

TITANIUM CORPORATION

800, 736 – 8th Avenue SW, Calgary, Alberta T2P 1H4

NOTICE OF ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS

NOTICE IS HEREBY GIVEN THAT the annual and special meeting of the shareholders (the "**Meeting**") of TITANIUM CORPORATION INC. (the "**Company**") will be held as a virtual only meeting via live audio webcast online at <https://web.lumiagm.com/242557530> on Thursday, June 25, 2020 at 10:00 a.m. (Toronto time) for the following purposes:

1. fixing the number of directors to be elected at the Meeting at six (6);
2. the election of directors of the Company;
3. the appointment of the auditor and the authorization of the directors of the Company to fix the auditor's remuneration;
4. to consider and, if thought advisable, confirm and approve the stock option plan of the Company;
5. to consider and, if thought advisable, confirm and approve the deferred share unit plan of the Company;
6. to consider and, if thought advisable, confirm and approve the restricted share unit plan of the Company;
7. to consider and, if thought advisable, confirm and approve, amendments to by-law 1 of the Company; and
8. to consider any amendment or variation of the above matters or any other matter that may be brought before the Meeting or any adjournment or adjournments thereof in such manner as such proxy, in such proxyholder's sole judgment, may determine.

The specific details of the matters proposed to be put before the Meeting are set forth in the management information circular of the Company dated May 11, 2020.

The board of directors of the Company has determined that shareholders registered on the books of the Company at the close of business on May 11, 2020 are entitled to notice of the virtual Meeting and to vote at the virtual Meeting.

This year, out of an abundance of caution, to proactively deal with the unprecedented public health impact of the 2019 coronavirus disease, also known as COVID-19, and to mitigate risks to the health and safety of our communities, shareholders, employees and other stakeholders, the Company will hold its Meeting in a virtual only format, which will be conducted via live audio webcast commencing at 10:00 a.m. (Toronto time) on Thursday, June 25, 2020. Shareholders will have an equal opportunity to participate at the Meeting online regardless of their geographic location.

Shareholders of the Company who are unable to attend the virtual Meeting are requested to date and sign the enclosed form of proxy and return it in the enclosed envelope. In order to be valid and acted upon at the virtual Meeting, forms of proxy must be returned to the Company's registrar and transfer agent, TSX Trust Company, not later than 48 hours (excluding Saturdays, Sundays and holidays) prior to the commencement of the virtual Meeting or any adjournment thereof. Registered shareholders of the Company may revoke their proxies by depositing an instrument in writing at the registered office of the Company at any time up to and including the last business day preceding the day of the virtual Meeting or any adjournment thereof or in any other manner permitted by law, including pursuant to the provisions of the *Canada Business Corporations Act*.

DATED this 11th day of May, 2020.

BY ORDER OF THE BOARD

"David C.W. Macdonald"
David C.W. Macdonald
Chairman



MANAGEMENT INFORMATION CIRCULAR

MAY 11, 2020

SOLICITATION OF PROXIES

This management information circular (the "**Circular**") is furnished in connection with the solicitation of proxies by or on behalf of the management (the "**Management**") of Titanium Corporation Inc. (the "**Company**" or "**Titanium**") to be used at the annual and special meeting (the "**Meeting**") of the holders ("**Shareholder**") of common shares of the Company ("**Shares**") to be held as a virtual only meeting via live audio webcast online at <https://web.lumiagm.com/242557530> on Thursday, June 25, 2020 at 10:00 a.m. (Toronto time) and at any adjournment or adjournments thereof for the purposes set forth in the notice of the Meeting. The solicitation of proxies will be primarily by mail. Proxies may also be solicited by the directors or officers of the Company at nominal cost. Arrangements have been made with brokerage houses and other intermediaries, clearing agencies, custodians, nominees and fiduciaries to forward solicitation materials to the beneficial owners of the Shares held of record by such persons and the Company may reimburse such persons for reasonable fees and disbursements incurred by them in doing so. The cost of solicitation by or on behalf of Management will be borne by the Company. Unless otherwise specified, all information set forth herein is as at May 11, 2020.

THE VIRTUAL ONLY MEETING

This year, out of an abundance of caution, to proactively deal with the unprecedented public health impact of the 2019 coronavirus disease, also known as COVID-19, and to mitigate risks to the health and safety of the Company's communities, Shareholders, employees and other stakeholders, the Meeting will be held in a virtual only format. The virtual Meeting will be conducted via live audio webcast. Shareholders will have an opportunity to participate at the Meeting online regardless of their geographic location.

Attending and Participating at the Meeting

Registered Shareholders and duly appointed proxyholders will be able to listen to the Meeting, ask questions and vote online, all in real time, provided they are connected to the Internet and comply with all of the requirements set out herein.

Non Registered Holders (as defined below) (commonly referred to as beneficial shareholders) who have not duly appointed themselves as proxyholders may still attend the Meeting as guests. **Guests will be able to listen to the Meeting but will not be able to vote at the Meeting.**

- Go to <https://web.lumiagm.com/242557530> in your web browser. For details, refer to the "Virtual Annual and Special Meeting Guide 2020" that was provided with the accompanying form of proxy or voting instruction form ("**VIF**").
- If you have voting rights (registered Shareholders and duly appointed proxyholders), select "I have a Control Number" and follow the instructions.
- If you do not have voting rights (Non Registered Holders and guests), select "I am a Guest" and fill in the form. See "*Registration of a Proxyholder for Online Meeting Participation*" below.

See "*Participating and Voting at the Meeting*" below for additional instructions on voting. The Company recommends that Shareholders log in to the site at least thirty (30) minutes before the time of the Meeting. Shareholders will be able to log in to the site one hour before the time of the Meeting.

Logging into the Meeting to Vote – Registered Shareholders and Duly Appointed Proxyholders

Registered Shareholders and duly appointed proxyholders, including Non Registered Holders who have duly appointed

themselves as proxyholder, can participate, ask questions and vote, all in real time, during the Meeting by:

- Logging in online at <https://web.lumiagm.com/242557530>
- The Company recommends that Shareholders log in at least thirty (30) minutes before the time of the Meeting. Shareholders will be able to log in to the site one hour before the time of the Meeting.**
- Clicking "I have a Control Number" and then entering your Control Number (see below) and Password "titanium2020" (case sensitive).

For more detailed instructions or if you have questions about the Meeting, refer to the "Virtual Annual and Special Meeting Guide 2020" that was provided with the accompanying form of proxy or VIF.

For registered Shareholders, the Control Number is located on the accompanying form of proxy or in the email notification received from the Company's registrar and transfer agent, TSX Trust Company, (the "**Transfer Agent**"). For duly appointed proxyholders, provided that the instructions provided in this Circular have been followed, the Transfer Agent will provide a Meeting-specific control number by e-mail after the proxy deposit deadline has passed.

Participating and Voting at the Meeting

Attending the Meeting online gives Shareholders an opportunity to hear directly from Management and the Board. Registered Shareholders and duly appointed proxyholders can participate, ask questions and vote online by following the instructions herein and in the "Virtual Annual and Special Meeting Guide 2020" that was provided with the accompanying form of proxy or VIF.

Registered Shareholders who wish to participate and vote at the Meeting do not need to complete or return the accompanying form of proxy. A Control Number is located on the accompanying form of proxy and it may be used to login to the Meeting and vote at the Meeting by completing a ballot online during the Meeting. If a registered Shareholder submits a form of proxy, they do not need to vote again at the Meeting as their vote will already be recorded. Registered Shareholders who submit proxies in advance of the Meeting can still attend the Meeting and not vote. If they do vote at the Meeting again, the online vote will revoke their previously submitted proxy. See "*Appointment, Revocation and Deposit of Proxies*" below.

Non Registered Holders who wish to attend the Meeting and vote by completing a ballot online during the Meeting must appoint themselves as their own proxyholders by following the instructions herein. See "*Registration of a Proxyholder for Online Meeting Participation*" and "*Advice to Beneficial Shareholders*" below.

Registration of a Proxyholder for Online Meeting Participation

The following applies to Shareholders who wish to appoint someone as their proxyholder other than the management designees named in the form of proxy or VIF to attend the virtual Meeting and vote on their behalf. This includes Beneficial Shareholders who wish to appoint themselves as proxyholder to attend and participate in the virtual Meeting. Shareholders who wish to appoint someone other than the management designees as their proxyholder to attend and participate at the Meeting as their proxy and vote their Common Shares **MUST** submit their form of proxy or VIF, as applicable, appointing that person as proxyholder (see "*Solicitation of Proxies*" above and "*Beneficial Holders of Common Shares*" below) **AND** must register that proxyholder, as described below. **Registering a Shareholder's proxyholder is an additional step to be completed AFTER such Shareholder has submitted their form of proxy or VIF. Failure to register the proxyholder will result in the proxyholder not receiving the Meeting-specific control number from the Transfer Agent that is required in order to participate and vote at the Meeting.** If you are a Non Registered Holder and you wish to participate or vote at the Meeting, you must appoint yourself as proxyholder by inserting your own name in the space provided on the form of proxy or VIF sent to you by your intermediary, and follow all of applicable instructions provided by your intermediary **AND** you must also register yourself as your proxyholder, as described below. By doing so, you are instructing your Intermediary (as defined herein) to appoint you as proxyholder. Non Registered Holders who have not appointed themselves as proxyholder (and registered as instructed below) cannot vote online during the Meeting. This is because the Company and the Transfer Agent do not maintain the records for Non Registered Holders and we have no knowledge of your shareholdings or entitlement to vote, unless you appoint yourself as proxyholder.

Shareholders must register their proxyholder in advance of the Meeting. Before registering, you must first appoint your proxyholder (see above). To register a proxyholder, Shareholders MUST contact tsxtrustproxyvoting@tmx.com

by 10:00 a.m. (Toronto time) on Tuesday, June 23, 2020 and provide the Transfer Agent with the required proxyholder contact information, so that Transfer Agent may provide the proxyholder with a Meeting-specific control number via email. Without a Meeting-specific control number, proxyholders will not be able to attend and vote online at the Meeting.

APPOINTMENT, REVOCATION AND DEPOSIT OF PROXIES

The persons named in the enclosed form of proxy are officers and/or directors or nominees of Management. **A SHAREHOLDER HAS THE RIGHT TO APPOINT ANY OTHER PERSON TO REPRESENT HIM OR HER AT THE MEETING OR ANY ADJOURNMENT THEREOF AND MAY DO SO BY INSERTING IN THE BLANK SPACE PROVIDED IN THE FORM OF PROXY THE NAME OF THE PERSON, WHO NEED NOT BE A SHAREHOLDER, WHOM HE OR SHE WISHES TO APPOINT, OR BY COMPLETING ANOTHER FORM OF PROXY.** In order to be valid and acted upon at the Meeting, forms of proxy must be returned to the Transfer Agent, not later than 48 hours (excluding Saturdays, Sundays and holidays) prior to the commencement of the Meeting or any adjournment thereof. A Shareholder executing the enclosed form of proxy has the power to revoke it at any time before it is exercised. The *Canada Business Corporations Act* (the "CBCA") sets out a procedure for revoking proxies by depositing an instrument in writing at the registered office of the Company at any time up to and including the last business day preceding the day of the Meeting or in any other manner permitted therein or by law.

A registered Shareholder attending the Meeting has the right to vote online directly at the Meeting and if he or she does so, his or her proxy is nullified with respect to the matters such person votes upon and any subsequent matters thereafter to be voted upon at the Meeting or any adjournment thereof.

ADVICE TO BENEFICIAL SHAREHOLDERS

Only registered Shareholders and proxies deposited by registered Shareholders, or the persons they duly appoint as their proxies, are permitted to attend and vote at the Meeting. However, in many cases, Shares beneficially owned by a holder (a "Non Registered Holder") are registered in the name of an intermediary (an "Intermediary") that the Non Registered Holder deals with in respect of such Shares, such as, among others, banks, trust companies, securities dealers or brokers and trustees or administrators of self-administered RRSPs, RRIFs, RESPs, TFSA's and similar plans. In accordance with the requirements of National Instrument 54-101 – *Communication with Beneficial Owners of Securities of a Reporting Issuer* ("NI 54-101") of the Canadian Securities Administrators, the Company has elected to use the "notice-and-access" provisions (the "Notice-and-Access Provisions") for the Meeting in respect of the mailing of the notice of the Meeting, this Circular and the form of proxy (collectively, the "meeting materials"), annual financial statements and related management's discussion and analysis to the Non Registered Holders, but not in respect of mailings to registered holders of Shares (i.e., a shareholder whose name appears on the Company's records as a holder of Shares). The Notice-and-Access Provisions are a set of rules developed by the Canadian Securities Administrators that reduce the volume of materials that must be physically mailed to shareholders by allowing a reporting issuer to post its information circular in respect of a meeting of its shareholders and related materials online.

Titanium has also elected to use procedures known as "stratification" in relation to the Company's use of the Notice-and-Access Provisions. Stratification occurs when a reporting issuer using the Notice-and-Access Provisions provides a paper copy of an information circular and, if applicable, a paper copy of financial statements and related management's discussion and analysis ("Financial Information"), to some shareholders together with a notice of a meeting of its shareholders. In relation to the Meeting, registered Shareholders will receive a paper copy of the meeting materials and the Company's financial statements and related management's discussion and analysis whereas all Non Registered Holders will receive a notice containing information prescribed by the Notice-and-Access Provisions and a VIF. Titanium intends to pay for Intermediaries to deliver proxy-related materials to objecting Non Registered Holders. Furthermore, a paper copy of the Financial Information in respect of the Company's most recently completed financial year was mailed to those registered Shareholders and Non Registered Holders who previously requested to receive such information.

