, uncertainties and other factors include, without limitation, those related to:

- the industry-wide risks;
- fluctuations in capital markets and share prices;
- price volatility;
- risks related to the ability to obtain financing needed to fund the continued development of the Company's business;
- the Company's ability to manage anticipated and unanticipated costs;
- risks related to possible future government legislation, policies and controls or by changes in applicable laws and regulations;
- risks associated with political instability;
- risks related to securing and protecting the Company's intellectual property rights;
- risks related to the Company's failure to obtain necessary regulatory approvals as scheduled or at all:
- risks related to the Company's inability to maintain or improve its competitive position;

- risks related to the Company's ability to establish its business internationally;
- risks related to the Company's failure to retain key personnel and hire additional personnel needed to develop its business;
- risks related to the performance of the Company's directors and officers;
- risks related to the Company's failure to adequately evaluate its current business and its future prospects;
- risks outside of the control of the Company;
- risks related to potential conflicts of interests involving the Company's directors and officers that are not resolved in favour of the Company;
- risks related to security breaches;
- risks related to software errors and defects;
- risks related to internal controls and the reliability of financial reporting and financial statement preparation;
- the impact of securities or industry analysts not publishing research or publishing inaccurate or unfavourable research about the Company's business;
- the Company and/or its directors and officers may be subject to a variety of legal proceedings, the results of which may have a material adverse effect on the Company's business;
- the Company's ability to implement its growth strategy;
- the Company's ability to manage its growth;
- the Company's failure to maintain, promote and enhance its brand status;
- market conditions, volatility and global economic conditions;
- dilution from future equity financing;
- environmental risks;
- governmental regulations;
- costly reporting requirements;
- restrictions imposed by the Canadian Securities Exchange and other regulatory authorities on the Company's business;
- risks related to foreign exchange rate fluctuations, as applicable;
- risks related to the Company's reliance on strategic partnerships;
- insurance and tax risks;
- reputational risks;
- general risks and uncertainties related to the Company's prospects and business strategy; and
- public health crises such as the COVID-19 pandemic, and any worsening thereof, having an adverse impact on the Company's business; and
- the risks described in the section of this AIF entitled "Risk Factors";

This is not an exhaustive list of the risks and factors that may affect the Company's forward-looking information. Although the Company has attempted to identify important factors that could affect the Company and may cause actual actions, events, conditions, results, performance or achievements to differ materially from those described in the forward-looking information, there may be other factors that cause actions, events, conditions, results, performance or achievements not to be as anticipated, estimated or intended. In addition to those discussed in this AIF, please refer to the risks described in the Company's public disclosure record.

The Company cautions that the foregoing lists of important assumptions and factors are not exhaustive. Other events or circumstances could cause actual results to differ materially from those estimated or projected and expressed in, or implied by, the forward-looking information contained in this AIF. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on

forward-looking information. The Company does not undertake any obligation to publicly update or revise any forward-looking information other than as required under applicable securities laws.

#### **DEFINITIONS AND GLOSSARY OF TERMS**

The following is a glossary of certain terms used in this AIF, including the summary that follows. Words importing the singular, where the context requires, include the plural and vice versa and words importing any gender include all genders. Certain additional terms are defined within the body of this AIF and in such cases will have the meanings ascribed thereto.

**Acceleration Right** Has the meaning ascribed thereto under "Market for Securities – Prior Sales".

AIF This Annual Information Form.

Amalgamation The three cornered arm's length amalgamation among the Company, Subco and

EcoScreen Solutions Inc.

Amalgamation Has the meaning ascribed thereto under "Description of the Business – Material

**Agreement** Restructuring Transactions – The Amalgamation".

Any substance which induces an immune response in the body, especially the

production of Antibodies, which may be a substance from the environment, such

as chemicals, bacteria, viruses, or pollen.

**Audit Committee** The Audit Committee of the Board.

BCBCA The Business Corporations Act (British Columbia).

**Board** The board of directors of the Company.

**CAGR** Compound Annual Growth Rate.

CFO Chief Executive Officer.

CFO Chief Financial Officer.

**Common Shares** The common shares in the capital of Gemina.

Compensation Committee

The Compensation Committee of the Board.

Consolidation The consolidation of the outstanding Former EcoScreen Shares on a basis of

one (1) post-Consolidation Former Ecoscreen Share for each (3) three pre-

Consolidation Former Ecoscreen Shares outstanding.

**COVID-19** The novel coronavirus.

CRISPR Cas9, a DNA editing technique that enables specific DNA sequences along a

DNA strand to be located and, in a typical use of the CRISPR technique, cut.

CRO or Contract

Research Organizations

A company that provides technical and research support services within the

pharmaceutical, biotechnology and medical device sectors.

**CSE** Canadian Securities Exchange.

**DHSC** Department of Health and Social Care.

**Digital Supercluster** means Canada's Digital Technology Supercluster, a not-for-profit organization

established in 2018 under the Canada *Not-for-profit Corporations Act* (S.C. 2009, c. 23), headquartered in Vancouver British Columbia, being one of 5 organizations funded under the Canadian federal government's \$950 million innovation supercluster initiative, with a mission to support consortium-based

innovation.

Dual Affinity
Biomolecules

Has the meaning ascribed thereto under "Description of the Business – Technology

Overview".

**EcoMine** 

EcoMine Technologies Corporation.

**EcoMine License** 

Agreement

The license agreement between EcoScreen and EcoMine dated 8 December, 2020.

EcoScreen

EcoScreen Solutions Inc.

**Eco Share Financing** 

Has the meaning ascribed thereto under "General Development of the Business -

Three Year History - Eco Share Financing".

**Eco Subscription** 

Receipts

Has the meaning ascribed thereto under "General Development of the Business –

Three Year History – Eco Subscription Receipt Financing".

**Eco Subscription Receipt** 

**Financing** 

Has the meaning ascribed thereto under "General Development of the Business –

Three Year History – Eco Subscription Receipt Financing".

**Eco Unit** Has the meaning ascribed thereto under "General Development of the Business –

Three Year History – Eco Unit Financing".

**Eco Unit Financing** Has the meaning ascribed thereto under "General Development of the Business –

Three Year History - Eco Unit Financing".

Escrow Agent Computershare Investor Services Inc., the escrow agent under the Escrow

Agreement.

**Escrow Agreement** the escrow agreement substantially in Form 46-201F1 – *Escrow Agreement* entered

into among the Company, certain escrowed securityholders of the Company and

the Escrow Agent on 15 July, 2021.

**Escrowed Securities** The securities subject to the Escrow Agreement.

Escrowed

Securityholders

The securityholders of the Company who are party to the Escrow Agreement.

**FDA** United States Food and Drug Agency.

Field of Use Any or all of (i) the detection of pathogens for human health and animal health; (ii)

the detection of pathogens for the purpose of food safety and potable water safety; and (iii) the detection of human or animal disease biomarkers comprising organic

compounds present in blood, other bodily fluids, or tissues.

**Former EcoScreen Shares** Common shares in the capital of EcoScreen that were issued and outstanding prior

to completion of the Amalgamation.

**Former Eco Warrants** Common share purchase warrants in the capital of Ecoscreen that were issued and

outstanding prior to completion of the Amalgamation.

Forward-Looking

Information

Has the meaning ascribed thereto under "Explanatory Notes and Cautionary Statements – Cautionary Statement Regarding Forward-Looking Information".

Gemina (or the

"Company")

Gemina Laboratories Ltd., a company incorporated under the BCBCA.

**Gemina Surface** 

Chemistry

Has the meaning ascribed thereto under "Description of the Business – Summary

of the Business".

**Gemina UK** Gemina Laboratories (UK) Limited.

**Generation 1 Technology** Has the meaning ascribed thereto under "Description of the Business – Summary

of the Business".

**Hit Technologies** Hit Technologies Inc.

**IPOC** International Point of Care Inc.

In Vitro Diagnostics or

IVD

Tests that are performed on samples such as saliva, blood or tissue that have been

taken from the human body. In vitro diagnostics can detect diseases or other

conditions, and can be used to monitor a person's overall health.

**ISO** International Organization for Standardization.

ISO Certificate Has the meaning ascribed thereto under "Description of the Business – Regulatory

Environment – Health Canada – Canadian Approval Process for IVD".

**ISO Quality Management** 

System

Has the meaning ascribed thereto under "Description of the Business – Regulatory

Environment – Health Canada – Canadian Approval Process for IVD".

Kalorama Information, Worldwide Market for In Vitro Diagnostic Tests, 13<sup>th</sup> edition,

2021.

Lateral Flow Assay or

LFA

A detection platform, often paper based, for the detection of analytes (e.g. biomarkers) in complex mixtures. A pharmacy pregnancy test is an example of a

Lateral Flow Assay.

Master Project

Agreement

The Master Project Agreement between EcoScreen and Digital Supercluster dated

10 August, 2020, as amended 24 November, 2020.

MCTO Management Cease Trade Order.

MDL Health Canada Medical Device License.

MDSAP Medical Device Single Audit Program.

MHRA United Kingdom Medicines and Healthcare products Regulatory Agency.

**Microbial Expression** The use of microbes (typically yeast or bacteria) to produce biomolecules.

**Motif** In peptides and proteins, a pattern formed by a repeated sequence of amino acids

(i.e., in the primary structure).

NatureBank Asset Management Inc.

NP 46-201 National Policy 46-201 – Escrow for Initial Public Offerings.

NI 52-110 National Instrument 52-110 – Audit Committees.

Nomination and

**Corporate Governance** 

Committee

The Nomination and Corporate Governance Committee of the Board.

**Option** An option to purchase a Common Share issued pursuant to the Stock Option Plan.

**Peptides** Short chains of between 2 and 50 amino acids.

**Project** Has the meaning ascribed thereto under "Description of the Business – Contracts".

**POC** Point-of-care.

**POC Antigen COVID Test** Has the meaning ascribed thereto under "Description of the Business – Summary

of the Business".

Polymerase chain reaction or PCR

A method widely used to rapidly make millions to billions of copies of a specific DNA sample, enabling a small sample of target DNA to be amplified sufficiently to

be detected.

**PSI** Physical Science Innovations Corporation.

Replacement

**Subscription Receipts** 

the subscription receipts of the Company issued to replace the Eco Subscription Receipts which were cancelled in connection with the Amalgamation, with each such subscription receipt convertible into one Common Share and one-half of one

Warrant (in each case, on a post-Consolidation basis).

**Securities Legislation** The securities legislation of each of the provinces and territories of Canada and the

Exchange Act and U.S. Securities Act each as now enacted or as amended and the applicable rules, regulations, rulings, orders, instruments and forms made or promulgated under such statutes, as well as the rules, regulations, by-laws and

policies of the CSE.

**SEDAR** System for Electronic Document Analysis and Retrieval.

**Shareholders** Shareholders of the Company.

**SME** Small and medium-size enterprise.

2021, as amended from time to time.

**SubCo** 1272305 B.C. Ltd.

**USPTO** The United States Patent and Trademark Office.

Warrants Common Share purchase warrants of the Company.

**Warrant Certificates** Certificates representing the respective Warrants of the Company.

#### **CORPORATE STRUCTURE**

#### Name, Address and Incorporation

The Company was incorporated on 10 October, 2017, pursuant to the BCBCA under the name "D1 Capital Corp." In connection with the Amalgamation, the Company changed its name to "Gemina Laboratories Ltd." and now carries on the business of EcoScreen. The Company's head office is located at 3800 Westbrook Mall, Suite 142, Vancouver, British Columbia, V6S 2L9 and its registered and records is located at 10th Floor, 595 Howe Street, Vancouver, British Columbia, V6C 2T5.

#### **Intercorporate Relationships**

The Company has two wholly-owned subsidiaries, being EcoScreen and Gemina UK. EcoScreen was formed on 31 January, 2021 as a result of the amalgamation of the former EcoScreen Solutions Inc. and Subco pursuant to section 269 of the BCBCA. For more information on the Amalgamation, see disclosure under the heading "Description of the Business – Material Restructuring Transactions – The Amalgamation" Gemina UK was incorporated under the Companies Act 2006 (England and Wales) on 23 December, 2021.

The following chart depicts the corporate structure of the Company:

Subsidiaries	Jurisdiction of Incorporation	Ownership Interest in Voting Securities
EcoScreen Solutions Inc.	British Columbia, Canada	100%
Gemina Laboratories (UK) Limited	England and Wales	100%

### **GENERAL DEVELOPMENT OF THE BUSINESS**

#### **Three Year History**

The Company was incorporated under the BCBCA on 10 October, 2017 and did not carry on any active business until the Amalgamation. The Company has not generated any revenue since incorporation.

#### **EcoScreen and EcoMine**

On 6 May, 2020, EcoScreen was incorporated as a wholly-owned subsidiary of EcoMine. EcoMine was incorporated in 2017, originally to pursue certain green chemistry inventions with potential applications to mineral processing challenges in the mining sector. Throughout 2019, EcoMine started to explore potential applications of its bio-chemistry expertise outside the mineral processing arena and biosensing emerged as a candidate application area. In 2020, as the COVID-19 pandemic gathered momentum, EcoMine undertook a feasibility study to better understand the viability of building a biosensing programme, focused on COVID-19 testing. On 6 May, 2020, EcoScreen was incorporated to pursue this research and development activity. In connection therewith, in August 2020, EcoScreen partnered with Digital Supercluster pursuant to the Master Project Agreement to pursue a consortium innovation project which led to the development of the TestPoint Software. For more information on the Master Project Agreement, see disclosure under the headings "Description of the Business – Products in Development - TestPoint Software" and "Description of the Business – Contracts."

#### **Eco Unit Financing**

On 31 December, 2020, EcoScreen completed a non-brokered private placement of 10,000,000 units on a pre-Consolidation basis (3,333,334 on a post-Consolidation basis) ("Eco Units") at a price of \$0.05 per Eco Unit for gross proceeds of \$500,000 (the "Eco Unit Financing"). Each Eco Unit was comprised of one Former EcoScreen Share and one Former Eco Warrant, with each such Former Eco Warrant entitling the holder thereof to purchase one additional Former EcoScreen Share for a period of 2 years from the date of issue at an exercise price of \$0.05 per Former EcoScreen Share, subject to acceleration in certain circumstances. In connection with the Amalgamation, the Former EcoScreen Shares were exchanged for Common Shares and the Former Eco Warrants became exercisable for Common Shares, each on a post-Consolidation basis.