Shares held by Intermediaries can only be voted upon with the instructions of the Non Registered Holders. Intermediaries are required to seek voting instructions from Non Registered Holders in advance of the Meeting. Each Intermediary has its own procedures and provides its own instructions, which should be carefully followed by Non Registered Holders to ensure that their Shares are voted at the Meeting. In Canada, the vast majority of such shares are registered under the name of CDS & Co. (the registration name for The Canadian Depository for Securities Limited, which acts as nominee for many Canadian brokerage firms). Without specific instructions, Intermediaries are prohibited from voting shares for their clients. The

directors and officers of Titanium do not know for whose benefit the Shares registered in the names of Intermediaries are held.

The Company is taking advantage of those provisions of NI 54-101 which permit the Company to deliver proxy-related materials directly to its Non Registered Holders who do not object to the Company knowing who they are ("**NOBOs**"). As a result, NOBOs can expect to receive a VIF from the Transfer Agent. These VIFs are to be completed and returned to the Transfer Agent as set out in the instructions provided on the VIF. The Transfer Agent will tabulate the results of the VIFs received from NOBOs and will provide appropriate instructions at the Meeting with respect to the Shares represented by the VIFs it receives. By choosing to send these materials to you directly, the Company (and not the Intermediary holding your Shares on your behalf) has assumed responsibility for (i) delivering these materials to you; and (ii) executing your proper voting instructions. Please return your VIF as specified in your request for voting instructions that you receive.

Other Non Registered Holders who have not waived the right to receive meeting materials may be given a proxy which is restricted as to the number of Shares beneficially owned by the Non Registered Holder but which is otherwise uncompleted. This form of proxy need not be signed by the Non Registered Holder. Often, the form of proxy supplied to a Non Registered Holder by its Intermediary is identical to the form of proxy provided to registered Shareholders. However, its purpose is limited to instructing the registered Shareholders how to vote on behalf of the Non Registered Holder. The majority of Intermediaries now delegate responsibility for obtaining instructions from clients to Broadridge Financial Solutions, Inc. ("**Broadridge**"). Broadridge typically applies a special sticker to the proxy forms, mails those forms to the Non Registered Holders and asks Non Registered Holders to return the proxy forms to Broadridge. Broadridge then tabulates the results of all instructions received and provides appropriate instructions respecting the voting of Shares to be represented at the Meeting. **A Non Registered Holder receiving a proxy with a Broadridge sticker on it cannot use that proxy to vote Shares directly at the Meeting. The proxy must be returned to Broadridge well in advance of the Meeting in order to have the Shares voted.**

The purpose of these procedures is to permit Non Registered Holders to direct the voting of the Shares they beneficially own. **Should a Non Registered Holder who receives either a proxy or a VIF wish to attend and vote at the Meeting online (or have another person attend and vote on behalf of the Non Registered Holder), the Non Registered Holder should strike out the names of the persons named in the proxy and insert the Non Registered Holder's (or such other person's) name in the blank space provided or, in the case of a VIF, follow the corresponding directions therein and in this Circular. In either case, Non Registered Holders should carefully follow the instructions of their Intermediaries and their service companies. It is important that the VIF or form of proxy be received by the Intermediary or its agent sufficiently in advance of the Meeting to enable the Intermediary or its agent to provide voting instructions on your behalf. See "*The Virtual Only Meeting – Registration of a Proxyholder for Online Meeting Participation*" above.**

All references to Shareholders in this Circular and the accompanying form of proxy and notice of the Meeting are to Shareholders of record unless specifically stated otherwise.

MANNER OF VOTING AND EXERCISE OF DISCRETION BY PROXIES

All Shares represented by properly executed proxies received by the Company in a timely fashion will be voted at the Meeting in accordance with the instructions of the Shareholders appointing them. If a choice is specified in respect of any matter to be acted upon, the Shares will be voted accordingly. **IN THE ABSENCE OF SUCH DIRECTION, THE SHARES WILL BE VOTED "FOR" IN REGARDS TO THE FOLLOWING MATTERS:**

1. fixing the number of directors to be elected at the Meeting at six (6);
2. the election of directors of the Company;
3. the appointment of the auditor and the authorization of the directors of the Company to fix the auditor's remuneration;
4. confirming and approving the stock option plan of the Company (the "**Option Plan**");
5. confirming and approving the deferred share unit plan of the Company (the "**DSU Plan**");
6. confirming and approving the restricted share unit plan of the Company (the "**RSU Plan**" and, collectively with the Option Plan and DSU Plan, the "**Security Based Compensation Arrangements**");

7. confirming and approving amendments to by-law 1 of the Company; and
8. considering any amendment or variation of the above matters or any other matter that may be brought before the Meeting or any adjournment or adjournments thereof in such manner as such proxy, in such proxyholder's sole judgment, may determine.

THE ENCLOSED FORM OF PROXY, WHEN PROPERLY EXECUTED, CONFERS DISCRETIONARY AUTHORITY WITH RESPECT TO ALL AMENDMENTS OR VARIATIONS TO MATTERS IDENTIFIED IN THE NOTICE OF THE MEETING OR OTHER MATTERS WHICH MAY PROPERLY COME BEFORE THE MEETING. **HOWEVER, IF ANY SUCH AMENDMENTS, VARIATIONS OR OTHER MATTERS WHICH ARE NOT NOW KNOWN TO MANAGEMENT SHOULD PROPERLY COME BEFORE THE MEETING, THE SHARES REPRESENTED BY THE PROXIES HEREBY SOLICITED WILL BE VOTED THEREON IN ACCORDANCE WITH THE BEST JUDGMENT OF THE PERSON OR PERSONS VOTING SUCH PROXIES.** As of the date hereof, Management knows of no such amendments, variations or any other such matters.

The CBCA permits certain eligible Shareholders to submit shareholder proposals to the Company for inclusion in a management proxy circular for an annual meeting of Shareholders. No shareholder proposals were submitted for consideration at the upcoming Meeting. The final date by which the Company must receive shareholder proposals for the annual and special meeting of Shareholders to be held in 2021 is February 11, 2021, being the date that is at least 90 days before the anniversary of the Notice of the Annual and Special Meeting of Shareholders sent to Shareholders in connection with the Meeting.

VOTING SHARES AND PRINCIPAL HOLDERS THEREOF

As at May 11, 2020, the Company had 88,480,791 Shares issued and outstanding. Each Share carries the right to one vote at the Meeting.

The Company has fixed the close of business on May 11, 2020 as the record date for the purpose of determining Shareholders entitled to receive notice of the Meeting. All Shareholders of record as at the close of business on the record date will be entitled to vote at the Meeting and at all adjournments thereof.

Except as disclosed below, to the knowledge of the directors and officers of the Company, no person or company beneficially owns, directly or indirectly, or controls or directs, voting securities carrying 10% or more of the voting rights attached to any class of voting securities of the Company. The officers and directors of the Company together beneficially own, directly or indirectly, or exercise control or direction over, Shares carrying approximately 23.5% of the votes attached to the Shares.

Based on publicly available information as of May 11, 2020, Mr. Moss Kadey beneficially owns, or controls or directs, directly or indirectly, 11,619,167 Shares representing approximately 13.1% of the outstanding Shares.

INTEREST OF CERTAIN PERSONS AND COMPANIES IN MATTERS TO BE ACTED UPON

The current directors and officers of the Company and their associates and affiliates may have a material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in a matter to be acted upon at the Meeting as they currently hold, and may be granted additional, options, warrants, deferred share units and restricted share units, as applicable. See "*Particulars of Matters to be Acted Upon – Annual Approval of the Security Based Compensation Arrangements – Option Plan*", "*Particulars of Matters to be Acted Upon – Annual Approval of the Security Based Compensation Arrangements – DSU Plan*", "*Particulars of Matters to be Acted Upon – Annual Approval of the Security Based Compensation Arrangements – RSU Plan*", "*Statement of Executive Compensation – Compensation Discussion and Analysis – Elements of Compensation – DSU Plan*" and "*Statement of Executive Compensation – Compensation Discussion and Analysis – Elements of Compensation – RSU Plan*".

PARTICULARS OF MATTERS TO BE ACTED UPON

Financial Statements

The Company's audited financial statements for the fiscal year ended December 31, 2019 and the report of the auditor on those financial statements will be presented at the Meeting. No formal action will be taken at the Meeting to approve the

financial statements. The board of directors of the Company (the "**Board**") approved the financial statements upon the recommendation of the audit committee of the Board (the "**Audit Committee**") prior to their delivery.

Election of Directors

The Company's articles currently provide that the Board shall consist of a minimum of three and a maximum of fifteen directors. At the Meeting, Shareholders will be asked to fix the number of directors to be elected at the Meeting at six (6) members and to elect six (6) directors to hold office until the next annual meeting or until their successors are elected or appointed.

In the event that, prior to the Meeting, any vacancies occur in the slate of nominees appearing below, it is intended that discretionary authority shall be granted to vote proxies solicited by or on behalf of Management for the election of any person or persons as directors. Each director elected will hold office until the next annual meeting of Shareholders or until his or her successor is duly elected, unless the office is earlier vacated in accordance with the by-laws of the Company.

The following table and the notes thereto state the names of all persons proposed to be nominated by Management for election as directors, their principal occupations and the number of Shares beneficially owned, directly or indirectly, by each of them as of May 11, 2020.

Name and Province and Country of Residence	Position	Principal Occupation During Past 5 Years	Director Since	Number of Shares Beneficially Owned or Controlled ⁽⁶⁾
Scott Nelson Alberta, Canada	President, Chief Executive Officer and a director	President and Chief Executive Officer of Titanium since February 23, 2005.	February 23, 2005	943,488 ⁽³⁾
Bruce Griffin London, United Kingdom	Director	Since February 2020, owner of Farview Solutions Limited, a private consulting and advisory company. Prior thereto, Senior Vice President Strategic Development of Lomon Billions Group from February 2017 to January 2020.	August 7, 2019	Nil
Moss Kadey ⁽²⁾ Ontario, Canada	Director	Since 2000, an independent businessman and a director of private companies.	July 23, 2008	11,619,167 ⁽⁴⁾
David Macdonald ⁽¹⁾⁽²⁾ Ontario, Canada	Director	Since 2002, a Managing Partner of Glencoban Capital Management Inc., a private merchant banking firm.	January 25, 2012	5,193,612 ⁽⁵⁾
Brant G. Sangster ⁽¹⁾⁽²⁾ Alberta, Canada	Director	Since August 2006, an independent businessman, strategic consultant and a director of public companies. Prior thereto, Senior Vice-President, Oil Sands of Petro-Canada.	September 1, 2006	86,796
John W. Stevens ⁽¹⁾ Ontario, Canada	Director	Since 2000, Executive Vice President of Arva Limited, a private equity investment company. Prior thereto, a partner in the Canadian Law firm Osler, Hoskin & Harcourt practicing commercial and corporate law.	November 9, 2016	973,600 ⁽⁶⁾

Notes:

- (1) Member of the Audit Committee.
- (2) Member of the Compensation and Corporate Governance Committee.
- (3) 769,878 Shares are held directly by Mr. Nelson, 126,000 Shares are held by Auxilium Corporation and 47,610 Shares are held by his spouse, Ann Nelson.
- (4) 840,000 Shares are held directly by Mr. Kadey, 2,400,000 Shares are held by the Kadey Family Trust, 7,419,167 Shares are held by Mossco Capital Inc., 860,000 Shares are held by Mosskd Inc. and 100,000 Shares are held by his spouse, Vivette Kadey.
- (5) 5,175,612 Shares are held directly by Mr. Macdonald, 6,000 Shares are held by the Katrina Macdonald Trust, 6,000 Shares by the Sophie Golets Trust and 6,000 Shares by the William Golets Trust.
- (6) 393,400 Shares are held by Mr. Stevens, 330,200 Shares are held by his spouse, Katherine Stevens and 250,000 Shares are held by John W. Stevens Family Trust. Additionally, Arva Limited holds 1,500,000 Shares and Mr. Stevens is a director and officer of such company.

The information with respect to Shares beneficially owned, controlled or directed by the nominees for election as directors named above is in each instance based upon information furnished by the person concerned.

Biographical Information

Scott Nelson was appointed President and Chief Executive Officer of Titanium in February 2005 and since that time has led the research and development, demonstration piloting and commercialization activities of the Company's patented technologies, assembling the management and technical teams, business partners and raising the public and government funding for these programs. Previously, Mr. Nelson held management and executive positions in energy and technology industries including: executive positions with IBM Canada from September 2002 until February 2005; President of his private consulting firm Auxilium Corporation, providing management consulting services to the energy, utility and technology sectors, from January 1996 until September 2006; Chairman of London based Eurosov Energy PLC during 1998 and 1999; executive positions and President of Amerada Hess Canada from February 1989 until the sale of the Company to Petro-Canada in April 1996; prior to 1989, Mr. Nelson held general management and financial positions with Amoco Canada Petroleum Company Ltd., Dome Petroleum Ltd. and the Irving group of companies.

Bruce Griffin is the owner of Fairview Solutions Limited, a company providing consulting and advisory services to the mineral sands, titanium pigment and industrial minerals industries. Mr. Griffin has previously held senior management positions in several mining and minerals companies, including as Senior Vice President Strategic Development of Lomon Billions Group, the world's third largest producer of titanium dioxide pigments, Chief Executive Officer and a director of TZ Minerals International Pty. Ltd., the leading independent consultant on the global mineral sands industry, World Titanium Resources Ltd., a development stage titanium project in Africa and as Vice President Titanium for BHP Billiton, then one of the world's leaders in the industry.

Moss Kadey is the Founder and CEO of Mossco Capital Inc., a Toronto based strategic investor specializing in consumer goods, real estate and technology companies. He is the Chairman and Founder of Luxury Brand Partners, a Miami based creator and owner of branded consumer products in the beauty and hair care industries. Some of the brands he has been involved with from start up to eventual sale have been Bumble and Bumble, sold to Estee Lauder, Becca Cosmetics sold to Estee Lauder, Oribe Hair Care sold to Kao Industries and the North and South American owner of the Brita Water Filter rights sold to The Clorox Company. He is on the boards of numerous privately held corporations and is currently the Chairman of the Supervisory Board of Hanvest Holdings, the parent company of Brita GmbH in Germany, the world leader in household pour through water filtration systems. Mr. Kadey obtained his Chartered Accountant designation in South Africa.

David Macdonald is a co-founder and Managing Partner of Glencoban Capital Management Inc. ("**Glencoban**"), a private merchant banking firm founded in 2002. Glencoban invests in development-stage public and private companies, mainly in the alternative energy, energy and mining sectors. Glencoban manages a limited number of concentrated investments and seeks to add value through active involvement in strategy, financing and governance. From 1989 to 2002, Mr. Macdonald worked as an investment banker at UBS Bunting Warburg Inc. at its offices in Toronto, Ontario. He was Head of Corporate Finance in Canada and served as Joint Managing Director of the firm from 1994 to 2002. From 1983 to 1989, Mr. Macdonald worked in investment banking with S.G. Warburg & Co. Ltd. in London, England. As an investment banker, Mr. Macdonald was active in debt and equity financings, mergers and acquisitions, and demutualization and privatization advice for a wide range of clients across many sectors. From 2004 to 2009 when it was sold, Mr. Macdonald was also a director of Centenario Copper Corporation ("**Centenario**"), a company formerly listed on the Toronto Stock Exchange. From 2006 to 2009, Mr. Macdonald chaired the Compensation Committee and the Governance Committee and chaired the Special Committee on the sale of Centenario. Mr. Macdonald is also a director of Georgian Bay Spirit Co., a private company engaged in the

development, production, marketing and distribution of alcohol beverage products in Canada. Mr. Macdonald is currently the chair of the National Ballet of Canada, Endowment Foundation and a director of the National Ballet of Canada. He is also a past director of the Art Gallery of Ontario Foundation and the Art Gallery of Ontario.

Brant G. Sangster has extensive experience in Canada's energy industry. He retired in 2006 from a 25-year career with Petro-Canada, one of Canada's largest oil and gas companies at the time. In his most recent role as Senior Vice President for Petro-Canada, Mr. Sangster was responsible for the company's oil sands production and development, as well as Petro-Canada's participation in Syncrude. He was also a member of Petro-Canada's Executive Leadership Team, accountable for the effective integration of the planning and execution of oil sands business objectives with overall strategies and activities of Petro-Canada. Mr. Sangster is a director of Inter Pipeline Ltd. and was a director of Canadian Oil Sands Limited. Mr. Sangster graduated from Dalhousie University with a Bachelor of Science degree in Chemical Engineering.

John W. Stevens is the Executive Vice President of Arva Limited and has been a director of Arva Limited since 1993. Arva Limited is a private Canadian corporation engaged in the private equity investment business headquartered in Toronto, Ontario. Arva Limited has investments in a variety of industries including telecommunications and automotive. Mr. Stevens is both an Ontario qualified lawyer and CPA(CA). He was employed in the public accounting profession from 1978 to 1980 with Clarkson Gordon. He subsequently obtained his law degree from Queens University in 1983. Mr. Stevens joined the Canadian law firm of Osler, Hoskin & Harcourt LLP in 1983, became a partner in the firm in 1991 and, from 1994 to 2000, was the Managing Partner of Osler's New York office. He practised in the corporate and commercial areas with emphasis on securities law, mergers and acquisitions and dealt with a broad range of finance, legal and corporate governance issues servicing the needs of many successful private and public companies. Mr. Stevens joined Arva Limited on a full time basis in June 2000. He has served as director on numerous boards of both private and public companies and charitable institutions.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

No proposed director is, as at the date hereof, or has been, within ten years of the date hereof, a director or chief executive officer or chief financial officer of any company, including Titanium, that: (i) while that person was acting in that capacity, was the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days; or (ii) was subject to an event that resulted in such company, after the director or executive officer ceased to be a director, chief executive officer or chief financial officer of the company, being the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days and which resulted from an event that occurred while that person was acting in the capacity as a director, chief executive officer or chief financial officer.

No proposed director is, as at the date hereof, or has been, within ten years of the date hereof, a director, chief executive officer or chief financial officer of any company, including Titanium, that: (i) while that person was acting in their 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 became 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 ten years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceeding, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold the assets of the proposed director.

In addition, no proposed director has been subject to: (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable security holder in deciding whether to vote for a proposed director.

Advance Notice By-laws

The Company has adopted advance notice by-laws (the "**AVN By-laws**") which provide that advance notice to the Company must be made in circumstances where nominations of persons for election to the Board are made by Shareholders other than pursuant to: (a) a "proposal" made in accordance with the CBCA; or (b) a requisition of a meeting made pursuant to the CBCA.

The AVN By-laws fix a deadline by which Shareholders must submit director nominations to the Corporate Secretary of the Company prior to any annual or special meeting of Shareholders and outlines the specific information that a nominating shareholder must include in the written notice to the Corporate Secretary of the Company for an effective nomination to

occur. No person nominated by a Shareholder will be eligible for election as a director of the Company unless nominated in accordance with the provisions of the AVN By-laws.

In the case of an annual meeting of shareholders, notice to the Corporate Secretary of the Company must be made not earlier than the 65th day and not less than 30 days prior to the date of the annual meeting; provided, however, that in the event that the annual meeting is to be held on a date that is less than 50 days after the date on which the first public announcement of the date of the annual meeting was made, notice may be made not later than the close of business on the 10th day following such public announcement. In the case of a special meeting of shareholders (which is not also an annual meeting), notice to the Company must be made not later than the close of business on the 15th day following the day on which the first public announcement of the date of the special meeting was made.

In the event of an adjournment or postponement of an annual meeting or special meeting of shareholders or any announcement thereof, a new time period will not commence for the giving of timely notice.

The Board may, in its sole discretion, waive any requirement of the advance nomination of directors provisions of the AVN By-laws.

Majority Voting for Directors

The Board has adopted a policy stipulating that if the votes "for" the election of a director nominee at a meeting of Shareholders are fewer than the number voted "withheld", the nominee is expected to submit his or her resignation promptly after the meeting for the consideration of the Compensation and Corporate Governance Committee of the Board (the "**Compensation Committee**"). The Compensation Committee will make a recommendation to the Board after reviewing the matter, and the Board will then decide whether to accept or reject the resignation. The Board's decision to accept or reject the resignation will be disclosed to the Shareholders. The nominee will not participate in any Compensation Committee deliberations whether to accept or reject the resignation. The Company's majority voting policy does not apply in circumstances involving contested director elections.

Unless a proxy specifies that the Shares it represents should be voted against fixing the number of directors of the Company at six (6), the proxy holders named in the accompanying proxy intend to use it to vote FOR fixing the number of directors of the Company at six (6). Additionally, unless a proxy specifies that the Shares it represents should be withheld from voting in the election of directors, the proxy holders named in the accompanying proxy intend to use it to vote FOR the election of the nominees as directors of the Company.

Appointment of Auditor

The persons designated in the enclosed form of proxy intend to vote for the appointment of PricewaterhouseCoopers LLP as auditor of the Company to hold office until the next annual meeting of Shareholders and to authorize the Board to fix its remuneration as such. PricewaterhouseCoopers LLP was first appointed as auditor of the Company on February 23, 2006.

Unless a proxy specifies that the Shares it represents should be withheld from voting in the appointment of the auditor, the proxy holders named in the accompanying proxy intend to use it to vote FOR the appointment of PricewaterhouseCoopers LLP as auditor of the Company to hold office until the close of the next annual meeting of Shareholders at a remuneration to be fixed by the Board.

Annual Approval of the Security Based Compensation Arrangements

As at the date hereof, there are 8,848,079 Shares reserved for issuance under the Security Based Compensation Arrangements (representing 10% of the issued and outstanding Shares), made up of: (i) 683,943 Shares available for issuance upon the exercise of future awards to be granted under the Security Based Compensation Arrangements (representing approximately 0.8% of the issued and outstanding Shares); and (ii) 8,164,136 Shares issuable upon the exercise of awards previously granted under the Security Based Compensation Arrangements (representing approximately 9.2% of the issued and outstanding Shares).

In addition, of the aggregate 3,539,232 Shares available for issuance upon the exercise or redemption of securities to be granted under the DSU Plan and the RSU Plan combined (representing 4.0% of the issued and outstanding Shares), an aggregate of: (i) 3,409,136 Shares are issuable upon the exercise or redemption of securities previously granted under the DSU Plan and the RSU Plan combined (representing approximately 3.9% of the issued and outstanding Shares); and (ii)

130,096 Shares are available for issuance under the DSU Plan and RSU Plan combined (representing approximately .01% of the issued and outstanding Shares).

Option Plan

Background

The Company has a "rolling" stock option plan pursuant to which the aggregate number of Shares that may be issued under the Option Plan and any other security based compensation arrangement, as that term is defined in the Option Plan, which includes the DSU Plan and the RSU Plan, may not exceed 10% of the issued and outstanding Shares, on a non-diluted basis, at any time.

Pursuant to Policy 4.4 of the TSX Venture Exchange (the "**Exchange**"), a "rolling" plan, such as the Option Plan, must receive shareholder approval each year at the annual meeting of shareholders. In addition, the Company must receive Exchange acceptance of a "rolling" plan each year. The Option Plan was last approved by the Shareholders at the annual and special meeting of Shareholders held on May 13, 2019. Management and the directors of the Company recommend that Shareholders approve the Option Plan at the Meeting.

A summary of the Option Plan is included in this Circular under the heading "*Statement of Executive Compensation – Compensation Discussion and Analysis – Elements of Compensation – Stock Option Plan*". This summary is qualified in its entirety by the full text of the Option Plan, which is attached as Schedule "A" to the Company's management information circular dated January 8, 2015.

Approval Requirements

The Option Plan must be approved by a simple majority (50%) of the votes cast by Shareholders present or represented by proxy at the Meeting.

Approval of the Option Plan by Shareholders

At the Meeting, Shareholders will be asked to consider and, if deemed advisable, to approve the following ordinary resolution to approve the Option Plan (the "**Plan Resolution**"):

"BE IT RESOLVED THAT:

1. subject to approval by the TSX Venture Exchange, the stock option plan of the Company be and it hereby is approved;
2. any director or officer of the Company is hereby authorized to execute and deliver and to do all such other acts and things as such director or officer may determine to be necessary or advisable in connection with the foregoing resolution; and
3. notwithstanding that this resolution has been passed by the shareholders of the Company, the adoption of the proposed share option plan of the Company is conditional upon receipt of final approval from the TSX Venture Exchange and the directors of the Company are hereby authorized and empowered to revoke this resolution, without any further approval of the shareholders of the Company, at any time if such revocation is considered necessary or desirable by the directors."

The Board has concluded that the approval of the Option Plan is in the best interests of the Company. **Accordingly, the Board unanimously recommends that Shareholders ratify, confirm and approve the Option Plan by voting FOR the Plan Resolution at the Meeting.**

Proxies received in favour of Management will be voted in favour of the Plan Resolution unless the Shareholder has specified in the proxy that his or her Shares are to be voted against such resolution.

DSU Plan*Background*

The Company has a deferred share unit plan pursuant to which the aggregate number of Shares that may be issued under such plan and other security based compensation arrangement, as that term is defined in the DSU Plan, which includes the Option Plan and the RSU Plan, may not exceed 10% of the issued and outstanding Shares, on a non-diluted basis, at any time.

The Board and Management have determined that, as a best practice, the DSU Plan should receive Shareholder approval each year. In addition, the Company should receive Exchange acceptance of the DSU Plan each year. Management and the directors of the Company recommend that Shareholders approve the DSU Plan at the Meeting.

A summary of the DSU Plan is included in this Circular under the heading "*Statement of Executive Compensation – Compensation Discussion and Analysis – Elements of Compensation – DSU Plan*". This summary is qualified in its entirety by the full text of the DSU Plan, which is attached as Schedule "B" to the Company's management information circular dated January 8, 2015.

Approval Requirements

The DSU Plan must be approved by a simple majority (50%) of the votes cast by Shareholders present or represented by proxy at the Meeting.

Approval of the DSU Plan by Shareholders

At the Meeting, Shareholders will be asked to consider and, if deemed advisable, to approve the following ordinary resolution to approve the DSU Plan (the "**DSU Plan Resolution**"):

"BE IT RESOLVED THAT:

1. subject to approval by the TSX Venture Exchange, the deferred share unit plan of the Company be and it hereby is approved;
2. any director or officer of the Company is hereby authorized to execute and deliver and to do all such other acts and things as such director or officer may determine to be necessary or advisable in connection with the foregoing resolution; and
3. notwithstanding that this resolution has been passed by the shareholders of the Company, the adoption of the proposed deferred share unit plan of the Company is conditional upon receipt of final approval from the TSX Venture Exchange and the directors of the Company are hereby authorized and empowered to revoke this resolution, without any further approval of the shareholders of the Company, at any time if such revocation is considered necessary or desirable by the directors."