#### **Eco Subscription Receipt Financing**

On 20 November, 2020, EcoScreen completed the first tranche of a non-brokered private placement of 1,000,000 subscription receipts on a pre-Consolidation basis (333,333 on a post-Consolidation basis) ("Eco Subscription Receipts") at an issue price of \$0.10 per Eco Subscription Receipt for gross proceeds of \$100,000 (together with the second tranche described below, the "Eco Subscription Receipt Financing"). Each Eco Subscription Receipt is automatically convertible into one Former EcoScreen Share and one-half of one Former Eco Warrant (in each case, on a pre-Consolidation basis) upon the satisfaction or waiver of certain escrow release conditions. Each whole Former Eco Warrant is exercisable at a price of \$0.15 until three years from the date of issuance.

Effective 29 January, 2021, EcoScreen completed the second tranche of a non-brokered private placement of 22,295,380 Eco Subscription Receipts on a pre-Consolidation basis (7,431,791 on a post-Consolidation basis) for gross proceeds of \$2,229,538, with \$172,000 of the gross proceeds being received subsequent to 31 January, 2021 in respect of 1,720,000 Eco Subscription Receipts on a pre-Consolidation basis (573,333 on a post-Consolidation basis). Of the total gross proceeds, \$109,038 relates to a settlement of amounts owing to EcoMine.

Pursuant to the subscription agreement, the gross cash proceeds of EcoScreen's subscription receipt offering were held in escrow by the Company, in a segregated account, on behalf of the subscribers. Upon completion of the Amalgamation, the Company had access of up to 25% of the escrowed proceeds, which was deemed to be a non-interest bearing loan from the subscribers to the Company.

The remaining funds were to be released from escrow to the Company 3 days after the later of:

- The Company having received third party results validating the performance of its proof-of-concept COVID-19 dual-affinity immunoprobes function in saliva and that, as a result, the Company is in a position to proceed to the next phases of its product development plan for COVID-19 saliva-based screening; and
- 2. The date on which the CSE provides conditional acceptance of listing of the common shares of the Company.

The Company has received third party results validating the performance of its proof-of-concept COVID-19 dual-affinity immunoprobes function in saliva, satisfying the first escrow release condition described above.

If these escrow release conditions were not satisfied or waived prior to 30 April, 2021, all of the issued and outstanding subscription receipts were to be cancelled and the escrowed proceeds were be returned to the holders of subscription receipts. However, in connection with the Amalgamation, the outstanding Eco Subscription Receipts were cancelled and replaced with the Replacement Subscription Receipts. The escrow

release conditions which applied to the Eco Subscription Receipts were applicable to the Replacement Subscription Receipts, except that the date upon which the escrow release conditions must be satisfied was extended to 31 July, 2021.

On 13 July, 2021, the Company received conditional acceptance from the CSE for listing. As a result, the Replacement Subscription Receipts converted 3 days later on 16 July, 2021 and the remaining 75% of the escrowed proceeds were made available to the Company.

#### **Eco Share Financing**

On 31 January, 2021, EcoScreen completed a non-brokered private placement of 2,187,500 Former EcoScreen Shares on a pre-Consolidation basis (729,167 on a post-Consolidation basis) at an issue price of \$0.08 per Former EcoScreen Share for gross proceeds of \$175,000 (the "Eco Share Financing"). In connection with the Amalgamation, the Former EcoScreen Shares were exchanged for Common Shares on a post-Consolidation basis.

#### **Amalgamation**

On 31 January, 2021, the Company acquired all of the issued and outstanding Former EcoScreen Shares by way of a three-cornered arm's length amalgamation involving the Company, SubCo and EcoScreen. For more information on the Amalgamation, see disclosure under the heading "Description of the Business – Material Restructuring Transactions – The Amalgamation".

#### March 2021 Unit Financing

On 5 March, 2021, the Company completed a non-brokered private placement of 4,000,000 units at a price of \$0.05 per unit for gross proceeds of \$200,000. Each unit is comprised of one Common Share and one Warrant, with each such Warrant exercisable into one Common Share at a price of \$0.15 per Common Share for a period of 24 months from the date of issue. These units were issued pursuant to agreements between the Company and subscribers prior to completion of the Amalgamation.

#### **CSE Listing**

On 10 August, 2021, the Company began trading on the CSE under the symbol "GLAB".

# October 2021 Unit Financing

On 25 October, 2021, the Company completed a non-brokered private placement of 4,031,700 units at a price of \$0.55 per unit for gross proceeds of \$2,217,435. Each unit is comprised of one Common Share and one-half of one Warrant, with each whole Warrant exercisable into one Common Share at a price of \$0.80 per Common Share for a period of 24 months from the date of issue, subject to acceleration in the event that the trading price of the Common Shares equals or exceeds \$2.00 for a period of 10 consecutive days. In connection with the private placement, the Company issued 291,136 finder's warrants. Each finder's warrant entitles the holder thereof to acquire one Common Share at a price of \$0.55 for a period of 24 months from the date of issuance, subject to acceleration in the aforementioned circumstances.

#### Short Form Base Shelf Prospectus

On 10 January, 2022, the Company filed a short form base shelf prospectus, pursuant to which the Company may offer for sale and issue, from time to time, Common Shares, Warrants, units comprising Common Shares

and Warrants, subscription receipts exercisable for Common Shares, Warrants or units, or debt securities of the Company, with the total gross proceeds not to exceed \$50,000,000 for the period of 25 months that the base shelf prospectus remains effective.

#### **Recent Developments**

# POC Antigen COVID Test developments

On 3 February 2022, the Company announced, in respect of the POC Antigen COVID Test, design freeze for shallow nasal swab testing. Subsequently, on 31 March, 2022, the Company announced the results of cross-reactivity trials relating to the POC Antigen COVID Test and the successful conclusion of the body of work on empirical validation required to complete Phase 1 of the POC Antigen COVID Test technical development programme and the development of an initial POC Antigen COVID Test feasibility lot. On 28 April 2022, the Company reported that it has moved into Phase 2 of its POC Antigen COVID Test development programme and had commenced a clinical performance study with prospectively collected patient samples. On 5 May 2022, the Company reported the successful conclusion of the aforementioned clinical study and confirmed that the results of this study were compatible with the requirements of a POC Antigen COVID Test regulatory submission. On 17 May 2022, the Company announced that the POC Antigen COVID Test had been awarded a CE Mark.

#### **Other Developments**

On 15 February 2022, the Company provided a strategic update statement confirming its strategic commitment to the development of biosensors for human diagnostics and well-being monitoring applications. Included in that update, the Company also stated its objective of pairing the Company's chemistry with novel proprietary device technologies for generating quantitative rapid test results.

On 23 February 2022, the Company announced the formation of a wholly-owned United Kingdom subsidiary, Gemina Laboratories (UK) Limited, together with the appointment of David Browning as a director of Gemina Laboratories (UK) Limited. David Browning will lead the Company's efforts to lead responsibility for Gemina's human wellness strategy and applications of the Gemina Surface Chemistry beyond medical diagnostics and into the wellness home-testing segment.

On 31 March 2022, the Company announced that it completed a major intellectual property milestone with the filing of a provisional patent. The patent contains 236 separate claims relating to the Company's surface chemistry platform for biosensing applications. On 28 April 2022, the Company announced that it had initiated development of an Influenza A/B rapid test prototype, a second diagnostic test development programme to follow the POC Antigen COVID Test development programme.

## **Expected Changes**

Gemina intends to move forward in carrying out its strategies, meeting its business objectives and developing its business as described elsewhere in this AIF – see information under the heading "Description of the Business" for a description of Gemina's business. However, Gemina's strategies and business objectives may be impacted by changes in the global economy, changes in legislation, changes in the IVD and healthcare industry, unanticipated costs and adverse novel discoveries regarding the biomolecules that Gemina intends to use in its operations.

Management also is keeping apprised of the latest developments and is currently in the process of evaluating the impact of the COVID-19 pandemic on its business, including, but not limited to, the impact on Gemina's operations, personnel and financial condition, the impact on the operations, personnel and financial condition

of the research partners and suppliers of Gemina, and the Company's eligibility to receive benefits made available through announced government relief programs. In addition, due to the potential impact of COVID-19 on the overall economic environment, there is a risk that the Company may require further financial support to fund its operations in the future should COVID-19 impact its profitability and/or cash flows. At this time, management is unable to quantify the potential financial impact associated with this event. See "Use of Available Funds – Impact of COVID-19" and "Risk Factors – Impact of COVID-19".

#### **DESCRIPTION OF THE BUSINESS**

#### **Summary of the Business**

Gemina is a biotechnology company that currently operates in the *In Vitro Diagnostics* ("IVD") and human wellness monitoring markets under the name "Gemina Labs." The Company endeavors to develop novel surface functionalization chemistries for the detection of pathogens and biomarkers (the "Gemina Surface Chemistry"). The near-term application of the Gemina Surface Chemistry is in point-of-care diagnostics. In particular, the Company has developed a first-generation technology (the "Generation 1 Technology"), which it plans to include within an initial demonstration product namely: a point-of-care lateral flow assay to test whether or not a person is currently infected with COVID-19 (the "POC Antigen COVID Test"). In the longer term, the Company believes the Gemina Surface Chemistry may have application beyond human health, for instance: the detection of biomarkers for human wellness monitoring, and the detection of pathogens in the built environment, to food and potable water safety and in veterinary medicine.

#### **Technology Overview**

The Gemina Surface Chemistry is based on the creation of biomolecules which exhibit a "dual affinity" — one region of the biomolecule designed to bind to a surface material; a second region customized to bind to a range of biological targets (the "**Dual Affinity Biomolecules**"). In layman's terms, the Dual Affinity Biomolecules act like an adhesive, enabling the selective coupling of biological targets (e.g. pathogens) to the surface of a biosensor. The Gemina Surface Chemistry has broad potential to functionalize a range of different sensor substrates and, in principle, can be tailored to bind to different pathogens and biomarkers. Therefore, conceptually, the Company's ability to design Dual Affinity Biomolecules has broad application potential in the IVD market; it may be used not just for addressing a range of different types of sensor surface, but a broad number of biological sensing targets as well.

The IVD market (excluding COVID-19 testing) was worth approximately US\$74 billion in 2020, forecast to grow to US\$96 billion by 2025¹. The market is made up of multiple diagnostic sensing platforms including: lateral flow assays ("LFA"), high-pressure liquid chromatography, gas chromatography-mass spectroscopy, enzyme-linked immunosorbent assays, radioimmunoassays, and polymerase chain reactions ("PCR"). These platforms range in sophistication and cost, from simple tests that can be purchased without a prescription, such as pregnancy tests or finger-prick blood glucose tests, through to analytical equipment installed in clinical laboratories. At one end of this spectrum, the market continues to support powerful new technology platforms (e.g. high-throughput and highly automated systems) for installation in centralized clinical laboratory settings. However, the IVD market is subject to an orthogonal trend in favour of the migration of testing from traditional centralized testing laboratories to point-of-care ("POC") testing, i.e. tests performed in a much wider range of environments including the workplace, home, and drop-in (or even drive through) clinics. This segment of the market has "skyrocketed in the last 20 years" according to Kalorama.

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<sup>&</sup>lt;sup>1</sup> Source: Kalorama.

The Gemina Surface Chemistry does not apply to the entirety of the IVD market. The Company does not have any plans, for instance, to enter the genetic testing market. However, management's assessment is that in principle the Gemina Surface Chemistry has the potential to apply to over 45% of the overall IVD market, especially in the clinical chemistry analytics, infectious disease, POC, over the counter and the most recently, the emerging POC COVID-19 testing markets.

# **Generation 1 Technology**

The Generation 1 Technology is based on Dual Affinity Biomolecules, in which the material binding motif is coupled to an antibody pathogen-capturing motif, which in turn "captures" target antigens. As discussed further under the heading "Intangible Properties," the Company submitted a patent application in connection with its Generation 1 Technology.

#### **Products in Development**

- 1. The POC COVID Antigen Test. The Company's first product under development is the POC COVID Antigen Test. The POC COVID Antigen Test represents a major focus for the Company and was awarded a CE Mark on 17 May 2022.
- 2. A Lateral Flow Assay Family. The Company has plans to develop a family of lateral flow assays based on the Gemina Surface Chemistry. The Company announced that it had launched the first of these development programmes, a Flu A/B test, on 28 April 2022.
- **3. Testing Device Platforms.** Beyond lateral flow assays, the Company also plans to explore pairing the Gemina Surface Chemistry with alternative diagnostic device platforms with the Gemina Surface Chemistry, as confirmed in its strategic update announcement of 15 February 2022 . As a result, the Company continues investigating the merits of a research and development programme based on other potentially viable platforms upon which to implement the Gemina Surface Chemistry.
- 4. Gemina TestPoint Software. The primary product development focus of the Company has been on the POC COVID Antigen Test, its successor tests and testing device platforms. Ancillary to this focus, the Company has developed Gemina TestPoint, a COVID-19 risk assurance software platform, that has been designed to enable public and private sector organizations to securely and privately record the results of their COVID-19 testing, to send alerts to individual employees and to provide an anonymized auditable record of testing to multiple stakeholders (e.g. management, unions, regulators). The development of Gemina TestPoint was supported by Digital Supercluster, via a \$990,000 consortium-based project led by the Company. The Master Project Agreement relating to the Gemina TestPoint project was entered into in August 2020 and is summarised below under "Contracts".

#### **Potential applications**

Near-term: COVID-19 testing

The Company believes that there is a near term opportunity for COVID-19 testing. In 2020, the COVID-19 testing market was US\$9 billion (with PCR taking approximately 75% share of that market). Estimates of the 2021 COVID 19 diagnostics market have varied considerably (Grandview Research estimates a global COVID 19 diagnostics market of \$97B in 2021). It is extremely difficult to predict the size of the market over the next 5 years — which depends on multiple factors, not least the continued roll-out and efficacy of vaccines, the emergence of different

strains of the virus and the implementation of mass testing policies. But as Kalorama comments, "vaccines do not end test markets".