The Board has concluded that the approval of the DSU Plan is in the best interests of the Company. **Accordingly, the Board unanimously recommends that Shareholders ratify, confirm and approve the DSU Plan by voting FOR the DSU Plan Resolution at the Meeting.**

Proxies received in favour of Management will be voted in favour of the DSU Plan Resolution unless the Shareholder has specified in the proxy that his or her Shares are to be voted against such resolution.

RSU Plan*Background*

The Company has a restricted share unit plan pursuant to which the aggregate number of Shares that may be issued under such plan and any other security based compensation arrangement, as that term is defined in the RSU Plan, which includes the Option Plan and the DSU Plan, may not exceed 10% of the issued and outstanding Shares, on a non-diluted basis, at any time.

The Board and Management have determined that, as a best practice, the RSU Plan should receive Shareholder approval each year. In addition, the Company should receive Exchange acceptance of the RSU Plan each year. Management and the directors of the Company recommend that Shareholders approve the RSU Plan at the Meeting.

A summary of the RSU Plan is included in this Circular under the heading "*Statement of Executive Compensation – Compensation Discussion and Analysis – Elements of Compensation – RSU Plan*". This summary is qualified in its entirety by the full text of the RSU Plan, which is attached as Schedule "C" to the Company's management information circular dated January 8, 2015.

Approval Requirements

The RSU Plan must be approved by a simple majority (50%) of the votes cast by Shareholders present or represented by proxy at the Meeting.

Approval of the RSU Plan by Shareholders

At the Meeting, Shareholders will be asked to consider and, if deemed advisable, to approve the following ordinary resolution to approve the RSU Plan (the "**RSU Plan Resolution**"):

"BE IT RESOLVED THAT:

1. subject to approval by the TSX Venture Exchange, the restricted share unit plan of the Company be and it hereby is approved;
2. any director or officer of the Company is hereby authorized to execute and deliver and to do all such other acts and things as such director or officer may determine to be necessary or advisable in connection with the foregoing resolution; and
3. notwithstanding that this resolution has been passed by the shareholders of the Company, the adoption of the proposed restricted share unit plan of the Company is conditional upon receipt of final approval from the TSX Venture Exchange and the directors of the Company are hereby authorized and empowered to revoke this resolution, without any further approval of the shareholders of the Company, at any time if such revocation is considered necessary or desirable by the directors."

The Board has concluded that the approval of the RSU Plan is in the best interests of the Company. **Accordingly, the Board unanimously recommends that Shareholders ratify, confirm and approve the RSU Plan by voting FOR the RSU Plan Resolution at the Meeting.**

Proxies received in favour of Management will be voted in favour of the RSU Plan Resolution unless the Shareholder has specified in the proxy that his or her Shares are to be voted against such resolution.

Approval of Amendments to By-law 1 of the Company

Background

On April 7, 2020, the Board adopted certain amendments to the Company's By-law 1 in the form of the amended and restated By-law 1 attached to this Circular as Schedule "A" (the "**Amended By-law**") to allow for the Company to hold the Meeting in a virtual only format in accordance with the provisions of the CBCA. The amendments provide that: (i) subject to the CBCA and the consent of the directors, meetings of Shareholders may be held entirely by electronic means and that the directors may establish procedures regarding the holding of meetings of Shareholders by such means (see section 2.04 of the Amended By-law attached as Schedule "A" to this Circular); and (ii) any vote of Shareholders at a meeting of Shareholders may be held, in accordance with the CBCA, partially or entirely by electronic means (see section 2.07(d) of the Amended By-law attached as Schedule "A" to this Circular). This summary of the amendments to the Amended By-law is qualified in its entirety by the full text of the Amended By-law attached as Schedule "A" to this Circular.

subject to the consent of the Board of Directors, provide for shareholders to participate in shareholders' meetings by electronic means and to provide for shareholders' meetings to be held entirely by electronic means (see sections 3.04 and 3.05 of Appendix B);

Approval Requirements

The Amended By-law must be approved by a simple majority (50%) of the votes cast by Shareholders present or represented by proxy at the Meeting.

Approval of the Amended By-law by Shareholders

The Amended By-law is in effect until it is confirmed, confirmed as amended or rejected by Shareholders at the Meeting. If confirmed the Amended By-law will continue in effect. Accordingly, Shareholders are being asked to confirm the Amended By-law at the Meeting so that the Amended By-law can continue in effect.

At the Meeting, Shareholders will be asked to consider and, if deemed advisable, to approve the following ordinary resolution to approve the Amended By-law (the "**Amended By-law Resolution**"):

"BE IT RESOLVED THAT:

1. the amendments to By-law 1 of the Company, in the form adopted by the board of directors of the Company on April 7, 2020 and included in the amended and restated By-law 1 of the Company attached as Schedule "B" to the management information circular of the Company dated May 11, 2020, be and it hereby is confirmed and approved;
2. any director or officer of the Company is hereby authorized to execute and deliver and to do all such other acts and things as such director or officer may determine to be necessary or advisable in connection with the foregoing resolution; and
3. notwithstanding that this resolution has been passed by the shareholders of the Company, the adoption of the proposed amended and restated By-law 1 of the Company is conditional upon receipt of final approval from the TSX Venture Exchange and the directors of the Company are hereby authorized and empowered to revoke this resolution, without any further approval of the shareholders of the Company, at any time if such revocation is considered necessary or desirable by the directors."

The Board has concluded that the approval of the Amended By-law is in the best interests of the Company. **Accordingly, the Board unanimously recommends that Shareholders ratify, confirm and approve the Amended By-law by voting FOR the Amended By-law Resolution at the Meeting.**

Proxies received in favour of Management will be voted in favour of the Amended By-law Resolution unless the Shareholder has specified in the proxy that his or her Shares are to be voted against such resolution.

General

Management knows of no other matters to come before the Meeting other than the matters referred to in the notice of the Meeting. **HOWEVER, IF ANY OTHER MATTERS WHICH ARE NOT NOW KNOWN TO MANAGEMENT SHOULD PROPERLY COME BEFORE THE MEETING, THE PROXY WILL BE VOTED ON SUCH MATTERS IN ACCORDANCE WITH THE BEST JUDGMENT OF THE PERSON OR PERSONS VOTING THE PROXY.**

STATEMENT OF EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Background

Titanium's mission is "Creating Value from Waste™" ("CVW™"). The Company has developed innovative CVW™ technologies to recover valuable heavy minerals, bitumen, solvent and water from oil sands waste tailings. The recovery of bitumen, associated solvents and water from froth treatment tailings streams enables important and timely environmental improvements for the oil sands industry. The Company completed demonstration piloting which was the culmination of

several years of progressive research and development of its proprietary technology. From July 2017 until the middle of 2019, the Company worked on front end engineering and design for the first commercial implementation of the CVW™ technology at Canadian Natural Resources' Horizon site. Titanium and its partner are currently working on engineering optimization and planning next steps for the project.

On January 24, 2018, the Company changed its fiscal year end from August 31 to December 31 resulting in a four month transition year from September 1, 2017 to December 31, 2017. The notice for the year end change required under National Instrument 51-102 – *Continuous Disclosure Obligations* was filed on SEDAR at www.sedar.com. All disclosure provided herein is for the Company's most recently completed financial year, being December 31, 2019. Where applicable, all disclosure herein relating to the year ended December 31, 2017 relates to the four-month transition year from September 1, 2017 to December 31, 2017. Additional information relating to the compensation paid during the year ended August 31, 2017 has also been provided herein, where applicable.

Compensation and Corporate Governance Committee

In order to assist the Board in fulfilling its oversight responsibilities regarding human resource and compensation matters, the Board has established the Compensation Governance Committee. The Compensation Committee is currently comprised of three directors, namely Moss Kadey, Brant Sangster and David Macdonald, all of whom are independent within the meaning of National Instrument 58-101 – *Disclosure of Corporate Governance Practices* ("**NI 58-101**"). Mr. Sangster is the current Chair of the Compensation Committee.

The Board recognizes the importance of appointing knowledgeable and experienced individuals to the Compensation Committee; in particular, those who have the necessary background in executive compensation and risk management in order to fulfill the Compensation Committee's obligations to the Board. All current members of the Compensation Committee bring strong business and industry knowledge to the committee and have experience as senior leaders of successful organizations.

The Compensation Committee's responsibilities include recommending to the Board for approval the remuneration of the Chief Executive Officer, including salary, bonus, options and any other incentive plan; the annual compensation budget for staff of the Company; the number of Shares to be reserved under the Option Plan; the number of options to be granted pursuant to the Option Plan; salaries, target bonus awards, other incentive awards and options for the officers of the Company; implementation of, or changes to, compensation and benefits policies; and administering the DSU Plan and the RSU Plan.

In establishing the Company's executive compensation program, the Compensation Committee considers the implication of the risks associated with the Company's compensation program, including the risk of executives taking inappropriate or excessive risks; the risk of inappropriate focus on achieving short term goals at the expense of long term returns to Shareholders; and the risk of encouraging aggressive accounting practices.

While no program can fully mitigate these risks, the Company believes that many of these risks are mitigated by: weighting the Company's long term incentives towards share ownership and vesting the Company's long term incentives over a number of years; establishing a uniform incentive program for all executive officers and employees; avoiding narrowly focused performance goals which may encourage loss of focus on providing long term Shareholder returns and retaining adequate discretion to ensure that the Compensation Committee and the Board retain their business judgment in assessing actual performance; and establishing a strong "tone at the top" for accounting, regulatory, environmental and health and safety compliance.

No compensation consultant or advisor has, at any time since the Company's most recently completed financial year, been retained to assist the Board or the Compensation Committee in determining compensation for any of Titanium's directors or executive officers.

Compensation Philosophy and Objectives

The Company's overall compensation philosophy is that executives should be compensated for performance in their position and for achievement of additional personal and corporate objectives. The main objective of the Company's compensation program is to attract, motivate and retain highly qualified and competent executives, consistent with general sector practices, while specifically recognizing the size of the Company and its stage of development. The Company's compensation program also has an objective of aligning the interests of executives with those of Shareholders. The Company's compensation program is designed to reward executives for performance in their position and for achievement of general personal and corporate

objectives in a manner consistent with the Company's strategic plan, including further development of the Company and achieving Shareholder returns.

Short Sales, Puts, Calls and Options

Pursuant to the Company's Insider Trading and Blackout Policy, directors, officers and all employees of the Company, shall not knowingly sell, directly or indirectly, a security of the Company if such person selling such security does not own or has not fully paid for the security to be sold. Directors, officers and employees of the Company shall not, directly or indirectly, buy or sell a put, call, option or other right or obligation to purchase or sell securities of the Company.

Elements of Compensation

The elements of compensation awarded to, earned by, paid to or payable to Named Executive Officers (as hereinafter defined) for the most recently completed financial year are as follows: (i) a base salary; (ii) a short term incentive in the form of a cash bonus and/or award of restricted share units ("**RSUs**"); (iii) a long term incentive in the form of stock options and RSUs; and (iv) retention bonuses for certain Named Executive Officers in the form of a cash bonus and/or award of RSUs.

Generally, the Compensation Committee considers a broad range of factors when setting overall compensation for the Named Executive Officers and each element of compensation, including but not limited to what is required to recruit and retain the Named Executive Officers who are critical to the success of the Company; what general sector compensation practices are; what the Company can afford; what is necessary to incentivize individual and corporate performance; and what is necessary to align the interests of Named Executive Officers with those of shareholders on a longer term basis.

Base Salary

Base salary is intended to provide Named Executive Officers with basic compensation consistent with the individual's level of responsibility, skills, knowledge and experience; the contribution expected from each individual; and general sector compensation practices for individuals in the applicable position, all with a view to attracting and retaining the Named Executive Officers. In some circumstances, the level of base salary may affect the Company's decisions relating to short term incentives (i.e., cash bonuses) given that, in some cases, bonuses are payable as a percentage of base salary (i.e., if performance criteria are achieved).

Short Term Incentives

The Company may award short term incentives to Named Executive Officers from time to time based on their annual performance. Short term incentive compensation is intended to motivate and incentivize Named Executive Officers to meet certain shorter term personal and corporate objectives, which vary from individual to individual, from year to year. The Compensation Committee communicates to the Named Executive Officers the key accomplishments it wishes to reward in a given year, such as individual achievements, research and development success, specific progress during the year on advancing the Company's commercialization of its technology, and overall cost savings. These short term incentives are intended to ensure that a portion of a Named Executive Officer's compensation correlates with corporate objectives and varies with actual performance in a given year. In some circumstances, a maximum level of bonus (expressed as a percentage of base salary) or a set amount upon achievement of a specified goal is included in an employment agreement with a Named Executive Officer (see "*Summary Compensation Table – Discussion – Employment Agreements*"), but generally the award of short term incentives is at the discretion of the Board, based upon the recommendations of the Compensation Committee.

The Company's process for awarding short term incentives to Named Executive Officers varies depending on the circumstances. From time to time, the Chief Executive Officer will present the Compensation Committee with the performance of certain other Named Executive Officers and will make recommendations to the Compensation Committee regarding possible bonuses to such Named Executive Officers to reward them for specific performance. Annually, the Compensation Committee will then consider and determine whether to recommend such awards to the Board for approval. The Compensation Committee also independently considers whether awards of short term incentives should be made to the Chief Executive Officer.