Longer-term: diagnostic testing

Diagnosis and disease monitoring are important elements within any health care system. As the medical research community identifies more and more markers of disease, more and more opportunity for diagnostic testing is created. The Company believes that surface chemistry (e.g. biomarker/ pathogen binding chemistries) is an enabler of major segments within the overall IVD market:

IVD market segments	2020 market size US\$ (billion)	CAGR %
Clinical chemistry analytics	8	2
Infectious diseases	10	7
Other immunoassays	7.3	2
Drugs of abuse	0.4	4
POC (professional/ hospital)	10	6
POC (OTC, not diabetes)	1	3
COVID-19	9	-

#### Infectious diseases

The Company sees infectious disease diagnosis as an important sector for longer term applications of its technology. The largest segments for infectious disease testing include but are not limited to influenza (20% of 2020 POC test demand), sexually transmitted diseases (13% of 2020 POC test demand), HIV (13% of 2020 POC test demand), and hepatitis (12% of 2020 POC test demand). Other areas of testing include Helicobacter pylori in gastrointestinal disease (6% of 2020 POC test demand) and c. difficile (9% of 2020 POC test demand), to name just a few examples.

#### **Biomarkers**

Similarly, the Company is also interested in developing biomarker diagnostic tests in the future – especially for the ongoing monitoring of chronic conditions. According to von Lode et al in 'Best Practices and Pitfalls in Commercializing IVD Applicable Biomarkers', "a biomarker is a characteristic that can be objectively measured and evaluated as an indicator of a physiological or pathological process in an individual or an individual's response to a therapeutic intervention."

A variety of applications include, but is not limited to, use in detection of substance abuse (650,000 emergency department visits each year in the US: US Department of Health and Human Services), cardiac (biomarker testing market of \$1,622 million in 2020), autoimmune, inflammation & allergy (allergy is now the fifth leading chronic disease in the United States, 85m sufferers) infectious (Infectious disease screening includes hepatitis B & C, HIV, syphilis, chlamydia, flu and TB testing, gastrointestinal (emerging biomarkers for inflammatory bowel disorder), neurological (emerging biomarker research for Alzheimer's disease which is now estimated to exceed \$1.2 trillion in global healthcare costs), sleep apnea (emerging biomarker research - 2018, Beckman Coulter – for a condition that affects 34% of men and 17% of women). In addition, IVD-applicable biomarkers are increasingly being used for individualizing therapies (also known as personalized medicine), based on factors known to influence the patient's response to treatment.

#### **Business model**

As of the date hereof, the Company has not yet generated any revenues and is still in the process of developing the Gemina Surface Chemistry platform and the IVD devices. Additionally, the Company is in the process of developing its business model but believes that revenues will, in the future, potentially be generated as follows:

- *Direct revenues* from: (i) a share of sales, generated by manufacturing partners, of the Company's products including the POC COVID Antigen Test and follow-on products;
- Indirect revenues from: (i) out-licensing validated safety and/or medical diagnostic product reference
  designs to established companies in the IVD market; and (ii) out-licensing the Gemina Surface Chemistry
  to established companies in the IVD market.

The combination of revenues available to the Company is potentially extremely flexible, which will enable the Company to adopt different revenue generating strategies for different product streams in different territories. However, the Company does not have visibility of any of these revenue streams at this juncture.

#### **Contracts**

Set forth below is a summary of the Company's two material contracts, as of the date hereof, other than contracts entered into in the ordinary course of business.

- Master Project Agreement. EcoScreen entered into the Master Project Agreement with Digital Supercluster for the purposes of developing a one-stop assurance framework for pathogen screening, combining proprietary biosensors with a digital risk platform to address the problem of labour confidence by assisting in rapid and accurate real-time screen, anonymized monitoring and risk management of employees, which incorporates a consumable testing device that is integrated with a secure cloud-based data platform to obtain, store and communicate COVID-19 screening data (the "Project"). In November 2020 the Project was modified to focus on creating a screening platform for business to use in the workplace. The Gemina TestPoint Software was developed as part of the Project. The agreement allows EcoScreen to engage project participants or contributors to assist in the Project, provided each such project participant enters in an agreement with EcoScreen and Digital Supercluster. As of the date hereof, EcoScreen has engaged the following project participants or contributors: Great Pacific Media Inc., Nomadic Pictures Corporation, Patriot One Detection Ltd., the University of North Dakota and the University of British Columbia. Digital Supercluster has agreed to reimburse EcoScreen and project participants up to \$465,000 towards the completion of the Project. Except as specified in the agreement, EcoScreen will have own all rights to products and intellectual property developed in connection with the Project. Based on the reporting made by EcoScreen to Digital Supercluster over the term of the Project, Digital Supercluster notified EcoScreen on 20 December 2021 that the Project had successfully completed.
- EcoMine License Agreement. EcoScreen entered into the Ecomine License Agreement to clarify certain intellectual property rights as between the two companies. EcoScreen has granted EcoMine a royalty-free, exclusive, perpetual, worldwide license and the right to sublicense certain intellectual property owned by EcoScreen, within the limitations and on the terms and conditions set out in the EcoMine License Agreement. EcoMine has agreed to provide EcoScreen with a royalty-free, exclusive license and the right to sublicense (the "EcoMine License") the certain intellectual property owned by EcoMine, within the limitations and on the terms and conditions set out in the EcoMine License Agreement. To the extent that either party comes into possession of an EcoScreen Improvement or EcoMine Improvement (as defined in the EcoMine License Agreement), as applicable, then such party will immediately notify the other party and allow them to practice such EcoScreen Improvement or EcoMine

Improvement, as applicable, within the limitations and on the terms and conditions of the EcoMine License Agreement. To the extent that either party creates, develops, conceives of, or reduces to practice a New Technology (as defined in the EcoMine License Agreement), as applicable, then such party will immediately notify the other party and allow them to practice such New Technology, as applicable, within the limitations and on the terms and conditions of the EcoMine License Agreement. Either party may terminate the respective licenses granted under the EcoMine License Agreement in the event of a material breach that is not cured or planned to be cured within 30 days of receiving notice of the breach.

• Arrangements with International Point of Care, Inc. ("IPOC"). On 15 June 2021 The Company entered into a term sheet with IPOC, in respect of the provision of substantive technical services relating to the POC COVID Antigen Test, these being a multi-month programme of performance and manufacturability studies designed to support bringing the POC COVID Antigen Test to market. As the POC COVID Antigen Test development programme has evolved, the precise deliverables under this contract have necessarily evolved. Within the context of the POC COVID Antigen Test's CE Mark, IPOC is the Legal Manufacturer of the POC COVID Antigen Test and under a separate Memorandum of Understanding dated 24 March 2022, the Company will license IPOC to manufacture the POC COVID Antigen Test, with IPOC taking responsibility for, amongst other matters, manufacturing, regulatory compliance and quality assurance.

## **Expenditures**

Set forth in the table below is a breakdown of the expenditures made for the year ended 31 January, 2022:

Description of Expenditure	Amount
Research and development	\$2,705,233
General and administrative costs	\$2,029,680)
Total	\$4,734,913

# **Research and Development**

Research and development expenses were \$2,705,233 (net of 214,181 grant funding. See below) for the year ended 31 January, 2022. During the year, the Company's activities were focused on the following:

- The completion of its prototype POC COVID Antigen Test. Completion of a design optimization phase and transfer to the Company's manufacturing partner in June 2021. In collaboration with our manufacturing partner we conducted Phase 1 manufacturing studies with saliva and nasal fluid-based assays.
- The Company has continued its R&D into a family of Lateral Flow Assay tests and similar rapid test devices.
- The Company has continued its exploration of human wellness healthy buildings markets outside the *in vitro* diagnostic market diagnostics.

On 10 August, 2020, as amended on 24 November, 2020, the Company entered into a development agreement with Canada's Digital Technology Supercluster ("CDTS") to develop a pathogen screening platform utilizing the Company's proprietary biosensors and a digital risk assurance platform. The project was completed on 30 November, 2021 and under the agreement, the Company committed to certain deliverables at an estimated cost of \$749,518, with the Company responsible for \$368,613 and CDTS to reimburse for the remaining \$380,905 (total received net of program fees \$357,534). From the period of incorporation on 6 May, 2020 to 31

January, 2021, the Company recognized \$143,353 of grant funding related to this project and for the year ended 31 January, 2022, the Company recognized the remaining \$214,181.

#### **General and Administration**

General and administration expenses for the year ended 31 January, 2022, were \$2,029,680 consisting of professional fees and personnel expenses to support product and platform research and development activities, business development activities and the Company's public reporting requirements.

#### **Production**

**Dual Affinity Biomolecules**. The Company's dual affinity biomolecules have been manufactured in small quantities exclusively for research and development purposes to date. Small batch production has been done both synthetically and via microbial expression systems. The chemistry used to make synthetic biomolecules has been known for more than 100 years and biomolecule synthesis in the laboratory is a common tool within today's biotechnology landscape. In contrast, microbial expression systems involve modifying micro-organisms to manufacture the desired biomolecules, in bioreactors. The Company's current view is that although both manufacturing routes are viable, its preference will be to use microbial expression as the manufacturing costs will be significantly lower than synthetic biomolecule production.

**The POC COVID Antigen Test**. The Company has engaged a single contract manufacturer for its initial product (a lateral flow assay device). Our preferred partner is a registered FDA Medical Device Establishment, has an ISO 13485:2016 Certification, and currently manufactures medical devices for Canada and export to the United States, Europe and Asia. This partner will also be responsible for the commercial supply if any of our products will be authorized for marketing. See "Description of the Business – Contracts" for further details.

#### **Specialized Skills and Knowledge**

Various aspects of the Company's business require specialized skills and knowledge. Such skills and knowledge include, but are not limited to, expertise related to surface chemistry, materials science biomolecular binding mechanisms, and diagnostic device design. The Company expects to rely upon various legal and financial advisors, consultants and others in the operation and management of its business, including scientific contract research organizations, external design and manufacturing partners and regulatory consultants. See "Risk Factors – Risks Related to the Business - Dependence on Management and Key Personnel".

#### Market overview: Competitive Landscape & Comparators

Gemina's competition in the IVD (in vitro diagnostics) arena may be stratified into three separate categories, namely:

- i) Covid-19 testing competitors (direct and indirect),
- ii) participants in the broader market for pathogen and biomarker detection; and
- iii) an upper echelon of multinational players which exhibit significant market depth and breadth of product offerings.

# (i) COVID-19

According to Kalorama 7% of the global COVID-19 testing market (currently ~\$9 BN USD) is in the POC area addressed by Gemina's first product candidate. The vast majority of testing is molecular lab-based at 69% and immunoassay lab-based at 24% of worldwide spend totals, respectively. Management believes these ratios will

move in favour of POC testing, as society increasingly recognizes the cost and timeliness benefits of rapid POC testing.

## POC Direct Competition for COVID-19 Testing

Direct competitors to Gemina's POC COVID-19 antigen test exist both in the Canadian and international landscape. Gemina expects to compete in multiple jurisdictions for COVID-19 testing market share.

In Canada a number of private and publicly listed companies are developing and/ or marketing POC tests and include, but are not limited to, MedMira (TSXV: MIR), ThermaBright (TSXV: THRM), and LexaGene Holdings (TSXV: LXG). Other smaller and lesser known international competitors include but are not limited to ChemBio Diagnostics (NASDAQ: CHEMI), and EKF Diagnostics (LSE: EKF). ChemBio Diagnostics develops a number of rapid POC tests, including a COVID-19 antigen test while EKF Diagnostics has a rapid COVID-Seroklir offering which has FDA clearance.

#### Indirect Competition for COVID-19 Testing

A number of competitors have developed PCR tests: Abbott's COVID-19 offerings, for example, include AbbottRealTime SARASS-Cov2 PCR. Additionally, Mammoth BioSciences has developed a CRISPR based assay, while Oxford Nanopore has developed the LamPORE gene sequencing platform (both high-throughput diagnostic devices). With the explosion of COVID-19 globally, lab facilities have been put under great stress given the volume of testing required during the ongoing pandemic.

#### (ii) Pathogen and Biomarker Testing

The IVD market for infectious diseases is \$10B, with a 7% CAGR. Within that market, POC infectious disease testing is a key driver of growth. The overall market for professional POC tests for infectious diseases was estimated at \$1.3 BN for 2020 and a significant CAGR of 10% (implying a market of over \$2bn by 2025). The US represents 48% of infectious disease IVD sales distribution. Leaders include Abbott, Quidel, and Becton Dickinson.

The market for biomarker based testing is \$53bn, currently growing at a faster rate than the IVD market as a whole (6% revenue growth per annum in the next 5 years).

#### Competition

The pharmaceutical and biotechnology industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. The market for COVID 19 testing products has rapidly expanded since the start of the pandemic and includes large company entrants (e.g. Roche and Abbot Laboratories) as well as numerous smaller companies (e.g. Lexagene Holdings, Chembio Diagnostics (USA), EKF Diagnostics (UK) and Canadian companies MedMira, Thermabright, Florotech). While we believe that our technology, the expertise of our executive and scientific teams, research, development experience and scientific knowledge provide us with competitive advantages, we face a high level of competition from many different sources, including pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions. Products that we successfully develop and commercialize may compete with existing products and new products that may become available in the future.

Many of our competitors, either alone or with their collaborators, have significantly greater financial resources, established presence in the market, expertise in research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and reimbursement and marketing approved products than we

do. Gemina Labs is at an early stage in its development, nor does the Company have a prior history of marketing a product or generating sales. The Company will need to make significant investments to build up its sales and marketing capabilities.

The Company's competitors also compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring technologies complementary to, or necessary for, our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. Additional mergers and acquisitions may result in even more resources being concentrated in our competitors.

The productization of the Company's technology is untested and the Company's initial patent application has not yet been granted. Our commercial potential could be significantly reduced or eliminated if our competitors develop and commercialize products that are more effective, are more convenient or are less expensive than those that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market or make our development more complicated. The key competitive factors affecting the success of all of our programs are likely to be efficacy and convenience.

#### **Intangible Properties**

In the course of developing the Company's IVD Devices, the Company will also develop corresponding proprietary intellectual property. The Company intends to protect this intellectual property by filing patent applications and maintaining trade secrets.

#### **Patents**

The Company's first patent application (entitled "Dual Affinity Probes for Pathogen Detection") covers material elements of the Company's Generation 1 Technology. A provisional patent application covering this technology was submitted to and received by the USPTO in September 2020, and this application was converted to a PCT application in September 2021.

#### **Trademarks**

The Company has applied for trademark protection for the "Gemina Labs" name and logo in the main markets in which it plans to operate in the foreseeable future.

### Relationship with EcoMine

The Company does not believe that its future business depends on the intellectual property of any third party, including any current intellectual property assets originally developed by EcoMine prior to the Company's incorporation. However, the Company and EcoMine have entered into the Ecomine License Agreement, a cross-license agreement under which certain technologies developed by the EcoMine for a period of three years beginning on 8 December, 2020 and ending on 8 December, 2023, shall (or shall on request) be licensed to the Company on an exclusive world-wide and royalty free basis and to be used within the Field of Use. The Company has entered into substantively reciprocal obligations with respect to technologies that it may develop outside the Field of Use.

#### **Employees**

As of the date hereof, the Company has 5 employees and 7 consultants.

#### **Foreign Operations**

The Company's research and development to date has largely taken place in Canada, although certain biomolecules have been manufactured for the Company by Genscript Biotech (USA and China) and certain scientific validation has been done under contract by NanoScience Analytical (USA). In addition, the Company works with Paragreen Associates, a specialist IVD consultancy and RAPIvD Limited, a specialist IVD prototyping company (both in the UK). On 23 February 2023, the Company announced that it had established a UK subsidiary and had appointed David Browning (the founder and principal of Paragreen Associates) as a Director of that subsidiary.

#### **Regulatory Environment**

Gemina's operations in each of Canada, the United Kingdom and the United Sates are subject to varying regulatory regimes with differing approval requirements under each regime. The Company's human health products, regardless of whether they are developed for safety applications or medical diagnostic applications, will require regulatory approval.

Given the nature of the Company's operations and the evolving nature of the industry in which it operates, the regulatory environment continues to change and the Company is required to adapt to such changes in order to ensure continued compliance

#### **Bankruptcy and Similar Procedures**

Gemina is not the subject of any bankruptcy (whether voluntary or otherwise), receivership or other similar proceedings since its incorporation nor are any such proceedings being contemplated or threatened in the foreseeable future.

#### **Material Restructuring Transactions**

#### The Amalgamation

In connection with the amalgamation agreement dated 18 January, 2021 among the Company, 1272305 B.C. Ltd. ("SubCo") and EcoScreen (the "Amalgamation Agreement"), the Company acquired all of the issued and outstanding Former EcoScreen Shares by way of a three-cornered arm's length amalgamation (the "Amalgamation"). In connection with the Amalgamation and pursuant to the terms of the Amalgamation Agreement: (i) EcoScreen completed the Eco Unit Financing, the Eco Subscription Receipt Financing and the Eco Share Financing (each as described in detail below); (ii) the Company completed a name change from "D1 Capital Corp." to "Gemina Laboratories Ltd."; (iii) EcoScreen completed a consolidation of the outstanding Former EcoScreen Shares on a basis of one (1) post-Consolidation Former EcoScreen Share for each (3) three pre-Consolidation Former EcoScreen Shares outstanding (the "Consolidation"); and (iv) EcoScreen amalgamated with SubCo under subsection 269 of the BCBCA to form EcoScreen Solutions Inc. Thereafter, EcoScreen Solutions Inc. became a wholly-owned subsidiary of the Company. In accordance with the Amalgamation Agreement, the EcoScreen shareholders were issued one Common Share for every one Former EcoScreen Share held immediately prior to the completion of the Amalgamation.

As a result of the Amalgamation, the Company issued an aggregate of 37,395,834 Common Shares in exchange for the Former EcoScreen Shares outstanding immediately prior to the closing of the Amalgamation.

Although the Amalgamation resulted in EcoScreen becoming a wholly-owned subsidiary of the Company, the Amalgamation constituted a reverse takeover of the Company because: (i) immediately after the completion of

the Amalgamation the EcoScreen shareholders held 97.20% of the outstanding Common Shares and the former Shareholders of the Company held 2.80% of the outstanding Common Shares; (ii) the business of EcoScreen became the business of the Company; and (iii) the majority of the Board are nominees of EcoScreen.

#### **RISK FACTORS**

There are a number of risk factors that could cause future results to differ materially from those described herein. The following are certain risk factors relating to the business carried on by the Company, which prospective investors should carefully consider before deciding whether to purchase Common Shares. The risks and uncertainties described herein are not the only ones that the Company faces. Additional risks and uncertainties, including those that the Company does not know about now or that it currently deems immaterial, may also adversely affect the Company's business. If any of the following risks actually occur, the Company's business may be harmed and its financial condition and results of operation may suffer significantly. References to the Company include its owned and partially-owned subsidiaries and affiliates in which the Company has an interest, as applicable.

# **Risks Relating to the Common Shares**

## Market for the Common Shares and volatility of Common Share price

There can be no assurance that an active trading market in the Common Shares will be sustained. The market price for Common Shares could be subject to wide fluctuations. Factors such as government regulation, interest rates, share price movements of peer companies and competitors, announcements of quarterly variations in operating results, revenues and costs, and sentiments toward stocks as well as overall market movements, may have a significant adverse impact on the market price of the Common Shares. The stock market has from time to time experienced extreme price and volume fluctuations, which have often been unrelated to the operating performance of a particular company.

#### Speculative nature of investment risk and no history of dividends

An investment in the securities of Gemina carries a high degree of risk and should be considered as a speculative investment. Gemina has no history of earnings, limited cash reserves, a limited operating history, has not paid dividends, and is unlikely to pay dividends in the immediate or near future. Any decision to pay dividends on the Common Shares will be made by the Board on the basis of its earnings, financial requirements and other conditions.

### Additional funding and possibility of dilution

In order to successfully take any of the Company's IVD testing products currently development through to regulatory approvals and launch, the Company will require substantial additional capital. When such additional capital is required, Gemina will need to pursue various financing transactions or arrangements, including debt financing, equity financing or other means. Additional financing may not be available when needed or, if available, the terms of such financing might not be favourable to Gemina and might involve substantial dilution to existing Shareholders. As discussed in further detail below under the heading "Risks Related to the Business - Gemina will require substantial additional funding, which may not be available to it on acceptable terms, or at all, and, if not so available, may require Gemina to delay, limit, reduce or cease its operations", Gemina may not be successful in locating suitable financing transactions in the time period required or at all. A failure to raise capital when needed would have a material adverse effect on Gemina's business, financial condition and results of operations. Any future issuance of securities to raise required capital will likely be dilutive to existing Shareholders. In addition, debt and other debt financing may involve a pledge of assets and may be senior to

interests of equity holders. Gemina may incur substantial costs in pursuing future capital requirements, including investment banking fees, legal fees, accounting fees, securities law compliance fees, printing and distribution expenses and other costs. The ability to obtain needed financing may be impaired by such factors as the capital markets (both generally and in the biotechnology and IVD industries in particular), Gemina's status as a new enterprise with a limited history and/or the loss of key management personnel.

#### **CSE listing**

In the future, the Company may fail to meet the continued listing requirements for the Common Shares to be listed on the CSE. If the CSE delists the Common Shares from trading on its exchange, the Company could face significant material adverse consequences, including: a limited availability of market quotations for the Common Shares; a determination the Common Shares are a "penny stock" which will subject brokers trading in the Common Shares to more stringent rules and therefore, possibly result in a reduced level of trading activity in the secondary market for the Common Shares; a limited amount of news and analysts coverage for the Company; and a decreased ability to issue additional securities or obtain additional financing in the future.

#### **Risks Relating to the Business**

## The Company's limited operating history

The business of Gemina began in May 2020, and as such Gemina has a limited operating history and has yet to generate any revenue. Therefore, Gemina will be subject to all of the business risks and uncertainties associated with any new business enterprise, including under-capitalization, cash shortages, limitations with respect to personnel, financial and other resources and lack of revenues. The current state of Gemina's business will likely require additional expenditures and capital before cash flow will be generated. Although Gemina possesses an experienced management team, there is no assurance that Gemina will be successful in achieving a return on Shareholders' investment and the likelihood of success of Gemina must be considered in light of the Company's early-stage operations and the problems, expenses, difficulties, complications and delays frequently encountered in connection with the establishment of any business. There is no assurance that Gemina can generate revenues, operate profitably, or provide a return on investment, or that it will successfully implement its plans.

# Significant ongoing costs and obligations

As a biotechnology IVD development company, Gemina expects to spend substantial funds on the research, development and testing of IVD products. In addition, Gemina expects to incur significant ongoing costs and be subject to obligations related to its investment in infrastructure and growth and in connection with regulatory compliance, which could have a material adverse impact on Gemina's financial condition and cash flows. For the foreseeable future, Gemina will have to fund all of its operations and development expenditures from cash on hand, equity financings, through collaborations with other biotechnology companies or through financings from other sources. Gemina will also require significant additional funds if it expands the scope of current plans for research and development or if it were to acquire any other assets and advance their development. It is possible that future financing will not be available or, if available, may not be on favorable terms. The availability of financing will be affected by the achievement of Gemina's corporate goals, the results of scientific research, the need and ability to obtain regulatory approvals and the state of the capital markets generally. If adequate funding is not available, Gemina may be required to delay, reduce or eliminate one or more of its research and development programs, or obtain funds through corporate partners or others who may require Gemina to relinquish significant rights to its IVD Products or intellectual property or obtain funds on less favourable terms than Gemina would otherwise accept. To the extent that external sources of capital become limited or unavailable or available on onerous terms, Gemina's intangible assets and its ability to continue its business plans may become impaired, and Gemina's assets, liabilities, business, financial condition and results of operations may be materially or adversely affected.

In addition, future changes in regulations, more vigorous enforcement thereof or other unanticipated events could require extensive changes to Gemina's operations, increased compliance costs or give rise to material liabilities, which could have a material adverse effect on the business, results of operations and financial condition of Gemina. Gemina's efforts to grow its business may be costlier than expected. Gemina may incur significant losses in the future for a number of reasons, including the other risks described in this Prospectus, and unforeseen expenses, difficulties, complications and delays, and other unknown events.

If the Company loses the services of members of its management team or other key personnel, or is unable to attract new team members who possess specialized market knowledge and technical skills, it could reduce the Company's ability to compete and to manage its operations effectively

The Company's management team consists of a core group of experienced senior executive officers. The loss of the technical knowledge, management expertise, and knowledge of the Company's and its clients' operations of one or more members of the Company team could result in a diversion of management resources, as the remaining members of management would need to cover the duties of any senior executive who leaves the Company and would need to spend time usually reserved for managing its business to search for, hire and train new members of management. Additionally, as members of the Company's management team have built strong relationships in the healthcare sector, the loss of these relationship contacts could have an adverse effect on the Company's business. The Company does not expect to carry "key man" insurance that could compensate it for the loss of any of its senior executives.

The loss of some or all of the Company's management team or other key personnel, particularly those personnel with quality assurance, material handling equipment and information technology expertise, could negatively affect the Company's ability to develop and pursue the Company's growth strategy, which could adversely affect the Company's business and financial condition. Any departures of key personnel could also be viewed in a negative light by investors and analysts, which could cause the market price of the Common Shares to decline. Additionally, the market for key personnel in the industry in which the Company will compete is highly competitive and not concentrated in all of the locations in which it expects to operate. As a result, the Company may not be able to attract and retain key personnel with the skills and expertise necessary to manage its business and pursue its growth strategy.

# Changing conditions in the national and international healthcare industry may impact the Company's results of operations

The Company is subject to extensive international, national and provincial regulations relating to healthcare as well as the policies and practices of the private healthcare insurance industry. In recent years, there have been a number of government and private initiatives to reduce healthcare costs and government spending. These changes have included an increased reliance on managed care; consolidation of competitors, suppliers and customers; a shift in healthcare provider venues from acute care settings to clinics, physician offices and home care; and the development of larger, more sophisticated purchasing groups. All of these changes place additional financial pressure on customers in the IVD market. The Company expects the healthcare and IVD industry to continue to change significantly and these potential changes, which may include a reduction in government support of healthcare services, adverse changes in legislation or regulations, and further reductions in healthcare reimbursement practices, could have a material adverse effect on the Company's business, results of operations and financial condition.

#### The Company will be subject to stringent regulatory and licensing requirements

The Company will be required to comply with extensive and complex laws and regulations at the federal, provincial and local government levels in Canada and any other countries where it operates. The Company will also be required to hold permits and licenses and to comply with the operational and security standards of various governmental bodies and agencies. Any failure to comply with these laws and regulations or any failure to maintain the necessary permits, licenses or approvals, or to comply with the required standards, could disrupt the Company's operations and/or adversely affect the Company's results of operations and financial condition. The Company may collect, handle and maintain patient-identifiable health information and other sensitive personal and financial information, which are subject to federal, provincial and foreign laws that regulate the use and disclosure of such information. Regulations currently in place continue to evolve, and new laws in this area could further restrict the Company's ability to collect, handle and maintain personal or patient information, or could require the Company to incur additional compliance costs, either of which could have an adverse impact on the Company's results of operations. Violations of federal, provincial or foreign laws concerning privacy and data protection could subject the Company to civil or criminal penalties, breach of contract claims, costs for remediation and harm to the Company's reputation.