The Company generally grants short term incentives in the form of cash bonuses. In 2013, the Company implemented the RSU Plan for the purposes of, among other things, reducing the cash expense of compensating Management and promoting greater alignment of interests between Shareholders and Management, including payment of short term incentives (see "*Summary Compensation Table – Discussion – Employment Agreements*"). Given the greater reliance on the use of RSUs to

compensate the Company's officers in light of the Company's financial condition and to promote alignment with Shareholders, the Board approved certain amendments to the RSU Plan to mitigate the adverse tax consequences associated with this type of compensation award for short term incentive purposes, which were approved by the Board in January 2015 and subsequently approved by Shareholders at the Company's annual and special meeting held on February 12, 2015.

In respect of the fiscal year ended December 31, 2019, the Compensation Committee recommended that awards of bonuses be made to certain Named Executive Officers for general achievement of individual and corporate objectives, of which 50% was payable in cash and 50% was payable in RSUs (see "*Summary Compensation Table – Discussion – Employment Agreements*"). As at January 30, 2020, there were 130,096 RSUs available to settle compensation awards with Management. Given the Company's equity constraints, the Board resolved to defer the grant and pricing of all RSUs to Management payable pursuant to the bonus and retention payments until such time as there are sufficient Shares available to be reserved for issuance pursuant to the RSUs under the RSU Plan (the "**Management Compensation Deferral**").

Long Term Incentives

The Company may award long term incentives in the form of stock options and RSUs to Named Executive Officers from time to time. Long term incentive compensation is intended to ensure a commonality of interests between the Named Executive Officers and Shareholders. The forms of long term incentive are intended to ensure that a portion of a Named Executive Officer's compensation is tied to the growth in the value of the Shares over the longer term. This is the high risk, high return component of the Company's executive compensation program because the value received by the Named Executive Officers for such awards correlates to the market value of the Shares. In some circumstances, an initial grant of stock options and/or RSUs to a new Named Executive Officer or a future grant of such awards upon achievement of a specified goal may be included in an employment agreement with a Named Executive Officer (see "*Summary Compensation Table – Discussion – Employment Agreements*"), but in most circumstances, the award of long term incentives is at the discretion of the Board.

The process by which the Company grants stock options and/or RSUs for long term incentive purposes to Named Executive Officers varies depending on the circumstances. Annually, the Chief Executive Officer will present the Compensation Committee with the performance of certain other Named Executive Officers and will make recommendations to the Compensation Committee regarding possible grants to such Named Executive Officers to reward them for specific performance. The Compensation Committee will then consider and determine whether to recommend such grants to the Board for approval. The Compensation Committee also independently considers from time to time whether grants should be made more generally to Named Executive Officers or to specific Named Executive Officers, such as the Chief Executive Officer, to incentivize performance over the longer term. For the Chief Executive Officer, the Compensation Committee considers the steps required to achieve the Company's strategic plan, the Chief Executive Officer's performance to date, and the number of awards judged necessary to retain the Chief Executive Officer. Finally, the Compensation Committee also considers and determines whether to recommend to the Board for approval grants to new Named Executive Officers when employment agreements are being negotiated by the Chief Executive Officer on behalf of the Company.

In setting or amending the plans for such awards, the Compensation Committee takes into account the recommendations of senior Management, including the Named Executive Officers. Previous grants of such awards are taken into account when considering new grants. Details regarding the plans for stock options, deferred share units ("**DSUs**") and RSUs are set out below. Also see "*Particulars of Matters to be Acted Upon – Annual Approval of the Security Based Compensation Arrangements*".

Stock Option Plan

The Company has the Option Plan for its directors, officers, employees and consultants. The Option Plan was initially approved at a special meeting of the Shareholders held on July 7, 2009 and has subsequently been reapproved each year at the annual and special meeting of Shareholders.

The purpose of the Option Plan is to encourage ownership of Shares by the directors, officers, employees and consultants of the Company; advance the interests of the Company by providing additional incentives for superior performance by such persons; and enable the Company to attract and retain valued directors, officers, employees and consultants.

The Option Plan is a "rolling" 10% plan that provides that the aggregate number of Shares reserved for issuance shall not exceed 10% of the issued and outstanding Shares.

As at the date hereof, there are 8,848,079 Shares reserved for issuance under the Security Based Compensation Arrangements (representing 10% of the issued and outstanding Shares). There are 683,943 Shares available for issuance upon the exercise of future awards to be granted under the Security Based Compensation Arrangements (representing approximately 0.8% of the issued and outstanding Shares). There are 8,164,136 Shares issuable upon the exercise of awards previously granted under the Security Based Compensation Arrangements (representing approximately 9.2% of the issued and outstanding Shares). For clarity, there are an aggregate of 3,539,232 Shares available for issuance upon the exercise or redemption of securities to be granted under the DSU Plan and the RSU Plan combined (representing 4.0% of the issued and outstanding Shares) and there are an aggregate of 3,409,136 Shares issuable upon the exercise or redemption of securities previously granted under the DSU Plan and the RSU Plan combined (representing approximately 3.9% of the issued and outstanding Shares), resulting in 130,096 Shares available for issuance under the DSU Plan and RSU Plan combined (representing approximately 0.1% of the issued and outstanding Shares).

The following summary of the Option Plan is qualified in its entirety by the full text of the Option Plan attached as Schedule "A" to the Company's management information circular dated January 8, 2015. The key features of the Option Plan are as follows:

1. the Option Plan is administered by the Board or, if the Board so delegates, a committee of the Board appointed from time to time by the Board;
2. the aggregate number of Shares reserved for issuance pursuant to options granted under the Option Plan and any other Security Based Compensation Arrangements shall not exceed 10% of the issued and outstanding Shares as at the date of grant (on a non-diluted basis). Further, any grant of options under the Option Plan shall be subject to the following restrictions:
 - (a) the aggregate number of Shares reserved for issuance pursuant to options and other securities issued under other Security Based Compensation Arrangements granted to any one individual in any 12 month period shall not exceed 5% of the issued and outstanding Shares, unless disinterested shareholder approval is obtained;
 - (b) the aggregate number of Shares reserved for issuance pursuant to options and other securities issued under other Security Based Compensation Arrangements granted to any one Consultant (as defined in the Option Plan) in any 12 month period shall not exceed 2% of the issued and outstanding Shares;
 - (c) the aggregate number of Shares reserved for issuance pursuant to options and other securities issued under other Security Based Compensation Arrangements granted to all optionees who are engaged in Investor Relations Activities (as defined in the Option Plan) in any 12 month period shall not exceed 2% of the issued and outstanding Shares;
 - (d) the aggregate number of Shares reserved for issuance pursuant to options and other securities issued under other Security Based Compensation Arrangements granted to Insiders (as defined in the Option Plan) shall not exceed 10% of the issued and outstanding Shares, unless disinterested shareholder approval is obtained; and
 - (e) the aggregate number of Shares reserved for issuance pursuant to options and other securities issued under other Security Based Compensation Arrangements granted to Insiders in any 12 month period shall not exceed 10% of the issued and outstanding Shares, unless disinterested shareholder approval is obtained;
3. the Board will fix the exercise price of each option at the time the option is granted, provided that such price shall not be less than the closing price of the Shares on the Exchange on the last trading day immediately preceding the date of grant of such option, less any applicable discount permitted under the policies of the Exchange;
4. if an optionee is an Insider, the exercise price of his or her options may only be reduced if disinterested shareholder approval is obtained, provided that such approval is then a requirement of the Exchange;
5. the period of time during which a particular option may be exercised is determined by the Board at the time the option is granted, provided that no such option term shall exceed ten years;

6. if the normal expiry date of an option falls within any black-out period (being a period of time when pursuant to any policies of the Company, any securities of the Company may not be traded by certain persons as designated by the Company) and the optionee is subject to the black-out period, the expiry date of such options shall be extended to the date that is ten business days following the end of such black-out period;
7. subject to the Exchange policies, the Board will determine the vesting period or periods within the term of an option during which an optionee may exercise an option or a portion thereof;
8. if any optionee ceases to be a director, officer, employee or consultant of the Company or its subsidiaries for any reason other than death, retirement or permanent disability, the optionee may within 30 days after such termination or prior to the expiry of the option period, whichever is earlier, exercise any option held by the optionee to the extent that the optionee was entitled to exercise the option at the date of such termination;
9. in the event of death of an optionee, the option previously granted is exercisable by the optionee's legal personal representative within 12 months following the date of death of the optionee;
10. in the event of retirement or permanent disability of an optionee, the optionee may within three months after such termination exercise any option held by the optionee to the extent that the optionee was entitled to exercise the option at the date of such termination;
11. in the event of termination for cause of an optionee, all options held by the optionee shall expire and terminate immediately;
12. options and rights related thereto held by an optionee are not assignable or transferable except effectively to the legal personal representative of an optionee upon his or her death;
13. the Board may amend, modify, change or discontinue the Option Plan and may amend, modify or change any outstanding option granted under the Option Plan, provided this does not alter or impair any option previously granted under the Option Plan (except as permitted under the Option Plan) and that this has been approved by the Exchange and, where necessary, by the Shareholders;
14. the Company shall have the power and the right to deduct or withhold, or require an optionee to remit to the Company, the required amount to satisfy federal, provincial and local taxes, domestic or foreign, required by law or regulation to be withheld with respect to any taxable event arising as a result of the Option Plan, including the grant or exercise of options granted under the Option Plan. With respect to required withholding, the Company shall have the irrevocable right to, and the optionee consents to, the Company setting off any amounts required to be withheld, in whole or in part, against amounts otherwise owing by the Company to the optionee (whether arising pursuant to the optionee's relationship as a director, officer or employee of the Company or as a result of the optionee providing services on an ongoing basis to the Company or otherwise), or may make such other arrangements satisfactory to the optionee and the Company. In addition, the Company may elect, in its sole discretion, to satisfy the withholding requirement, in whole or in part, by withholding such number of Shares as it determines are required to be sold by the Company, as trustee, to satisfy the withholding obligation net of selling costs. The optionee consents to such sale and grants to the Company an irrevocable power of attorney to effect the sale of such Shares and acknowledges and agrees that the Company does not accept responsibility for the price obtained on the sale of such Shares; and
15. optionees (or their beneficiaries) shall be responsible for all taxes with respect to any options under the Option Plan, whether arising as a result of the grant or exercise of options or otherwise. The provision further provides that the Board and the Company make no guarantees to any person regarding the tax treatment of options or payments made under the Option Plan and none of the Company, nor any of its employees or representatives shall have any liability to an optionee with respect thereto.

DSU Plan

The DSU Plan is designed to promote the alignment of interests between Non-Management Directors (as defined in the DSU Plan) and the Shareholders. The Board is responsible for administering the DSU Plan with the advice of the Compensation Committee or such other committee the Board deems appropriate.

The following is a summary of the DSU Plan and is qualified in its entirety by the full text of the DSU Plan attached as Schedule "B" to the Company's management information circular dated January 8, 2015.

Benefits of the DSU Plan

The DSU Plan is designed to provide long term incentives for Non-Management Directors. The Board believes that DSUs have the following primary benefits:

1. current practice in corporate governance favours the use of DSUs over options for directors because the value of the DSUs can only be realized upon the director ceasing to serve the Company, which helps to ensure that directors act in the long term interests of the Company; and
2. the DSUs provide the Board with an additional compensation tool which can be used to help retain and attract qualified directors and further align the interests of Non-Management Directors with the interest of the Shareholders.

Nature and Administration of the DSU Plan

Only Non-Management Directors ("**Eligible Directors**") are eligible to participate in the DSU Plan. A DSU issued under the DSU Plan is a bookkeeping entry representing a future right to receive one Share at the time of the holder's retirement, death or the holder otherwise ceasing to be an Eligible Director.

Each Eligible Director is a member (a "**DSU Plan Member**") in the DSU Plan.

A DSU Plan Member has the right to elect at any time by August 15th of each financial year to be credited with DSUs in lieu of all or any part of his or her Annual Board Retainer, Annual Chair Retainer and/or Meeting Fees (as such terms are defined in the DSU Plan) otherwise payable to him or her in cash in the immediately succeeding financial year.

Each DSU awarded by the Company is initially equal to the value of a Share at the time the DSU is awarded. The value of the DSU increases or decreases as the price of the Shares increases or decreases, thus promoting alignment of the interest of the Eligible Directors with the Shareholders. DSUs vest upon grant and are credited to an Eligible Director's account.

The value of the DSUs credited to a DSU Plan Member's account is redeemable upon the DSU Plan Member ceasing to be an Eligible Director of the Company. The value of the DSUs is redeemed by filing a written notice of redemption with the Company, specifying (i) either one or two redemption dates, and (ii) the percentage of DSUs held by the DSU Plan Member to be redeemed on each such redemption date (which when added together must equal 100%). Each redemption date specified in the notice of redemption must occur during the period commencing at least five business days following the date on which the notice is filed with the Company and ending:

1. in the event of death, termination for cause, termination without cause and resignation, 60 days after the DSU Plan Member's termination date; or
2. in the event of retirement from active employment, not later than the last day of the calendar year following the year of the DSU Plan Member's termination date.

Subject to applicable income tax and other withholdings as required by law, the value of the vested DSUs redeemed by or in respect of a DSU Plan Member will be paid to the DSU Plan Member or to his or her estate, as the circumstances warrant, in the form of one or two issuances of Shares on the basis of one Share for each DSU redeemed, less the Applicable Withholding Amount (as the term is defined in the DSU Plan), as soon as practicable after the applicable redemption date.