# Gemina will require substantial additional funding, which may not be available to it on acceptable terms, or at all, and, if not so available, may require Gemina to delay, limit, reduce or cease its operations

Gemina has used the proceeds from its previous equity offerings, and Gemina intends to use the proceeds from any possible future offerings, to, among other uses, continue to develop novel IVD products, finalize the development of the products currently in its pipeline including the POC Antigen COVID Test, file patent applications to protect these IVD Products and related intellectual property and advance its existing IVD Device portfolio through regulatory approval, all of which will require substantial additional capital. Because of the uncertainty surrounding the successful development of viable IVD products, Gemina is unable to estimate the actual amount of funding it will require to complete such activities.

The amount and timing of Gemina's future funding requirements will depend on many factors, including but not limited to:

- whether Gemina is successful in obtaining the benefits of Health Canada's and the FDAs expedited emergency use authorization review programs related to its IVD Products;
- the progress, costs, results of and timing of product prototype testing;
- the outcome, costs and timing of seeking and obtaining Health Canada, FDA and any other regulatory approvals that may be required;
- the costs associated with securing and establishing commercialization and manufacturing capabilities;
- market acceptance and adoption rate of its IVD Products;
- the costs of acquiring, licensing or investing in businesses and products and technologies;
- its ability to maintain, expand and enforce the scope of its intellectual property portfolio, including the
  amount and timing of any payments Gemina may be required to make, or that it may receive, in
  connection with the licensing, filing, prosecution, defense and enforcement of any patents or other
  intellectual property rights;
- its need and ability to hire additional management and scientific and medical personnel;
- the effect of competing IVD products;
- its need to implement additional internal systems and infrastructure, including financial and reporting systems;
- as may be applicable, research grant terms that change over time or whose terms Gemina is unable to meet;

- its ability to attract and retain competent staff;
- changes in the political and economic environment in the jurisdictions in which Gemina operates, including adverse economic circumstances beyond COVID-19;
- the duration and effects of COVID-19 on Gemina's personnel, business, operations and financial condition:
- the duration and effects of COVID-19 (and other chronic and infectious diseases) on the global population and the corresponding need for testing products;
- unforeseen and unanticipated design flaws of the Company's products resulting in ineffective or inaccurate testing results; and
- the economic and other terms, timing of and success of any collaboration, licensing or other transactions into which Gemina may enter in the future.

Some of these factors are outside of Gemina's control. Gemina does not believe that its existing capital resources are sufficient to enable Gemina to complete the development and commercialization of its IVD Products and related product reference designs. Accordingly, Gemina expects that it will need to raise additional funds in the future. Gemina may seek additional funding through a combination of equity offerings, debt financings, government or other third-party funding, commercialization, marketing and distribution transactions and other collaborations, strategic alliances and licensing transactions. Additional funding may not be available to Gemina on acceptable terms or at all. In addition, the terms of any financing may adversely affect the holdings or the rights of Gemina securityholders. In addition, the issuance of additional Common Shares, or the possibility of such issuance, may cause the market price of the Common Shares to decline. Any additional equity financing may be dilutive to investors and debt financing, if available, may involve restrictions on financing and operating activities. If Gemina is unable to obtain funding on a timely basis, it may be required to significantly curtail one or more of its research or development programs and/or incur financial penalties. Gemina also could be required to seek funds through transactions with collaborative partners or otherwise that may require Gemina to relinquish rights to some of its intellectual property or preclinical assets or otherwise agree to terms unfavourable to Gemina.

#### No assurance of third party reimbursement

Sales of the Company's products, if any, will be dependent, in part, on the availability of levels of reimbursement from third-party payers, such as government agencies and private insurance companies. Reimbursement policies by such third-party payers could reduce or eliminate such reimbursements and thereby adversely affect future sales of the Company's products. Third party payers are increasingly challenging prices paid for medical products and the cost effectiveness of such products. Significant uncertainty exists as to the reimbursement status of newly approved health care products. There can be no assurance that the Company's proposed products will be considered cost effective or that reimbursement from third party payers will be available or, if available, that reimbursement will not be limited, thereby adversely affecting the Company's ability to sell its products.

# Competition, rapid technological change and new products

The biotechnology industry is characterized by extensive research efforts, rapid technological progress and intense competition. There are many public and private companies, including well-known diagnostic companies, engaged in marketing and developing products for the markets targeted by the Company. Many of these companies have substantially greater financial, technical and human resources than those of the Company. There can be no assurance that the Company's competitors will not succeed in developing technologies and products that are more effective than any products developed by the Company, or that would render the Company's technology and products obsolete non- competitive.

The Company's future prospects are highly dependant on its ability to increase the functionality of its existing products in a timely fashion and to develop new products that address new technologies and achieve market acceptance. There is no assurance that the Company will be successful in these efforts.

#### Products the Company expects to source and sell may be subject to recalls and product liability claims

If the Company's products produce inaccurate or inconsistent results, do not function as designed, are inappropriately designed or are not properly produced, the Company may have to withdraw such products from the market and/or be subject to product liability claims. Although the Company expects to maintain insurance against product liability and defense costs in amounts believed to be reasonable, there is no assurance that the Company can successfully defend any such claims or that the insurance it expects to carry will be sufficient. A successful claim against the Company in excess of insurance coverage could have a material adverse impact on its business, financial condition and results of operations.

# Gemina, has a limited operating history and expects a number of factors to cause its operating results to fluctuate on an annual basis, which may make it difficult to predict the future performance of Gemina

Gemina is a biotechnology with a limited operating history. Gemina's operations to date have been focused on conducting in-house research, developing and designing its IVD products, including prototypes thereof and establishing key supplier and partner relationships. Consequently, any predictions made about Gemina's future success or viability may not be as accurate as they could be if Gemina had a longer operating history. Gemina's operating results are expected to significantly fluctuate from quarter-to-quarter or year-to-year due to a variety of factors, many of which are beyond its control. Factors relating to Gemina's business that may contribute to these fluctuations include:

- limited market intelligence and market development;
- little to no bench mark products or case studies available;
- product development improvements can take 18 to 24 months while technology and consumer expectations increase at a much faster rate;
- poor definitions of product specifications;
- challenge in retaining an adequate and qualified workforce;
- the rate at which the Company's IVD Products are adopted;
- stringent government regulations and unfavorable reimbursement policies may restrict the growth of the IVD market generally;
- its ability to obtain additional funding to develop its IVD Products;
- competition from existing IVD Products or new IVD Products that continue to emerge;
- assuming market authorization has been obtained for one of the Company's IVD Products, the ability of
  patients or healthcare providers to obtain coverage or sufficient reimbursement for its IVD Products;
- its dependency on third-party manufacturers;
- its ability to establish or maintain collaborations, licensing or other transactions;
- its ability to defend against any challenges to its intellectual property including, claims of patent infringement;
- its ability to enforce its intellectual property rights against potential competitors;
- its ability to secure additional intellectual property protection for its IVD Products and associated product reference designs currently under development;
- a biological or chemical effect that Gemina does not predict;
- adverse economic circumstances;
- potential liability claims; and

• the duration and effects of COVID-19 on Gemina's personnel, business, operations and financial condition.

Accordingly, the results of any historical financial periods should not be relied upon as indications of future operating performance.

## Rate of Adoption of the Company's products

Bringing new IVD products to the market does not necessarily translate to mass adoption. IVD products may be expensive and getting insurance coverage may not be easy. Difficulty acquiring appropriate coverage, and adequate payment/reimbursement can pose significant hurdles to adoption. In the future, it may be the case that certain of the Company's products will be launched as a free offering in the beginning stages of productization which many companies cannot afford without outside funding. The failure of the Company to secure the require financial resources to ensure mass adoption of its IVD Products would have a material adverse effect on the Company's business operation, financial condition and cash flows.

# Gemina has never been profitable, it has no products approved for commercial sale, and to date it has not generated any revenue

Gemina has never been profitable and does not expect to be profitable in the foreseeable future. Gemina has not submitted any products for approval by regulatory authorities in Canada, the United States or elsewhere. To date, Gemina has devoted most of its financial resources to research and development, including research related to its Surface Chemistry, the development of its Generation 1 Technology, product design and prototype development, patent application filing and media relation efforts, as well as corporate overhead. Gemina has not generated any revenues from licensing our agreements or product sales. Gemina expects to continue to incur losses for the foreseeable future, and expects these losses to increase as Gemina continues the development of its IVD Products. If the Company's IVD Products do not achieve market acceptance, or if they are not adopted on a mass scale, Gemina may never become profitable. As a result of the foregoing, Gemina expects to continue to experience net losses and negative cash flows for the foreseeable future. These net losses and negative cash flows have had, and will continue to have, an adverse effect on Gemina's stockholders' equity and working capital.

Because of the numerous risks and uncertainties associated with the IVD market, Gemina is unable to accurately predict the timing or amount of increased expenses or when, or if, Gemina will be able to achieve profitability. In addition, Gemina's expenses could increase if it is required by Health Canada to perform preclinical studies or trials in addition to those currently expected, or if there are any delays in completing its preclinical studies or the development of any of its IVD Products. The amount of future net losses will depend, in part, on the

# Gemina has no licensing, marketing or distribution experience and it will have to invest significant resources to develop those capabilities or enter into acceptable third-party sales and marketing transactions

Gemina has no licensing, marketing or distribution experience. To develop licensing, distribution and marketing capabilities, Gemina will have to invest significant amounts of financial and management resources, some of which will need to be committed prior to any confirmation that its IVD Products will be approved by Health Canada and/or the FDA. For products where Gemina decides to perform licensing, marketing and distribution functions itself or through third parties, it could face a number of additional risks, including that Gemina or its third-party collaborators may not be able to build and maintain an effective marketing or sales force. If Gemina uses third parties to market and license its IVD Products, it may have limited or no control over their licensing, marketing and distribution activities on which its future revenues may depend.

# Gemina may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights

Gemina may from time to time seek to enforce its intellectual property rights against infringers when it determines that a successful outcome is probable and may lead to an increase in the value of the applicable intellectual property. If Gemina chooses to enforce its patent rights against a party, then that individual or company has the right to ask the court to rule that such patents are invalid or should not be enforced. Additionally, the validity of its patents and the patents it has licensed, as applicable, may be challenged if a petition for post grant proceedings such as inter-partes review and post grant review is filed within the statutorily applicable time with the Canadian Intellectual Property Office or the United States Patent and Trademark Office. These lawsuits and proceedings are expensive and would consume time and resources and divert the attention of managerial and scientific personnel even if Gemina were successful in stopping the infringement of such patents. In addition, there is a risk that the court will decide that such patents are not valid and that Gemina does not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of such patents is upheld, the court will refuse to stop the other party on the ground that such other party's activities do not infringe its intellectual property rights.

# If the Company is unable to adequately protect and enforce its intellectual property, the Company's competitors may take advantage of its development efforts and compromise its prospects of marketing, selling and licensing its IVD Products and TestPoint Software, as applicable

The Company's success will depend in part upon its ability to protect its intellectual property and proprietary technologies and upon the nature and scope of the intellectual property protection the Company receives. The ability to compete effectively and to achieve partnerships will depend on its ability to develop and maintain proprietary aspects of the Company's IVD Products and the TestPoint Software and to operate without infringing on the proprietary rights of others. The presence of such proprietary rights of others could severely limit its ability to develop and commercialize its IVD Products and the TestPoint Software, to conduct its existing research and could require financial resources to defend litigation, which may be in excess of the Company's ability to raise such funds. There is no assurance that the Company will be able to obtain patent protection of its IVD Products, related product reference designs and trade secrets in a form that will be sufficient to protect its Surface Chemistry and Generation 1 Technology and gain or keep any competitive advantage that the Company may have.

The patent positions of biotechnology companies can be highly uncertain and involve complex legal, scientific and factual questions for which important legal principles remain unresolved. Patents issued to the Company may be challenged, invalidated or circumvented. To the extent the Company's intellectual property offers inadequate protection, or is found to be invalid or unenforceable, the Company is exposed to a greater risk of direct competition. If its intellectual property does not provide adequate protection against the Company's competitors' products, its competitive position could be adversely affected, as could the Company's business, financial condition and results of operations. Both the patent application process and the process of managing patent disputes can be time consuming and expensive, and the laws of some foreign countries may not protect the Company's intellectual property rights to the same extent as do the laws of Canada and the United States. The Company will be able to protect its intellectual property from unauthorized use by third parties only to the extent that the contents of its Generation 1 Technology are covered by valid and enforceable intellectual property rights including patents or are effectively maintained as trade secrets, and provided the Company has the funds to enforce its rights, if necessary.

# Changes in patent law and its interpretation could diminish the value of patents in general, thereby impairing the Company's ability to protect its IVD Products and technologies

As is the case with other biotechnology companies, the Company's success is heavily dependent on intellectual property rights, particularly patents. Obtaining and enforcing patents in the biotechnological industry involves technological and legal complexity, and obtaining and enforcing biotechnological patents is costly, time consuming and inherently uncertain. The Supreme Court of Canada and the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to the Company's ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the Canadian House of Representative, the Federal Court of Canada, the Canadian Intellectual Property Office, U.S. Congress, the federal courts, and the U.S. Patent and Trademark Office and international treaties entered into by these nations, the laws and regulations governing patents could change in unpredictable ways that would weaken the Company's ability to obtain patents or to enforce patents the Company may obtain in the future.

# If Gemina is not able to adequately prevent disclosure of trade secrets and other proprietary information, the value of its IVD Products could be significantly diminished

In some cases, Gemina relies on trade secrets to protect its proprietary information, especially where it does not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. Gemina relies in part on confidentiality agreements with its employees, consultants, outside scientific collaborators and other advisors to protect its trade secrets and other proprietary information. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover its trade secrets and proprietary information. Costly and time-consuming litigation could be necessary to enforce and determine the scope of its proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect its competitive business position.

#### Failure to manage growth

As Gemina advances its IVD Products through regulatory approval processes and enters into strategic partnerships as applicable, Gemina will need to increase its product development, scientific, management and administrative headcount to manage these programs and negotiate these arrangements. In addition, to meet its obligations as a public company, Gemina may need to increase its general and administrative capabilities and improve its operational and financial controls and reporting procedures. Gemina's management, personnel and systems currently in place may not be adequate to support this future growth. In managing its growing operations, Gemina is also subject to the risks of over-hiring and/or overcompensating its employees and over-expanding its operating infrastructure. As a result, Gemina may be unable to manage its expenses effectively in the future, which may negatively impact its gross profit or operating expenses.

#### Dependence on management and key personnel

The success of Gemina is currently largely dependent on the performance of its directors, officers and scientific advisors. The loss of the services of any of these persons could have a materially adverse effect on Gemina's business and prospects. There is no assurance Gemina can maintain the services of its directors, officers, scientific advisors, or other qualified personnel required to operate its business. As Gemina's business activity grows, Gemina will require additional key financial, administrative and scientific personnel as well as additional operations staff. There can be no assurance that any recruitment efforts will be successful in attracting, training and retaining qualified personnel as competition for persons with these skill sets increase. If Gemina is not

successful in attracting, training and retaining qualified personnel, the efficiency of its operations could be impaired, which could have an adverse impact on Gemina's operations and financial condition. In addition, the COVID-19 pandemic may cause Gemina to have inadequate access to available skilled workforce and qualified personnel, which could have an adverse impact on Gemina's financial performance and financial condition.

#### Insurance and uninsured risks

Gemina's business is subject to a number of risks and hazards generally, including adverse prototype testing results, design flaws resulting in product recalls, labour disputes and changes in the regulatory environment. Such occurrences could result in delays in operations, monetary losses and possible legal liability. Gemina's insurance will not cover all the potential risks associated with its operations. Gemina may also be unable to maintain insurance to cover these risks at economically feasible premiums. Losses from these events or any significant uninsured liability may require Gemina to pay substantial amounts, which would adversely affect its financial position and results of operations.

# Gemina may be materially adversely affected in the event of cyber-based attacks, network security breaches, service interruptions, or data corruption

Gemina relies on information technology to process and transmit sensitive electronic information and to manage or support a variety of business processes and activities. Gemina uses technology systems to record, process, and summarize financial information and results of operations for internal reporting purposes and to comply with regulatory financial reporting, legal, and tax requirements. Gemina's information technology systems, some of which are managed by third-parties, may be susceptible to damage, disruptions or shutdowns due to computer viruses, attacks by computer hackers, failures during the process of upgrading or replacing software, databases or components thereof, power outages, hardware failures, telecommunication failures, user errors or catastrophic events. Although Gemina has developed systems and processes that are designed to protect proprietary or confidential information and prevent data loss and other security breaches, such measures cannot provide absolute security. If its systems are breached or suffer severe damage, disruption or shutdown and Gemina is unable to effectively resolve the issues in a timely manner, its business and operating results may significantly suffer and it may be subject to litigation, government enforcement actions or potential liability. Security breaches could also cause Gemina to incur significant remediation costs, result in product development delays, disrupt key business operations, including development of its IVD Products, and divert attention of management and key information technology resources.

#### Internal controls

Effective internal controls are necessary for Gemina to provide reliable financial reports and to help prevent fraud. Although Gemina will undertake a number of procedures and will implement a number of safeguards, in each case, in order to help ensure the reliability of its financial reports, including those imposed on Gemina under Canadian securities law, Gemina cannot be certain that such measures will ensure that Gemina will maintain adequate control over financial processes and reporting. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm Gemina's results of operations or cause it to fail to meet its reporting obligations. If Gemina or its auditors discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in Gemina's consolidated financial statements and materially adversely affect the trading price of the Common Shares.

Management of Gemina will ensure the accounting cycle, payroll administration, operational activities, and financial reporting controls to assess internal control risks and to ensure proper internal control are in place. One of the deficiencies in internal control is the lack of segregation of accounting duties due to the limited size

of Gemina. However, the threat of this deficiency is considered immaterial as management has taken effective measures to mitigate this weakness.

The potential risk that flows from the identified deficiencies and weaknesses is the risk of potential fraud. However, the risk of fraud is considered low as management anticipates taking a number of measures as stated above to mitigate the potential risk of fraud, including without limitation: (i) all purchase and payment, including payroll, must be authorized by management; (ii) all material capital expenditures must be preapproved by the Board; (iii) all source documents in any other language other than English must be translated and scanned for accounting entries and recordkeeping purposes; (iv) and almost all of Gemina's cash will be deposited with a Canadian bank in Vancouver Canada.

The Board will continue to monitor the operations of Gemina, evaluate the internal controls, and develop measures in the future to mitigate any potential risks and weaknesses.

## Litigation

Gemina may become party to litigation from time to time in the ordinary course of business which could adversely affect its business. Should any litigation in which Gemina becomes involved be determined against Gemina such a decision could adversely affect Gemina's ability to continue operating and the market price for the Common Shares and could use significant resources. Even if Gemina is involved in litigation and wins, litigation can redirect significant company resources.

#### **Conflicts of interest**

Gemina's directors and officers do not devote their full time to the affairs of Gemina and certain of Gemina's directors and officers are also directors, officers and shareholders of other biotechnology and research and development companies or other public companies in general, and as a result they may find themselves in a position where their duty to another company conflicts with their duty to Gemina. In particular, certain directors of the Company are also directors of EcoMine, with which the Company has signed the Ecomine License Agreement – see "Interest of Management and Others in Material Transactions", below. Although Gemina has policies which address such potential conflicts and the BCBCA has provisions governing directors in the event of such a conflict, there is no assurance that any such conflicts will be resolved in a way that is favourable to Gemina. If any such conflicts are not resolved in a way that is favourable to Gemina, Gemina may be adversely affected.

# Impact of COVID-19

Gemina's business, operations and financial condition could be materially and adversely affected by the outbreak of epidemics or pandemics or other health crises, including the recent outbreak of COVID-19. On 30 January, 2020, the World Health Organization declared the outbreak of a global health emergency and on 13 March, 2020 the U.S. declared that the COVID-19 outbreak in the United States constitutes a national emergency. To date, there have been a large number of temporary business closures, quarantines and a general reduction in consumer activity in Canada, the United States, Europe and China. The outbreak has caused companies and various international jurisdictions to impose travel, gathering and other public health restrictions. While these effects are expected to be temporary, the duration of the various disruptions to businesses locally and internationally and the related financial impact cannot be reasonably estimated at this time. Similarly, Gemina cannot estimate whether or to what extent this outbreak and the potential financial impact may extend to countries outside of those currently impacted. Gemina is actively assessing and responding where possible to the potential impact of the COVID-19 pandemic. Gemina may face disruption to restrictions on operations, delays and uncertainties relating to product development, manufacturing and testing

plans, travel restrictions, impact on personnel and the impact on the economic activity in affected countries or regions can be expected and can be difficult to quantify. Such pandemics or diseases represent a serious threat to maintaining a skilled workforce industry and could be a major health care challenge for Gemina. There can be no assurance that Gemina's personnel will not be impacted by this pandemic and ultimately that Gemina would see its workforce productivity reduced or incur increased medical costs/insurance premiums as a result of these health risks. In addition, the COVID-19 pandemic has created a dramatic slowdown in the global economy. Depending on the length and severity of the pandemic, COVID-19 could impact Gemina's operations, could cause delays in the receipt of applicable FDA and Health Canada approvals, could postpone research activities, and could impair Gemina's ability to raise funds depending on COVID-19's effect on capital markets. The duration of the COVID-19 pandemic outbreak and the resultant travel restrictions, social distancing, government response actions, business closures and business disruptions, can all have an impact on Gemina's operations and access to capital. The COVID-19 pandemic and public health response has had adverse effects on the availability and supply chain for certain materials used in the Company's products, which could impact the Company's ability to secure these materials on reasonable terms and on the timeframes required by the Company. Notwithstanding the growth in the IVD market as a result of the COVID-19 pandemic, there can be no assurance that Gemina will not be impacted by adverse consequences that may be brought about by the COVID-19 pandemic on global financial markets, share prices and financial liquidity and thereby that may severely limit the financing capital available. Finally, the duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of Gemina in future periods.

# **Financial and Accounting Risks**

#### Liquidity and future financing risk

Gemina will likely operate at a loss until its business becomes established and it will require additional financing in order to fund future operations and expansion plans. Gemina's ability to secure any required financing to sustain operations and expansion plans will depend in part upon prevailing capital market conditions and business success. There can be no assurance that Gemina will be successful in its efforts to secure any additional financing or additional financing on terms satisfactory to management. Moreover, future activities may require Gemina to alter its capitalization significantly and, if additional financing is raised by issuance of additional Common Shares from treasury, control may change and Shareholders may suffer dilution. The inability of Gemina to access sufficient capital for its operations could have a material adverse effect on Gemina's financial condition and results of operations.

#### Gemina's financial condition would be adversely impacted if its intangible assets become impaired

Intangibles are evaluated quarterly and are tested for impairment at least annually or when events or changes in circumstances indicate the carrying value of each segment, and collectively Gemina taken as a whole, might exceed its fair value. If Gemina determines that the value of its intangible assets is less than the amounts reflected on its balance sheet, it will be required to reflect an impairment of its intangible assets in the period in which such determination is made. An impairment of its intangible assets would result in it recognizing an expense in the amount of the impairment in the relevant period, which would also result in the reduction of its intangible assets and a corresponding reduction in its stockholders' equity in the relevant period.

#### Tax risk

Gemina is subject to various taxes including, but not limited to the following: income tax; goods and services tax; sales tax; land transfer tax; payroll tax; and equivalent taxes imposed by the taxing authorities in the United

States. Gemina's tax filings will be subject to audit by various taxation authorities. While Gemina intends to base its tax filings and compliance on the advice of its tax advisors, there can be no assurance that its tax filing positions will never be challenged by a relevant taxation authority resulting in a greater than anticipated tax liability.

#### Forward-Looking Statements May Prove Inaccurate

Investors are cautioned not to place undue reliance on forward-looking statements. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking statements or contribute to the possibility that predictions, assumptions and uncertainties are found in this AIF under the heading "Cautionary Statement Regarding Forward-Looking Information".

#### **DIVIDENDS AND DISTRIBUTIONS**

There are no restrictions that would prevent the Company from paying dividends on the Common Shares; however, the Company has neither declared nor paid any dividends on the Common Shares since incorporation and has not established any dividend or distribution policy. The payment of dividends, if any, in the future, rests within the sole discretion of the Board. The payment of dividends will depend upon the Company's earnings, its capital requirements and its financial condition, as well as other relevant factors. The Company intends to retain its earnings to finance growth and expand its operations and does not anticipate paying any dividends on the Common Shares in the foreseeable future.

# **DESCRIPTION OF CAPITAL STRUCTURE**

#### **Common Shares**

The authorized share capital of the Company consists of an unlimited number of Common Shares. As of the date hereof, there are an aggregate of 55,602,992 Common Shares issued and outstanding (on a non-diluted basis) as fully paid and non-assessable common shares in the capital of the Company.

There are no special rights or restrictions of any nature attached to any of the Common Shares. The holders of the Common Shares are entitled to receive notice of and to attend and vote at all meetings of the shareholders of the Company and each Common Share confers the right to one vote in person or by proxy at all meetings of the shareholders of the Company. The holders of the Common Shares, subject to the prior rights, if any, of any other class of shares of the Company are entitled to receive such dividends in any financial year as the Board may by resolution determine. In the event of the liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the holders of the Common Shares are entitled to receive, subject to the prior rights, if any, of the holders of any other class of shares of the Company, the remaining property and assets of the Company.

#### **Options**

On 19 February, 2021, the Board adopted a Stock Option Plan (the "Stock Option Plan").

The purpose of the Stock Option Plan is to provide the Company with a share-related mechanism to attract, retain and motivate qualified directors, officers, employees and consultants, to reward those individuals from time to time for their contributions toward the long terms goals of the Company and to enable and encourage those individuals to acquire Common Shares as long term investments. The general terms and conditions of the Stock Option Plan are reflected in the disclosure below.

# **Key Terms** Summary Administration The Stock Option Plan will be administered by the Board, or such director or other senior officer of the Company as may be designated as administrator by the Board. The Board or such committee may make, amend and repeal at any time, and from time to time, such regulations not inconsistent with the Stock Option Plan. **Number of Common** The aggregate number of Common Shares that may be reserved for issuance Shares pursuant to Options, or other proposed share compensation arrangements, shall not exceed 10% of the outstanding Common Shares at the time of the granting of an Option. **Securities** Each Option entitles the Participant to purchase one Common Share at an exercise price determined by the Board. **Participation** Options shall only be granted to "Eligible Persons", being directors, senior officers, employees, consultants, consultant companies or management company employees of the Company. **Exercise Price** The Company must not grant Options with an exercise price lower than the market price of the Common Shares as determined by the Board, provided that if the Company is listed on a recognized stock exchange, such price shall not be less than the market price determined in accordance with the rules of such stock exchange. **Exercise Period** The exercise period of an Option will be the period from and including the award date through to and including the expiry date that will be determined by the Board at the time of grant (the "Expiry Date"), provided that every Option shall have a term not exceeding, and shall therefore expire no later than, 10 years after the date of grant, subject to extension where the Expiry Date falls within a blackout period. Vesting Unless otherwise determined by the Board, all Options shall vest over an 18 month period, with 1/3 of such Options vesting every 6 months. The Board may decide to shorter vesting schedules; however, Options granted to Eligible Persons performing Investor Relations Activities shall vest over a minimum of 12 months with no more than 1/4 of such Options vesting in any three month period. Cessation of being an Subject to certain limitations, in the event that an participant ceases to be an **Eligible Person** officer, or consultant of the company or ceases to be employed by the Company, other than by reason of death or disability, each Option held by such participant shall terminate and shall therefore cease to be exercisable no later than the earlier of the expiry date and the date which is 90 days after such event, provided that the Board may, in its discretion, extend the date of such termination and the resulting period in which such Option remains exercisable to a date not exceeding the earlier of the expiry date and the date which is

one year after such event. If a participant dies or otherwise ceasing to be an Eligible Person, each Option held by such participant shall terminate and shall

therefore cease to be exercisable no later than the earlier of the expiry date and the date which is 365 days after the date of the Participant's death.