DSUs are personal and non-assignable. DSUs cannot be pledged, hypothecated, charged, transferred, assigned or otherwise encumbered or disposed of by the DSU Plan Member otherwise than by testate succession or the laws of descent and distribution. Any attempt to do so will cause the DSUs to be null and void. During the lifetime of the DSU Plan Member, a vested DSU is redeemable only by the DSU Plan Member or, upon the death of a DSU Plan Member, the DSU Plan Member's estate.

Limitations under the DSU Plan

Notwithstanding any other provision of the DSU Plan:

1. the aggregate number of Shares reserved for issuance pursuant to DSUs granted under the DSU Plan and other Security Based Compensation Arrangements cannot exceed 10% of the issued and outstanding Shares as at the date of grant (on a non-diluted basis);
2. the aggregate number of Shares reserved for issuance pursuant to DSUs granted to any one individual in any 12 month period cannot exceed 1% of the issued and outstanding Shares, unless disinterested shareholder approval is obtained;
3. the aggregate number of Shares reserved for issuance pursuant to DSUs granted to Insiders (as defined in the policies of the Exchange) cannot exceed 2% of the issued and outstanding Shares, unless disinterested shareholder approval is obtained; and
4. all DSUs granted pursuant to the DSU Plan are subject to the policies of the Exchange.

Adjustments

In the event of any stock dividend, stock split, combination or exchange of Shares, merger, consolidation, spinoff or other distribution (other than normal cash dividends) of the Company's assets to the Shareholders, or any other changes affecting the Shares, the Board can make such proportionate adjustments with respect to the number of DSUs outstanding under the DSU Plan to reflect this change or changes as it deems appropriate.

No additional DSUs will be granted to a DSU Plan Member to compensate for a downward fluctuation in the price of the Shares, nor will any other form of benefit be conferred upon, or in respect of, a DSU Plan Member for such purpose.

Dividends

Whenever cash dividends are paid on the Shares, additional DSUs will be credited to the DSU Plan Member's account. The number of additional DSUs will be calculated by dividing (i) the dividends that would have been paid to the DSU Plan Member if the DSUs in the DSU Plan Member's account on the relevant dividend record date had been Shares, by (ii) the Market Price (as defined in the DSU Plan) at the date of payment of such dividend. Any fractional DSUs resulting from such calculation will be rounded to the nearest whole number.

Amendment and Termination

The DSU Plan can be amended or terminated at any time by the Board, except as to rights already accrued under the DSU Plan by the DSU Plan Members. Notwithstanding the foregoing, any amendment or termination of the DSU Plan will be such that the DSU Plan continuously meets the requirements of paragraph 6801(d) of the Regulations under the *Income Tax Act* (Canada) or any successor provision thereto.

RSU Plan

The RSU Plan is designed to provide certain officers and other key employees of the Company and its related entities with the opportunity to acquire RSUs in order to enable them to participate in the long-term success of the Company and to promote a greater alignment of their interests with the interests of the Shareholders. The Compensation Committee (or such other committee as the Board may appoint) is responsible for administering the RSU Plan.

The following is a summary of the RSU Plan and is qualified in its entirety by the full text of the RSU Plan attached as Schedule "C" to the Company's management information circular dated January 8, 2015.

Benefits of the RSU Plan

The RSU Plan is designed to be an incentive for the officers and other key employees of the Company with the flexibility to provide for short-term and long-term incentive compensation based on decisions of the Compensation Committee. RSUs provide the Compensation Committee with an additional compensation tool which can be used to help retain and attract highly qualified officers and employees and further align the interests of officers and key employees with the interest of the Shareholders.

Nature and Administration of the RSU Plan

All Employees (as defined in the RSU Plan) of the Company and its related entities ("**Eligible Persons**") are eligible to participate in the RSU Plan (as "**RSU Plan Participants**"), though the Company reserves the right to restrict eligibility or otherwise limit the number of persons eligible for participation in the RSU Plan at any time. Eligibility to participate in the RSU Plan does not confer upon any person a right to receive an award of RSUs.

Subject to certain restrictions, the Compensation Committee can, from time to time, award RSUs to Eligible Persons. RSUs will be credited to an account maintained for each RSU Plan Participant on the books of the Company as of the award date. The number of RSUs to be credited to each RSU Plan Participant's account in respect of a fiscal year shall be determined by dividing: (a) the dollar amount of the portion of the RSU Plan Participant's compensation which the Compensation Committee, in its sole discretion, determines to be paid as RSUs; by (b) the Fair Market Value (as defined in the RSU Plan) per Share on the award date or such higher price per Share as the Compensation Committee determines. Any fractional RSUs resulting from this calculation will be rounded to the nearest whole number.

Each award of RSUs vests on the date(s) (each a "**Vesting Date**") specified by the Compensation Committee on the award date, and reflected in the applicable Award Notice (as defined in the RSU Plan). Additionally, the term of the RSUs shall be determined by the Compensation Committee on the date of the award of RSUs and shall not exceed ten years from the date the RSUs are awarded. Each RSU outstanding and all rights thereunder shall expire at the expiry time determined by the Compensation Committee, subject to earlier termination in accordance with the RSU Plan.

Rights and obligations under the RSU Plan can be assigned by the Company to a successor in the business of the Company, any company resulting from any amalgamation, reorganization, combination, merger or arrangement of the Company, or any corporation acquiring all or substantially all of the assets or business of the Company. The RSUs are non-transferable and non-assignable by the RSU Plan Participant. Certificates representing RSUs will not be issued by the Company.

Credit for Dividends

An RSU Plan Participant's account will be credited with additional RSUs as of each dividend payment date in respect of which cash dividends are paid on Shares. The number of additional RSUs to be credited to an RSU Plan Participant's account is computed by dividing: (a) the dividends that would have been paid to such RSU Plan Participant if each RSU in the RSU Plan Participant's account on the relevant dividend record date had been a Share, by (b) the Fair Market Value of the Shares determined as of the date of payment of such dividend. Any fractional RSUs resulting from this calculation will be rounded to the nearest whole number. Any additional RSUs credited to the RSU Plan Participant's account will vest in proportion to and will be paid under the RSU Plan in the same manner as the RSUs to which they relate. Note that the Company is not obligated to pay dividends on Shares.

Acquisition of Vested RSUs

An RSU Plan Participant or, if applicable, the RSU Plan Participant's estate, who wishes to acquire a Share for any vested RSUs may do so by delivering a completed Notice of Acquisition (as defined in the RSU Plan) to the Company on or before the Expiry Time (as defined in the RSU Plan) of the RSU and paying the required exercise price, following which the Company shall issue, within ten days following receipt of the Notice of Acquisition, one Share for each RSU in the RSU Plan Participant's account that the RSU Plan Participant has included on the Notice of Acquisition (the "**Payment Amount**"). Given the greater reliance on the use of RSUs to compensate the Company's officers in light of the Company's financial condition, the RSU Plan was amended to provide for an exercise price to mitigate the adverse tax consequences associated with this type of compensation award for short term incentive purposes. The RSUs in respect of which Shares are issued will be cancelled and no further issuances will be made to the RSU Plan Participant under the RSU Plan in relation to such RSUs.

Resignation, Termination, Leave of Absence or Death

Generally, if an RSU Plan Participant's employment or service is terminated, or if the RSU Plan Participant resigns from their employment with the Company, then any RSUs credited to him or her under the RSU Plan which have not vested on or before the separation date for the RSU Plan Participant are forfeited, cancelled and terminated without payment. An RSU Plan Participant may, but only within the next 30 days following the separation date, deliver a completed Notice of Acquisition to the Company to acquire Shares for the vested RSUs, together with payment of the required exercise price. Any vested RSUs in respect of which an RSU Plan Participant has not delivered a completed Notice of Acquisition to the Company and paid

the required exercise price shall be forfeited and cancelled effective at 4:00 p.m. (Calgary time) on such 30th day and shall terminate without payment and shall be of no further force or effect from and after such time.

If an RSU Plan Participant is terminated without Cause (as defined in the RSU Plan), any RSUs which will vest within 60 days of the separation date will be deemed to have been vested on the separation date.

If an RSU Plan Participant's employment or service is terminated, within 30 days of a termination, the Compensation Committee can: (i) accelerate the vesting of all or any portion of the RSU Plan Participant's RSUs; or (ii) determine that an RSU Plan Participant will continue to be an RSU Plan Participant, but subject to such terms and conditions (including vesting) if any, established by the Compensation Committee.

If an RSU Plan Participant takes a leave of absence other than an Approved Leave of Absence (as defined in the RSU Plan), all RSUs granted to the RSU Plan Participant that have not then vested will terminate and be null and void, subject to applicable law and the Board's sole and absolute discretion to determine otherwise.

Upon the death of an RSU Plan Participant, any RSUs granted to an RSU Plan Participant which, as of the date of the death have not yet vested, immediately vest.

Control Change

In the event of a Control Change (as defined in the RSU Plan), the Compensation Committee may:

1. cause the conversion or exchange of any outstanding RSUs into or for rights or other securities of substantially equivalent value (or greater value) in any entity participating in or resulting from a Control Change; or
2. accelerate the vesting of any or all outstanding RSUs to provide that outstanding RSUs are fully vested upon (or immediately prior to) the completion of the transaction resulting in the Control Change.

If, before the completion of the Vesting Date with respect to any award of RSUs, an RSU Plan Participant's employment is terminated in circumstances where the termination occurs:

1. subsequent to a Control Change and during the Control Change Period (as defined in the RSU Plan); or
2. prior to the date on which a Control Change occurs and it is reasonably demonstrated that such termination:
 - (a) was at the request of a third party who has taken steps reasonably calculated to effect a Control Change; or
 - (b) otherwise arose in connection with or anticipation of a Control Change; and
3. such termination was for any reason whatsoever other than death or termination for Cause,

then the award shall immediately vest on the separation date and the Payment Amount shall be equal to the number of Shares determined on the separation date multiplied by the number of RSUs in the RSU Plan Participant's account.

Adjustments

In the event of any subdivision, consolidation, stock dividend, capital reorganization, reclassification, exchange or other change with respect to the Shares, or a consolidation, amalgamation, merger, spin-off, sale, lease or exchange of all or substantially all of the property of the Company or other distribution of the Company's assets to the Shareholders (other than the payment of dividends in respect of the Shares as contemplated in the RSU Plan), the account of each RSU Plan Participant and the RSUs outstanding under the RSU Plan will be adjusted in such manner, if any, as the Compensation Committee deems appropriate to preserve, proportionally, the interests of RSU Plan Participants.

Discretion to Permit Vesting

The Compensation Committee can, at any time, permit both the vesting of any or all RSUs held by an RSU Plan Participant, and determine the form and terms of payment of the Payment Amount in respect of such RSUs.

Limitations under the RSU Plan

Notwithstanding any other provision of the RSU Plan:

1. the aggregate number of Shares reserved for issuance pursuant to RSUs granted under the RSU Plan and other Security Based Compensation Arrangements (as defined in the RSU Plan) cannot exceed 10% of the issued and outstanding Shares as at the date of grant (on a non-diluted basis);
2. the aggregate number of Shares reserved for issuance pursuant to RSUs granted to any one individual in any 12 month period shall not exceed 1% of the issued and outstanding Shares, unless disinterested shareholder approval is obtained;
3. the aggregate number of Shares reserved for issuance pursuant to RSUs granted to Insiders (as defined in the policies of the Exchange) shall not exceed 2% of the issued and outstanding Shares, unless disinterested shareholder approval is obtained; and
4. all RSUs granted pursuant to the RSU Plan are subject to the policies of the Exchange.

Amendment, Suspension or Termination of Plan

Subject to applicable law, the Compensation Committee can, without notice or Shareholder approval, amend, suspend or terminate the RSU Plan for any purpose which, in the good faith opinion of the Compensation Committee, may be expedient or desirable. That being said, the Compensation Committee cannot materially adversely alter or impair any rights of an RSU Plan Participant or materially increase any obligations of an RSU Plan Participant with respect to RSUs previously awarded under the RSU Plan without the consent of the affected RSU Plan Participant.

If the RSU Plan is terminated or suspended, no new RSUs will be credited to the account of RSU Plan Participants. Previously credited RSUs will remain outstanding but will not be entitled to Dividend Equivalents (as such term is defined in the RSU Plan) following suspension or termination unless at the time of suspension or termination the Compensation Committee determines the entitlement to Dividend Equivalents should be continued.

The Compensation Committee shall not require the consent of any affected RSU Plan Participant in connection with a termination of the RSU Plan in which the vesting of all RSUs held by the RSU Plan Participant are accelerated and the Payment Amount (less Applicable Withholding Amount) is paid to the RSU Plan Participant in respect of all such RSUs.

The RSU Plan will terminate on the date upon which no further RSUs remain outstanding provided that such termination is confirmed by a resolution of the Compensation Committee.

Perquisites and Personal Benefits

Named Executive Officers who are employees of the Company are eligible to participate in the Company's various benefit programs on the same basis as other employees of the Company. Those Named Executive Officers receive the following perquisites and personal benefits: a corporate contribution to the employee's registered retirement savings account at an amount equal to 5% of the employee's base salary; and participation in the Company's group benefit plan, which includes the payment by the Company of life insurance premiums for an insured benefit equal to one times salary, accidental death and dismemberment insurance coverage for an insured benefit equal to one times salary and dental and extended health coverage for the employee and his or her immediate family. For information regarding perquisites and personal benefits relating to specific Named Executive Officers, see "*Summary Compensation Table – Discussion – Employment Agreements*". While these perquisites and personal benefits do not significantly affect the Company's decisions about other elements of compensation, the Compensation Committee considers such perquisites and personal benefits necessary to attract highly qualified individuals at the executive level.