#### Limitations

**To any one person.** The number of Common Shares reserved for issuance to any one person in any 12 month period under the Stock Option Plan and any other share compensation arrangement shall not exceed 5% of the outstanding Common Shares at the time of the grant, unless the Company has obtained disinterested shareholder approval to exceed such limit.

**To Consultants.** The number of Common Shares reserved for issuance to any one Consultant in any 12 month period under the Stock Option Plan and any other share compensation arrangement shall not exceed 2% of the outstanding Common Shares (on a non-diluted basis) at the time of the grant.

**To persons conducting Investor Relations Activities.** The aggregate number of Common Shares reserved for issuance to all Eligible Persons conducting "Investor Relations Activities" in any 12 month period under the Stock Option Plan and any other share compensation arrangement shall not exceed 1% of the outstanding Common Shares at the time of the grant.

**To Insiders.** Unless the Company has received disinterested shareholder approval to do so, the aggregate number of Common Shares reserved for issuance to insiders under the Stock Option Plan and any other share compensation arrangement shall not exceed 10% of the outstanding Common Shares at the time of the grant; the aggregate number of Common Shares reserved for issuance to Insiders in any 12 month period under the Stock Option Plan and any other share compensation arrangement shall not exceed 10% of the outstanding Common Shares at the time of the grant.

Amendments,
Suspension and
Termination

The Board may amend, subject to the approval of any regulatory authority whose approval is required, suspend or terminate the Stock Option Plan or any portion thereof. No such amendment, suspension or termination shall alter or impair any outstanding unexercised Options or any rights without the consent of such Participant. If the Stock Option Plan is suspended or terminated, the provisions of the Stock Option Plan and any administrative guidelines, rules and regulations relating to the Stock Option Plan shall continue in effect for the duration of such time as any Option remains outstanding.

As at the date hereof, there are 3,650,000 Options outstanding under the Option Plan, each exercisable to purchase one Common Share.

### Warrants

As at the date of this AIF, there are 12,189,549 Warrants are outstanding, each exercisable to purchase one Common Share.

The Warrants are governed by the terms and conditions set forth in the certificates representing the respective Warrants (the "Warrant Certificates"). The summary below of terms and conditions attaching to the Warrants

does not purport to be complete and is qualified in its entirety by reference to the provisions of the Warrant Certificates.

The Warrants do not entitle the holder to any rights as a shareholder, including, without limitation, voting rights or attendance at annual general or special meetings.

The Warrants may be exercised in whole or in part from time to time prior to the expiry thereof. The exercise price and the number of shares issuable upon exercise of the Warrants will both be subject to adjustment if, prior to the exercise of any of the rights of the Warrant holder there is a reorganization of the authorized capital of the Company by way of consolidation, merger, subdivision, amalgamation, reclassification or otherwise, or the payment of any stock dividends (subject to the consent of the CSE) in either or both the number of shares which may be purchased pursuant to a Warrant Certificate or the price at which such shares may be purchased, by corresponding amounts, so that the rights evidenced by the Warrant Certificate shall thereafter be as reasonably as possible equivalent to those originally granted thereby.

### **MARKET FOR SECURITIES**

## **Trading Price and Volume**

The following table sets out information relating to the monthly trading of the Common Shares on the CSE (under the symbol "GLAB") from the date Gemina began trading on the CSE on 10 August, 2021 up to the date of this AIF:

	High	Low	Volume
Month <sup>(1)</sup>	(Cdn\$)	(Cdn\$)	(# of Common Shares)
1 May, 2022 to 30 May,	0.76	0.46	190,665
2022			
April 2022	0.55	0.44	117,385
March 2022	0.52	0.405	587,061
February 2022	0.50	0.40	105,861
January 2022	0.55	0.33	337,942
December 2021	0.39	0.33	19,094
November 2021	0.44	0.35	201,378
October 2021	0.53	0.40	117,156
September 2021	0.54	0.45	143,855
10 August, 2021 to 31	0.60	0.31	133,533
August, 2021			

Notes:

#### **Prior Sales**

During the year ended 31 January, 2022 and up to the date of this AIF, the Company issued the following securities, which are convertible into Common Shares but are not listed or quoted on a marketplace:

Date of Issuance	Type of Security	Number of Securities	Issue or Exercise Price Per Security
19 February, 2021	Options <sup>(1)</sup>	2,500,000 <sup>(9)</sup>	\$0.30
1 April, 2021	Warrants <sup>(2)</sup>	4,000,000	\$0.15
1 April, 2021	Options <sup>(1)</sup>	250,000	\$0.30

<sup>(1)</sup> The Company began trading on the CSE on 10 August, 2021.

16 July, 2021	Warrants <sup>(3)</sup>	3,882,562	\$0.45
10 September, 2021	Options <sup>(4)</sup>	730,000 <sup>(10)</sup>	\$0.45
	Options <sup>(5)</sup>	200,000	\$0.45
14 September, 2021	Options <sup>(5)</sup>	200,000	\$0.45
22 October, 2021	Warrants <sup>(6)</sup>	2,015,850	\$0.80
	Finder Warrants <sup>(7)</sup>	291,136	\$0.55
17 November, 2021	Options <sup>(1)</sup>	100,000	\$0.39
9 March, 2022	Options <sup>(1),(8)</sup>	500,000	\$0.45

#### Notes:

- (1) Options to acquire Common Shares issued to certain consultants of the Company.
- (2) Issued in respect of agreements entered into between the Company and subscribers prior to completion of the Amalgamation.
- (3) Issued upon conversion of certain subscription receipts of the Company issued to replace certain subscription receipts of EcoScreen which were cancelled in connection with the Amalgamation, with each such subscription receipt convertible into one Common Share and one-half of one Warrant of the Company.
- (4) Options to acquire Common Shares issued to certain officers and employees of the Company.
- (5) Options to acquire Common Shares issued to a director of the Company.
- (6) Each Warrant of the Company entitles the holder to acquire one Common Share at an exercise price of \$0.80 per Common Share for a period of 24 months from the date of issue, subject to acceleration in the event that the trading price of the Common Shares equals or exceeds \$2.00 for a period of 10 consecutive days (the "Acceleration Right").
- (7) Issued as a finder's fee in connection with a private placement offering, with each such finder warrant entitling the holder to acquire one additional Common Share at a price of \$0.55 per Common Share for a period of 24 months for the date of issue, subject to the Acceleration Right.
- (8) Of the 500,000 Options issued on 9 March 2022, 250,000 Options are subject to a three-year vesting period and the balance are subject to milestone vesting requirements.
- (9) Of the 2,500,000 Options granted on 19 February 2021, 650,000 Options have subsequently lapsed and are no longer exercisable by the prior holder.
- (10) Of the 730,000 Options granted on 10 September 2021, 150,000 Options have subsequently lapsed and are no longer exercisable by the prior holder.

# **ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER**

The following table sets out the Common Shares that are, to the Company's knowledge, held in escrow or that are subject to a contractual restriction on transfer and the percentage that number represents of the outstanding securities of that class as at the date of this AIF:

Designation of class	Number of securities held in escrow or that are subject to a contractual restriction on Transfer <sup>(1)(2)</sup>	Percentage of class
Common Shares	29,108,122	52% <sup>(3)</sup>
Warrants	3,469,630	28% <sup>(4)</sup>

### Notes:

(1) In connection with the Amalgamation and pursuant to the Escrow Agreement, 37,773,794 Common Shares and 4,181,730 Warrants (the "Escrowed Securities") were placed in escrow with the Escrow Agent and became subject to a 36-month release schedule beginning on 10 August 2021 (being the date the Common Shares began trading on the CSE), as described in the table below. As of the date hereof, 28,330,345 of these Common Shares and 3,136,297 of these Warrants remain in escrow pursuant to the Escrow Agreement

Time	Release Schedule
On the Listing Date	1/10 of the Escrowed Securities
6 months after the Listing Date	1/6 of the remaining Escrowed Securities
12 months after the Listing Date	1/5 of the remaining Escrowed Securities
18 months after the Listing Date	1/4 of the remaining Escrowed Securities
24 months after the Listing Date	1/3 of the remaining Escrowed Securities

30 months after the Listing Date	1/2 of the remaining Escrowed Securities	
36 months after the Listing Date	the remaining Escrowed Securities	

- (2) Pursuant to the terms of their subscription agreements, certain subscribers holding an aggregate of 3,333,334 Common Shares and 3,333,334 Warrants agreed not to trade any of these securities after the date the Common Shares become listed on a public stock exchange or stock quotation system, except for 1/12th of their securities on the date of such listing and an additional 1/12th of their securities on every month following the date of such listing, with the result that none of these securities will be subject to resale restrictions after the one year anniversary of the date of listing. As at the date hereof, 777,777 of these Common Shares and 333,333 of these Warrants remain subject to contractual restrictions on resale.
- (3) Based on 55,602,992 Common Shares issued and outstanding as at the date hereof.
- (4) Based on 12,189,549 Warrants issued and outstanding as at the date hereof.

The Escrowed Securities are subject to the terms and conditions set out in the Escrow Agreement, which is substantially in the form of 46-201F1 – Escrow Agreement, the form of agreement for escrow arrangements under NP 46-201.

#### **DIRECTORS AND EXECUTIVE OFFICERS**

# Name, Occupation and Security Holding

The following table sets forth information with respect to the directors and executive officers of the Company, including their respective provinces or states and countries of residence, their position(s) with the Company, their principal occupations for the last five years, the dates on which they first became directors or officers of the Company and the number of the Common Shares beneficially owned, directly or indirectly, or over which control or direction is exercised, by such persons or such persons' respective associates or affiliates.

The directors hold office until the next annual meeting of the Company or until they otherwise cease to hold office in accordance with the Company's Articles. The term of office of the executive officers expires at the discretion of the Board.

Name, Province/State and Country of Residence	Position with the Company	Principal Occupation During the Past Five Years	Period as Director and/or Officer	Number and Percentage of Common Shares Held <sup>(4)</sup>
John Davies <sup>(1)(2)</sup> Vancouver, BC, Canada	CEO and Director	President, Physical Science Innovations Corporation (2015 to Present)	31 January, 2021	22,000 (0.04%) <sup>(5)</sup>
Michael Liggett Vancouver, BC, Canada	CFO and Corporate Secretary	Chief Financial Officer, iCo Therapeutics Inc. (August 2016 to Present) Chief Financial Officer, Hit Technologies Inc. (November 2014 to January 2020) President, OGGE Finance Solutions Corp. (September 2012 to Present)	12 March, 2021	Nil (Nil%)
Robert Greene Vancouver, BC, Canada	CTO and Director	President, EcoMine (August 2017 to Present), previously a graduate student at UBC	31 January, 2021	Nil (Nil%) <sup>(5)</sup>

Name, Province/State and Country of Residence	Position with the Company	Principal Occupation During the Past Five Years	Period as Director and/or Officer	Number and Percentage of Common Shares Held <sup>(4)</sup>
James Tansey <sup>(2)(3)</sup> <i>Vancouver, BC,</i> <i>Canada</i>	Director	Associate Professor, Sauder School of Business (UBC); Co-Founder and Senior Advisor, NatureBank Asset Management	31 January, 2021	1,877,000 (3.38%) <sup>(5)(6)</sup>
David Rokoss <sup>(1)(2)(3)</sup> Vancouver, BC, Canada	Director	Partner, Ptolemy Capital; Director, Blackheath Resources Inc. (June 2017 to May 2021)	10 October, 2017	587,501 (1.06%) <sup>(5)(7)</sup>
Martin Cronin <sup>(1)(2)(3)</sup> Kelowna, BC, Canada	Director	CEO and President of Patriot One Technologies (2016-20); Director, Helios Global Technologies (2010 to Present)	12 March, 2021	31,000 (0.06%) <sup>(5)</sup>

- (1) Member of the Audit Committee.
- (2) Member of the Nomination and Governance Committee
- (3) Member of the Compensation Committee.
- (4) Based on 55,602,992 Common Shares issued and outstanding as of the date of this AIF.
- (5) Certain directors of the Company hold direct and indirect interests in EcoMine Corporation ("EcoMine"), a significant shareholder of the Company. Robert Greene, CTO and a director of the Company, holds 5,333,333 common shares of EcoMine and securities convertible into an additional 3,033,334 common shares, representing 25.44% of its outstanding common shares on an undiluted basis and 34.86% on a fully diluted basis. David Rokoss, director of the Company, holds 1,333,333 common shares of EcoMine and securities convertible into an additional 466,667 common shares, representing 6.36% of its outstanding common shares on an undiluted basis and 7.50% on a fully diluted basis. James Tansey, director of the Company, holds 300,000 common shares of EcoMine and securities convertible into an additional 100,000 common shares, representing 1.43% on an undiluted basis and 1.67% on a fully diluted basis. Physical Science Innovations Corporation ("PSI"), a company in which certain directors of the Company hold significant interests, holds 5,333,333 common shares of EcoMine and securities convertible into an additional 3,033,334 common shares, representing 25.44% of its outstanding common shares on an undiluted basis and 34.86% on a fully diluted basis. John Davies holds 10,100,000 common shares of PSI, representing 28.31% of its outstanding common shares on an undiluted basis. James Tansey holds 5,050,000 common shares of PSI, representing 14.16% of its outstanding common shares on an undiluted basis. Martin Cronin holds 3,607,143 common shares of PSI, representing 10.11% of its outstanding common shares on an undiluted basis.
- (6) 1,850,000 of these Common Shares are held through Canvas Impact Advisors, an entity controlled by Mr. Tansey.
- (7) 575,000 of these Common Shares held through David Rokoss Consulting Inc., a company controlled by Mr. Rokoss.

### **Aggregate Ownership of Securities**

As at the date of this AIF, the Company's directors and executive officers as a group beneficially own, directly or indirectly, or exercise control of, 2,427,001 Common Shares, collectively representing 4.36% of the 55,602,992 issued and outstanding Common Shares.

In addition, certain directors and officers of the Company hold significant indirect interests in the Company through EcoMine, as set out in the table below. EcoMine holds approximately 60.60% of the shares of the Company.

Director / Officer	Description of Ownership Interest		
David Rokoss	David Rokoss holds 1,333,333 common shares of EcoMine and securities		
Director	convertible into an additional 466,667 common shares, representing 6.36%		

	of its outstanding common shares on an undiluted basis and 7.50% on a fully diluted basis.
Robert Greene	Robert Greene holds 5,333,333 common shares of EcoMine and securities
CTO and Director	convertible into an additional 3,033,334 common shares, representing
	25.44% of its outstanding common shares on an undiluted basis and
	34.86% on a fully diluted basis.
John Davies	John Davies holds 10,100,000 common shares of PSI, a significant
CEO and Director	shareholder of EcoMine, representing 40% of its outstanding common
	shares. PSI holds 5,333,333 common shares of EcoMine and securities
	convertible into an additional 3,033,334 common shares, representing
	25.44% of its outstanding common shares on an undiluted basis and
	34.86% on a fully diluted basis.
James Tansey	James Tansey, director of the Company, holds 300,000 common shares of
Director	EcoMine and securities convertible into an additional 100,000 common
	shares, representing 1.43% on an undiluted basis and 1.67% on a fully
	diluted basis. Dr. Tansey also holds 5,050,000 common shares of PSI,
	representing 20.00% of its outstanding common shares. PSI holds
	5,333,333 common shares of EcoMine and securities convertible into an
	additional 3,033,334 common shares, representing 25.44% of its
	outstanding common shares on an undiluted basis and 34.86% on a fully
	diluted basis.
Martin Cronin	Martin Cronin holds 3,607,143 common shares of PSI, representing 10.11%
Director	of its outstanding common shares. PSI holds 5,333,333 common shares of
	EcoMine and securities convertible into an additional 3,033,334 common
	shares, representing 25.44% of its outstanding common shares on an
	undiluted basis and 34.86% on a fully diluted basis.

# Cease Trade Orders, Bankruptcies, Penalties or Sanctions

## **Cease Trade Orders**

At the date of this AIF, no director, executive officer or promoter of the Company is, or was within 10 years prior to the date of this AIF, a director, chief executive officer or chief financial officer of any company that:

- (i) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under Securities Legislation, that was in effect for a period of more than 30 consecutive days, that was issued while the director, executive officer or promoter was acting in the capacity as director, chief executive officer or chief financial officer of the relevant company; or
- (ii) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under Securities Legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director, executive officer or promoter ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

Hit Technologies Inc. ("Hit Technologies") a reporting issuer of which Mr. Michael Liggett, the Chief Financial Officer and Corporate Secretary of the Company, was Chief Financial Officer and a director, was subject to

a management cease trade order ("MCTO") commencing 31 October, 2017 for failure to file annual financial statements and associated management discussion & analysis for the year ended 30 June, 2017 within the required time period. Hit Technologies filed the required records on 17 December, 2017 and the MCTO was revoked on 8 January, 2018. Hit Technologies was subsequently subject to a MCTO commencing 30 October, 2018 for failure to file annual financial statements and associated management discussion & analysis for the year ended 30 June, 2018 within the required time period. Hit Technologies filed the required records on 17 December, 2018 and the MCTO was revoked on 4 January, 2019.

NatureBank Asset Management Inc. ("NatureBank") a reporting issuer of which Dr. James Tansey, a director of the Company, was a director, was subject to a MCTO commencing 17 June, 2020 for failure to file annual financial statements and associated management discussion & analysis for the year ended 31 December, 2019 within the required time period. NatureBank filed the required records on 17 July, 2020 and the MCTO was revoked on 21 July, 2020.

# **Bankruptcies**

To the Company's knowledge, no director or executive officer of the Company or any shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company:

- (i) is as at the date of this AIF, or has been within the 10 years before the date hereof, a director or executive officer of any company, including the Company, that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (ii) has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or became subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

## **Penalties or Sanctions**

To the Company's knowledge, and other than as disclosed herein, no director or executive officer of the Company or any shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to:

- (i) any penalties or sanctions imposed by a court relating to provincial and territorial Securities Legislation or by a provincial and territorial securities regulatory authority or has entered into a settlement agreement with a provincial and territorial securities regulatory authority; or
- (ii) any other penalties or sanctions imposed by a court or regulatory body that would be likely to be considered important to a reasonable investor in making an investment decision.

# **Conflicts of Interest**

Certain of the directors and officers of the Company are engaged in, and will continue to engage in, other business activities on their own behalf and on behalf of other companies and, as a result of these and other activities, such directors and officers of the Company may become subject to conflicts of interest. The BCBCA

provides that in the event that a director or senior officer has a material interest in a transaction or agreement or proposed transaction or agreement that is material to an issuer, the director or senior officer must disclose his interest in such contract or agreement and a director must refrain from voting on any matter in respect of such contract or agreement, subject to and in accordance with the BCBCA. To the extent that conflicts of interest arise, such conflicts will be resolved in accordance with the provisions of the BCBCA. To the best of the management of the Company's knowledge, as at the date hereof there are no existing conflicts of interest between the Company and a director or officer of the Company.

#### **PROMOTERS**

EcoMine is a promoter of the Company. EcoMine has ownership and control of 33,696,793 Common Shares representing 60.60% of the issued and outstanding Common Shares as of the date of this AIF. EcoMine does not beneficially own, directly or indirectly, or exercise control over, any voting or equity securities in any subsidiaries of the Company. No asset was acquired within the two years before the date of the AIF or thereafter, or is to be acquired, by the Company or by a subsidiary of the Company from EcoMine.

Certain directors and officers of the Company hold significant direct and indirect interests in EcoMine. For further information, please see the information under the heading "Directors and Executive Officers – Aggregate Ownership of Securities".

#### LEGAL PROCEEDINGS AND REGULATORY ACTIONS

The Company is not, and was not during the most recently completed financial year, or from the end of the most recently completed financial year to the date of this AIF, a party to, nor was any of its property the subject of, any legal proceedings or regulatory actions material to the Company, and no such proceedings or actions are known to be contemplated.

#### INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

No director, executive officer, or principal shareholder of the Company or an associate or affiliate of a director, executive officer or principal shareholder of the Company has or had any material interest, direct or indirect, in any transaction within the three years before the date of this AIF, or in any proposed transaction, that has materially affected or will materially affect the Company.

#### TRANSFER AGENTS AND REGISTRARS

The transfer agent and registrar of the Company is Computershare Investor Services Inc. of 510 Burrard St, Vancouver, BC V6C 3B9.

### MATERIAL CONTRACTS

The following is a summary of each material contract, other than contracts entered into in the ordinary course of the Company business, that was entered into in the financial year ended 31 January, 2022, or up to the date of this AIF, that is still in effect:

- 1) Master Project Agreement. See "Description of the Business Products in Development TestPoint Software" and "Description of the Business Contracts" for further details; and
- 2) EcoMine License Agreement. See "Description of the Business Contracts" for further details.
- 3) Term sheet dated 15 June, 2021 with IPOC, as supplemented by the head of terms dated 24 March, 2022. See "Description of the Business Contracts" for further details.

### **INTERESTS OF EXPERTS**

No person or company whose profession or business gives authority to a report, valuation, statement or opinion made by the person or company are named in this AIF as having prepared or certified any of the aforementioned documents or any part thereof described in this AIF.

Davidson & Company LLP, as auditor of the Company, has confirmed that they are independent with respect to the Company within the meaning of the Code of Professional Conduct of the Chartered Professional Accountants of British Columbia.

#### **AUDIT COMMITTEE**

### **Audit Committee Charter**

The Audit Committee Charter sets out the Audit Committee's responsibilities and authority, procedures governing meetings, qualifications for membership and particulars governing the role of the chair of the Audit Committee. A copy of the Audit Committee Charter is attached as Appendix "A" hereto.

# **Composition of the Audit Committee**

As at the date of this AIF, the following individuals are the current members of the Audit Committee and will hold office until the next annual general meeting of shareholders of the Company:

David Rokoss (Chair)	Independent <sup>(1)</sup>	Financially Literate <sup>(1)</sup>
John Davies	Not Independent <sup>(2)</sup>	Financially Literate <sup>(1)</sup>
Martin Cronin	Independent <sup>(1)</sup>	Financially Literate <sup>(1)</sup>

- (1) As defined by National Instrument 52-110 Audit Committees ("NI 52-110").
- (2) Mr. Davies is the current CEO of the Company and would not be considered independent under NI 52-110.

The members of the Audit Committee are appointed by the Board at its first meeting following the annual Shareholders' meeting. Unless a chair is elected by the full Board, the members of the Audit Committee designate a chair by a majority vote of the full Audit Committee membership.

### **Relevant Education and Experience**

The relevant education and/or experience of each member of the Audit Committee is as follows:

### David Rokoss (Chair)

Mr. Rokoss is a partner at Ptolemy Capital and has a twenty-year career as an entrepreneur and consultant, working with a variety of private and publicly listed companies, focusing on concept development, finance and operational management. For the last decade, he has consulted with numerous early stage companies across technology, bio-tech, retail and cleantech sectors, focusing on business and corporate development opportunities.

During this period, he worked with the banking team at Kyoto Planet Capital Partners, a private fund established to find, fund and foster early stage companies across the sustainability space, which included investments in wind, waste, bio-fuels and energy technologies. He has considerable experience in due diligence, local and cross-border mergers, corporate acquisitions and compliance issues, having worked with companies in multiple jurisdictions including those publicly trading in Canada, the United States and Germany. Mr. Rokoss is currently

a Director of Blackheath Resources Inc. (TSXV: BHR), and two private technology companies. He is a graduate of McMaster University.

### John Davies

Mr. Davies has 2 decades of experience in the field of university research strategy and IP commercialization. He holds a BA in law from Oxford, an MA in law and economics from McGill and qualified as a chartered accountant in the UK 1999. After qualification he became Finance Director of IndexIT, a technology advisory boutique that was acquired for some \$50m, seven months after incorporation by Beeson Gregory (an investment bank). He became an Associate Director of Beeson Gregory's corporate finance department where he was responsible for approximately \$250m in private equity transactions. He was also a director of Beeson Gregory's direct investing arm. He went on to become a founding director and CFO of IP Group (LSE). IP Group is a \$2bn business that partners with universities to commercialize their research assets. He was responsible for defining strategy, structuring the group's major partnering agreements and the creation of an initial portfolio of 40 IP-backed ventures. He also took the group through its £100m AiM listing, the first exit from its portfolio (another listing), and two acquisitions (including a venture capital company – where he subsequently served as a director). After his spell at IP Group, he joined the board of Scientific Research Capital a company established to invest internationally in science-backed ventures where he served as CEO, for a period of 5 years. In 2010, John moved to Vancouver, BC. After a number of years of work with the University of British Columbia, helping to define and implement improved research strategy, he left to set up PSI in 2015. PSI is a specialist business, located in Vancouver BC, that advises universities and other post secondaries on the development of research and innovation strategy, and which also curates a portfolio of disruptive deep-science technologies.

# **Martin Cronin**

Mr. Cronin has over twenty years of experience in international diplomacy with the British Government, including postings in Yemen, Jordan, Sweden, Pakistan and Iraq. He was extensively vetted to hold a Top Secret Security Clearance and worked extensively in conflict environments, with areas of expertise in conflict resolution, security and counter-terrorism policy, and international trade. In 2005 he became British Consul-General to Western Canada, based in Vancouver.

After leaving public service, he has undertaken a number of roles in the private sector including, Director of Government and Corporate Relations for ArmorWorks Canada (2010-12), Director of Helios Global Technologies (from 2010) and CEO and President of Patriot One Technologies (TSX: PAT) (2016-20).

Mr. Cronin has also served as the Honorary Colonel of the British Columbia Dragoons (a Canadian Forces Primary Reserve Regiment), Regional Director of the Canadian Forces Liaison Council, a member of the Advisory Board of the Central Okanagan Economic Development Commission. He was brought up and educated in the United Kingdom and holds a BA (Hons) from Leeds University in International History and Politics with Economics.

### **Audit Committee Oversight**

At no time since the commencement of the Company's most recently completed financial year was a recommendation of the Audit Committee to nominate or compensate an external auditor not adopted by the Board.

#### **Pre-Approval Policies and Procedures**

The audit committee of the Corporation has adopted specific policies and procedures for the engagement of non-audit services as described in the audit committee's charter attached hereto as Schedule "A".

### **External Auditor Service Fees (By Category)**

The following table sets out the aggregate fees billed by Davidson & Company LLP, the Company's external auditors, for the year ended 31 January, 2022 and the period from 6 May, 2020 to 31 January, 2021.

Financial Period Ending	Audit Fees <sup>(1)</sup>	Audit Related Fees <sup>(2)</sup>	Tax Fees <sup>(3)</sup>	All Other Fees <sup>(4)</sup>
January 31, 2022	\$30,000	\$42,000	\$6,000	Nil
January 31, 2021	\$43,000	Nil	\$16,500	Nil

- (1) "Audit Fees" include the aggregate fees billed in each financial year for audit fees.
- (2) "Audit Related Fees" include the aggregate fees billed in each financial year for assurance and related services to the performance of the audit or review of the Company's financial statements not already disclosed under "Audit Fees".
- (3) "Tax Fees" are the aggregate fees billed by the auditor for tax compliance, tax advice and tax planning.
- (4) "All Other Fees" include aggregate fees billed for products or services not already reported in the above table.

# **Reliance on Certain Exemptions**

The Company is relying on the exemption in section 6.1 of NI 52-110 from the requirements of Parts 3 (*Composition of the Audit Committee*) and 5 (*Reporting Obligations*).

## **ADDITIONAL INFORMATION**

Additional information relating to the Company may be found under the Company's profile on SEDAR at www.sedar.com.

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans is contained in the Company's information circular for its most recent annual meeting of shareholders filed on SEDAR on 10 December, 2021, as well as the Company's final long-form prospectus filed on SEDAR on 28 July, 2021 prepared in connection with the listing of the Common Shares on the CSE and the Company's final short-form prospectus filed on SEDAR on 13 January, 2022.

Additional financial information is provided in the Company's audited annual financial statements and accompanying management's discussion and analysis for the year ended 31 January, 2022.

# APPENDIX "A"

# **AUDIT COMMITTEE CHARTER**

(see attached)