Termination and Change of Control Provisions

All of the Named Executive Officers have termination and change of control provisions in their employment agreements. The events that trigger payment under these arrangements were determined through negotiation of such employment agreements at the time they were entered into. See also "*Employment Agreements*" and "*Termination and Change of Control Benefits*" below.

Summary Compensation Table

The following table (presented in accordance with Form 51-102F6 – Statement of Executive Compensation ("Form 51-102F6") under National Instrument 51-102 – *Continuous Disclosure Obligations* ("NI 51-102")) sets forth all direct and indirect compensation for, or in connection with, services provided to the Company for the fiscal years ended December 31, 2019, December 31, 2018, December 31, 2017 (four month transition period from September 1, 2017 to December 31, 2017) and August 31, 2017 in respect of the Chief Executive Officer, the Chief Financial Officer and the other two most highly compensated executive officers of the Company (the "Named Executive Officers").

Name and principal position	Fiscal Year ⁽¹⁾	Salary (\$)	Share based awards (\$)	Option-based awards (\$)	Non-equity incentive plan compensation (\$)		Pension value (\$)	All other compensation (\$)	Total compensation (\$)
					Annual incentive plans	Long-term incentive plans			
Scott Nelson ⁽²⁾ <i>President and Chief Executive Officer</i>	2019 (Dec 31)	325,000 ⁽⁵⁾	Nil	202,200 ⁽³⁾⁽⁷⁾	108,500	Nil	N/A	32,200 ⁽⁷⁾	667,900
	2018 (Dec 31)	300,000 ⁽⁵⁾	Nil	188,600 ⁽³⁾⁽⁶⁾	105,700	Nil	N/A	32,000	626,300
	2017 (Dec 31)	86,700 ⁽⁵⁾	Nil	20,300	Nil	Nil	N/A	10,200	117,200
	2017 (Aug 31)	260,000 ⁽⁵⁾	Nil	440,600 ⁽³⁾⁽⁴⁾	101,950	Nil	N/A	34,100	836,650
Jennifer Kaufield <i>Vice President, Finance and Chief Financial Officer</i>	2019 (Dec 31)	175,800 ⁽⁵⁾	Nil	136,300 ⁽³⁾⁽⁷⁾	66,000	Nil	N/A	9,500 ⁽⁷⁾	387,600
	2018 (Dec 31)	200,400 ⁽⁵⁾	Nil	184,900 ⁽³⁾⁽⁶⁾	74,750	Nil	N/A	10,500	470,600
	2017 (Dec 31)	72,100 ⁽⁵⁾	Nil	10,900	Nil	Nil	N/A	4,000	87,000
	2017 (Aug 31)	123,350 ⁽⁴⁾	Nil	214,600 ⁽³⁾⁽⁴⁾	80,000	Nil	N/A	16,100	434,050
Kevin Moran <i>Executive Vice President and Chief Technology Officer</i> ⁽⁸⁾	2019 (Dec 31)	275,000	Nil	155,300 ⁽³⁾⁽⁷⁾	85,000	Nil	N/A	22,500 ⁽⁷⁾	537,800
	2018 (Dec 31)	275,000	Nil	208,500 ⁽³⁾⁽⁶⁾	98,400	Nil	N/A	23,300	605,200
	2017 (Dec 31)	91,700	Nil	40,000	40,000	Nil	N/A	10,000	181,700
	2017 (Aug 31)	275,000	Nil	320,100 ⁽³⁾⁽⁴⁾	50,000	Nil	N/A	20,800	615,900
Niel Erasmus <i>Vice President, Mineral Sands</i> ⁽⁹⁾	2019 (Dec 31)	220,000	Nil	70,300 ⁽³⁾⁽⁷⁾	47,000	Nil	N/A	15,800	282,800
	2018 (Dec 31)	200,000	Nil	110,100 ⁽³⁾⁽⁶⁾	57,600	Nil	N/A	15,600	383,300
	2017 (Dec 31)	66,700	Nil	50,000	25,000	Nil	N/A	5,400	147,100
	2017 (Aug 31)	41,667	Nil	179,100 ⁽³⁾	Nil	Nil	N/A	3,645	224,412

Notes:

- On January 24, 2018, the Company changed its fiscal year end to December 31 from August 31. Information referenced in the row "2017 (Dec 31)" is for the four month transition year ended December 31, 2017.
- Scott Nelson is entitled to a \$12,000 per year vehicle allowance in addition to a registered retirement savings plan entitlement representing 5% of base pay. Mr. Nelson did not receive any compensation in his role as a director of the Company.
- As the Company's RSUs issued after February 12, 2015, being the last date that any amendments to the RSU Plan was approved by Shareholders, require an exercise price to be paid prior to issuance, the RSUs have been classified as "option-based awards" for the purposes of this Statement of Executive Compensation since the RSUs have "option-like features" for the purposes of the definition of "option-based awards" in Form 51-102F6.
- For the year ended August 31, 2017, the Board awarded: (i) Mr. Nelson an aggregate bonus and retention payment of \$256,000, of which \$154,050 was settled in RSUs; (ii) Ms. Kaufield a aggregate bonus and retention payment of \$160,000, of which \$80,000

was settled in RSUs; and (iii) Mr. Moran an aggregate bonus and retention payment in the amount of \$199,000, of which \$149,000 was settled in RSUs. Mr. Moran's RSUs were priced at \$1.37 (being the closing price per Share on the Exchange on July 25, 2017) and settled through the issuance of 108,759 RSUs. Mr. Nelson's and Ms. Kauffield's RSUs were priced at \$1.20 (being the closing price per Share on the Exchange on January 2, 2018) and settled through the issuance of 195,042 RSUs. All of the RSUs vested immediately and have an exercise price of \$0.0001 per RSU. Mr. Moran's RSUs expire on July 25, 2027 and Mr. Nelson's and Ms. Kauffield's RSUs expire on January 2, 2028.

- (5) Commencing May 1, 2015, as a part of the Company's cost savings measures, Mr. Nelson and Ms. Kauffield voluntarily elected to receive 20% of their annual salary in the form of RSUs, which amounts were agreed to be paid quarterly. As a result, the salaries noted for each of Mr. Nelson and Ms. Kauffield for the years or periods ended August 31, 2017, December 31, 2017, 2018 and 2019 have been adjusted in the salary column to reflect the amount of salary paid in cash. The percentage of Mr. Nelson's and Ms. Kauffield's annual salaries that were paid in RSUs has been reflected in the option-based awards column. In December 2017, the Compensation Committee resolved to pay \$31,250 of Mr. Nelson's annual salary in the form of RSUs, which amount was agreed to be paid quarterly, and to commence paying all of Ms. Kauffield's salary in cash, commencing January 1, 2018. Due to RSU Plan limits, only 75% (\$23,200) of Mr. Nelson's \$31,250 was settled with RSUs during the year ended December 31, 2018. As a result, the salary noted for Mr. Nelson for the year ended December 31, 2018 has been adjusted in the salary column to reflect the amount of salary paid in cash. The \$23,400 of annual salary of Mr. Nelson which was paid in RSUs has been reflected in the option-based awards column.
- (6) For the year ended December 31, 2018, the Board awarded: (i) Mr. Nelson an aggregate bonus and retention payment of \$269,000, of which \$169,300 was payable in RSUs and \$99,700 was payable in cash; (ii) Ms. Kauffield a bonus and retention payment of \$149,500, of which \$74,750 was settled in cash and \$74,750 was settled in RSUs; (iii) Mr. Moran an aggregate bonus and retention payment of \$196,800, of which \$98,400 was settled in cash and \$98,400 was settled in RSUs; and (iv) Mr. Erasmus an aggregate bonus and retention payment of \$57,600, all of which was settled in cash. As at December 31, 2018, there were 328,715 RSUs available to settle compensation awards with Management. Given the Company's equity constraints, Mr. Nelson decided to forgo the RSU compensation of \$169,300 awarded to him and allocated the remaining RSUs to settle Mr. Moran's and Ms. Kauffield's RSU incentive compensation. Mr. Moran's and Ms. Kauffield's RSUs were issued on January 3, 2019 and were priced at \$0.53, being the closing price per Share on the Exchange on December 31, 2018. All of the RSUs vested immediately and have an exercise price of \$0.0001 per RSU expiring 10 years following the grant date on January 3, 2029.
- (7) For the year ended December 31, 2019, the Board awarded: (i) Mr. Nelson an aggregate bonus and retention payment of \$217,000, of which \$108,500 was settled in cash and \$108,500 is to be settled RSUs; (ii) Ms. Kauffield a aggregate bonus and retention payment of \$132,000, of which \$66,000 was settled in cash and \$66,000 is to be settled RSUs; (iii) Mr. Moran an aggregate bonus and retention payment in the amount of \$170,000, of which \$85,000 was settled in cash and \$85,000 is to be settled RSUs; and (iv) Mr. Erasmus an aggregate bonus payment of \$47,000, which was settled in cash. As at January 30, 2020, there were 130,096 RSUs available to settle compensation awards with Management. Given the Company's equity constraints, the Board approved the Management Compensation Deferral in order to defer the grant and pricing of all RSUs to Management payable pursuant to the bonus and retention payments outlined herein until such time as there are sufficient Shares available to be reserved for issuance pursuant to the RSUs under the RSU Plan. As such, the dollar amounts representing the Management Compensation Deferral have been included under "All other compensation".
- (8) Mr. Moran was promoted to the role of Executive Vice President and Chief Technology Officer on June 12, 2017.
- (9) Mr. Erasmus commenced employment with the Company as Vice President, Mineral Sands on June 15, 2017.

Discussion

Significant factors necessary to understand the information disclosed in the Summary Compensation Table above include the terms of each Named Executive Officer's employment/consulting agreement.

Employment Agreements

Scott Nelson – Scott Nelson, President and Chief Executive Officer of the Company, entered into an employment agreement with the Company effective January 1, 2010. Pursuant to this agreement, Mr. Nelson's employment shall continue indefinitely until terminated in accordance with the terms of the employment agreement. Mr. Nelson's annual base salary under the agreement was \$300,000, which has been reviewed annually and may, in the discretion of the Board, be increased. On October 31, 2011, it was determined by the Company that Mr. Nelson's base pay was increased to \$325,000 per annum effective January 1, 2012. Effective May 1, 2015, as a part of the Company's cost savings measures, Mr. Nelson voluntarily elected to receive 20% of his annual salary in the form of RSUs, which amount was agreed to be paid quarterly. Effective January 1, 2018, the Compensation Committee determined that Mr. Nelson would receive \$31,250 of his annual salary in the form of RSUs, which amount was agreed to be paid quarterly. The Company reached its RSU 2% limit during the fiscal year of 2018 and Mr. Nelson received \$23,400 in the form of RSUs. Effective January 1, 2019 the Company determined that it would reinstate Mr. Nelson's base salary to \$325,000.

Mr. Nelson is eligible for an annual bonus of up to 65% of his annual base salary. The granting and amount of any such annual bonus is in the sole discretion of the Board. For the year ended December 31, 2019, the Board awarded Mr. Nelson an aggregate bonus and retention payment of \$217,000, of which \$108,500 was paid in cash on January 31, 2020 and \$108,500

is to be settled through the issuance of RSUs at a future date given the Company's equity constraints and the Management Compensation Deferral approved by the Board noted above.

As Chief Executive Officer, Mr. Nelson's specific objectives are set annually and reviewed by the Compensation Committee. For the fiscal year ended December 31, 2019, such specific objectives included developing strategic and annual business plans; program formulation and advancement of the Company's commercialization and implementation of its technology at an oilsand site; arranging grant funding for research and development programs managing programs to budget targets and reducing overhead costs.

The Company may immediately terminate Mr. Nelson's employment for "Cause" as that term is defined in the agreement. The agreement also provides that Mr. Nelson can resign on 90 days advance written notice. The Company may also terminate the agreement at any time for any reason other than "Cause" but termination payments are required. See "*Termination and Change of Control Benefits*" below.

Jennifer Kaufield – The Company entered into an employment agreement with Jennifer Kaufield as Vice President, Finance and Chief Financial Officer effective March 1, 2010. The agreement provides that her employment shall continue indefinitely until terminated in accordance with the agreement. Ms. Kaufield's compensation is based on a daily rate of \$800 which was reviewed annually and may, in the discretion of the Board, be increased. On October 31, 2011, it was determined by the Board that Ms. Kaufield's daily rate effective January 1, 2012 would be increased to \$960. Effective September 1, 2016, the Company amended Ms. Kaufield's employment agreement to, *inter alia*, provide for: (i) her to receive 20% of her annual salary in the form of RSUs, which amount was agreed to be paid quarterly; and (ii) her eligibility for an annual bonus of up to 40% of her daily salary aggregated over a 12 month period. Effective January 1, 2018, the Compensation Committee determined that Ms. Kaufield's hourly effective rate would be \$138 per hour and would be paid in cash. The granting and amount of any annual bonus is in the sole discretion of the Board. Ms. Kaufield was awarded an annual bonus in respect of the fiscal year ended December 31, 2019 in the amount of \$132,000, of which \$66,000 was paid in cash on January 31, 2020 and \$66,000 is to be settled through the issuance of RSUs at a future date given the Company's equity constraints and the Management Compensation Deferral approved by the Board noted above. Ms. Kaufield is entitled to receive vacation pay equal to 5% of the daily salary paid and a monthly payment by the Company of a contribution to her retirement savings plan in an annual amount that is equal to 5% of the daily salary paid.

The Company may immediately terminate Ms. Kaufield's employment for "Just Cause" as that term is defined in her employment agreement. The agreement provides that, if the Company should terminate Ms. Kaufield's employment for "Just Cause", she will be paid her daily salary earned for services rendered up to and including the termination date, plus any accrued vacation pay and reimbursable expenses owing up to and including the termination date. Subsequent to the year ended August 31, 2015, the Board approved an amendment to Ms. Kaufield's employment agreement to provide for a retiring allowance equal to 12 months of her annual aggregate daily salary as at the termination date if her employment is terminated for any reason other than for "Just Cause". The agreement also provides that Ms. Kaufield can resign on 90 days advance written notice. See "*Termination and Change of Control Benefits*" below.

Kevin Moran – The Company entered into an employment agreement with Kevin Moran as Vice President, Process Development effective June 30, 2008. The agreement provides that his employment shall continue indefinitely until terminated in accordance with the agreement. Mr. Moran's initial annual base salary under the agreement was \$185,000, which was increased to \$215,000 effective June 30, 2010, and subsequently increased again to \$225,750 effective June 30, 2011 and to \$275,000 effective October 1, 2015. Mr. Moran's annual base salary is reviewed annually and may, in the discretion of the Board, be increased.

Mr. Moran is eligible for an annual bonus of up to 40% of his annual base salary. The granting and amount of any such annual bonus is in the sole discretion of the Board. Specific achievement objectives are set and reviewed annually. For the fiscal year ended December 31, 2018, such objectives included technical management and advancement of research programs; achievement and testing of viable technical solutions; and planning and execution of commercialization plans. Mr. Moran was awarded an annual bonus in respect of the fiscal year ended December 31, 2019 in the amount of \$70,000 and a retention bonus of \$100,000 in respect of the fiscal year ended December 31, 2019. In aggregate, \$85,000 of the compensation was paid in cash on January 31, 2020 and \$85,000 is to be settled through the issuance of RSUs at a future date given the Company's equity constraints and the Management Compensation Deferral approved by the Board noted above. Mr. Moran was paid retention payments under his employment agreement of \$100,000 on the sixth, seventh, eighth and ninth anniversaries of the agreement, settled with 50% cash and 50% RSUs, as he was still actively employed by the Company on each of June 30, 2014, June 30, 2015, June 30, 2016 and June 30, 2017.

Mr. Moran is also entitled to a monthly payment by the Company of a contribution to his registered retirement savings plan in an annual amount that is equal to 5% of his annual base salary.

The Company may immediately terminate Mr. Moran's employment for "Just Cause" as that term is defined in the agreement. The agreement also provides that Mr. Moran can resign on 90 days advance written notice. The Company may also terminate the agreement at any time for any reason other than "Just Cause" but termination payments are required. See "*Termination and Change of Control Benefits*" below.

Niel Erasmus – The Company entered into an employment agreement with Niel Erasmus as Vice President, Mineral Sands effective June 15, 2017. The agreement provides that his employment shall continue indefinitely until terminated in accordance with the agreement. Mr. Erasmus' initial annual base salary under the agreement is \$200,000. Mr. Erasmus' annual base salary will be reviewed annually and may, in the discretion of the Board, be increased. Effective January 1, 2019, Mr. Erasmus's base salary was increased to \$220,000.

Mr. Erasmus is eligible for an annual bonus of up to 30% of his annual base salary. The granting and amount of any such annual bonus is in the sole discretion of the Board. Specific achievement objectives will be set and reviewed annually. For the fiscal year ended December 31, 2019, such objectives included the management of the Company's front-end engineering design study project. Mr. Erasmus was awarded an annual bonus in respect of the fiscal year ended December 31, 2019 in the amount of \$47,000, which was paid in cash on January 31, 2020.

Mr. Erasmus is also entitled to a monthly payment by the Company of a contribution to his registered retirement savings plan in an annual amount that is equal to 5% of his annual base salary.

The Company may immediately terminate Mr. Erasmus' employment for "Just Cause" as that term is defined in the agreement. The agreement also provides that Mr. Erasmus can resign on 90 days advance written notice. The Company may also terminate the agreement at any time for any reason other than "Just Cause" but termination payments are required. See "*Termination and Change of Control Benefits*" below.

Incentive Plan Awards

Outstanding Share based Awards and Option based Awards

The following table sets forth for each Named Executive Officer all awards outstanding at the end of the most recently completed fiscal year, including awards granted before the most recently completed fiscal year.

Name	Option-based Awards ⁽⁵⁾				Share-based Awards		
	Number of securities underlying unexercised options (#)	Option exercise price (\$)	Option expiration date	Value of unexercised in-the-money options (\$)	Number of Shares or units of Shares that have not vested (#)	Market or payout value of share-based awards that have not vested (\$)	Market or payout value of vested share-based awards not paid out or distributed (\$) ⁽⁶⁾
Scott Nelson <i>President and Chief Executive Officer</i>	10,280	0.0001 ⁽⁵⁾	October 1, 2028	N/A	N/A	N/A	459,600
	9,301	0.0001 ⁽⁵⁾	June 30, 2028	N/A			
	8,401	0.0001 ⁽⁵⁾	March 31, 2028	N/A			
	128,375	0.0001 ⁽⁵⁾	January 2, 2028	N/A			
	15,273	0.0001 ⁽⁵⁾	December 1, 2027	N/A			
	15,388	0.0001 ⁽⁵⁾	September 1, 2027	N/A			
	21,382	0.0001 ⁽⁵⁾	June 1, 2027	N/A			
	35,022	0.0001 ⁽⁵⁾	March 1, 2027	N/A			
	324,219	0.0001 ⁽⁵⁾	December 29, 2026	N/A			
	40,625	0.0001 ⁽⁵⁾	December 1, 2026	N/A			
	31,738	0.0001 ⁽⁵⁾	September 1, 2026	N/A			
	16,601 ⁽⁴⁾	0.0001 ⁽⁵⁾	June 1, 2026	N/A			
	600,000 ⁽¹⁾	0.41	February 16, 2021	174,000 ⁽³⁾			
	300,000 ⁽²⁾	1.07	April 21, 2022	Nil ⁽³⁾			
300,000 ⁽²⁾	0.80	April 30, 2023	Nil ⁽³⁾				
200,000 ⁽²⁾	0.69	June 9, 2024	2,000 ⁽³⁾				
Jennifer Kauffield <i>Chief Financial Officer</i>	141,038	0.0001 ⁽⁵⁾	January 3, 2029	N/A	N/A	N/A	292,700
	66,667	0.0001 ⁽⁵⁾	January 2, 2028	N/A			
	8,214	0.0001 ⁽⁵⁾	December 1, 2027	N/A			
	5,379	0.0001 ⁽⁵⁾	September 1, 2027	N/A			
	8,750	0.0001 ⁽⁵⁾	June 1, 2027	N/A			
	16,853	0.0001 ⁽⁵⁾	March 1, 2027	N/A			
	166,667	0.0001 ⁽⁵⁾	December 29, 2026	N/A			
	4,664 ⁽⁴⁾	0.0001 ⁽⁵⁾	December 1, 2026	N/A			
	200,000 ⁽¹⁾	0.41	February 16, 2021	58,000 ⁽³⁾			
	150,000 ⁽²⁾	1.07	April 21, 2022	Nil ⁽³⁾			
	200,000 ⁽²⁾	0.80	April 30, 2023	Nil ⁽³⁾			
150,000 ⁽²⁾	0.69	June 9, 2024	1,500 ⁽³⁾				
Kevin Moran <i>Executive Vice President and Chief Technology Officer</i>	185,660	0.0001 ⁽⁵⁾	January 3, 2029	N/A	N/A	N/A	366,100
	33,333	0.0001 ⁽⁵⁾	January 2, 2028	N/A			
	108,759	0.0001 ⁽⁵⁾	July 25, 2027	N/A			
	177,237	0.0001 ⁽⁵⁾	August 2, 2026	N/A			
	18,027 ⁽⁴⁾	0.0001 ⁽⁵⁾	October 21, 2025	N/A			
	400,000 ⁽¹⁾	0.41	February 16, 2021	116,000 ⁽³⁾			
	250,000 ⁽²⁾	1.07	April 21, 2022	Nil ⁽³⁾			
200,000 ⁽²⁾	0.80	April 30, 2023	Nil ⁽³⁾				
150,000 ⁽²⁾	0.69	June 9, 2024	1,500 ⁽³⁾				
Niel Erasmus <i>Vice President, Mineral Sands</i>	41,667	0.0001 ⁽⁵⁾	January 2, 2028	N/A	N/A	N/A	29,200
	200,000 ⁽²⁾	1.37	July 25, 2022	Nil			
	200,000 ⁽²⁾	0.80	April 30, 2023	Nil ⁽³⁾			
	150,000 ⁽²⁾	0.69	June 9, 2024	1,500 ⁽³⁾			

Notes:

- (1) Vesting of such options occurs over 18 months with one-sixth vesting every three months following the date of grant.
- (2) Vesting of such options occurs over three years with one-third vesting every 12 months following the date of grant.
- (3) The value of unexercised options was calculated using the closing price of the Shares on December 31, 2019, which was \$0.70 per Share, less the exercise price of the options.
- (4) On December 15, 2016, the Company redeemed an aggregate of 700,000 RSUs and 700,000 Shares were issued as follows: (i) Mr. Nelson – 370,000 RSUs redeemed for 370,000 Shares; (ii) Ms. Kauffield – 140,000 RSUs redeemed for 140,000 Shares; and (iii) Mr. Moran – 190,000 RSUs redeemed for 190,000 Shares.
- (5) As the RSUs issued after February 12, 2015 require an exercise price to be paid prior to issuance, the RSUs have been classified as "option-based awards" for the purposes of this Statement of Executive Compensation since the RSUs have "option-like features" for the purposes of the definition of "option-based awards" in Form 51-102F6.
- (6) The value of RSUs was calculated using the closing price of the Shares on December 31, 2019, which was \$0.70 per Share.

Incentive Plan Awards – Value Vested or Earning During the Year

The following table sets forth details of the value vested or earned during the most recently completed fiscal year for each incentive plan award.

Name	Option-based awards - Value vested during the year (\$) ⁽¹⁾⁽²⁾	Share-based awards - Value vested during the year (\$) ⁽²⁾	Non-equity incentive plan compensation - Value earned during the year (\$)
Scott Nelson <i>President and Chief Executive Officer</i>	N/A	N/A	108,500
Jennifer Kaufield <i>Chief Financial Officer</i>	N/A	N/A	66,000
Kevin Moran <i>Executive Vice President and Chief Technology Officer</i>	N/A	N/A	85,000
Niel Erasmus <i>Vice President, Mineral Sands</i>	N/A	N/A	47,000

Notes:

- (1) The value vested during the year of option-based awards was calculated using the closing price of the Shares on April 22, May 1 and July 26 (the first trading day following the vesting date), which was \$0.70, \$0.65 and \$0.75 respectively per Share, less the exercise price of \$1.07, \$0.80 and \$1.37 respectively for the options. There was no value associated with the vested stock option awards during 2019. The value of vested RSUs was calculated based on the difference between the market price of the Shares underlying the RSUs on the vesting date and the exercise price of the RSUs on the vesting date.
- (2) As the RSUs issued after February 12, 2015 require an exercise price to be paid prior to issuance, the RSUs have been classified as "option-based awards" for the purposes of this Statement of Executive Compensation since the RSUs have "option-like features" for the purposes of the definition of "option-based awards" in Form 51-102F6.

Discussion

The significant terms of all plan based awards, including non-equity incentive plan awards, issued or vested, or under which options have been exercised, during the year, or outstanding at year end, are set out above under the heading "*Compensation Discussion and Analysis*".

Pension Plan Benefits

The Company does not have a defined benefit plan or a defined contribution plan for any of its executive officers, nor does it have a deferred compensation plan for any of its executive officers.

Termination and Change of Control Benefits

The following contracts, agreements, plans and arrangements provide for payments to the applicable Named Executive Officers at, following or in connection with any termination (whether voluntary, involuntary or constructive), resignation, retirement, a change in control of the company or a change in such Named Executive Officers' responsibilities:

Scott Nelson – If Mr. Nelson's employment is terminated other than for "Cause" as that term is defined in his employment agreement, the Company is required to pay Mr. Nelson: (i) the accrued and unpaid annual base salary to the date of termination; (ii) all accrued and unused vacation pay owing to date of termination; (iii) a retiring allowance equal to 12 months of his annual base salary as at the termination; (iv) a "service factor" representing one month of salary for each year of completed service up to a maximum of 24, commencing with an initial "service factor" of 12 months for the 2010 calendar year; and (v) a prorated portion of his annual bonus for the year of such termination.

Jennifer Kaufield – If Ms. Kaufield's employment is terminated for any reason other than for "Just Cause" as that term is defined in her employment agreement, the Company is required to pay Ms. Kaufield: (i) her daily salary earned for services to and including the date of termination; (ii) the pro rata annual bonus to the date of termination based on the annual bonus paid in the prior year; (iii) all accrued vacation pay and reimbursable expenses owing to and including the date of termination; and (iv) a retiring allowance equal to 12 months of her annual aggregate daily salary as at the termination date.

Kevin Moran – If Mr. Moran's employment is terminated other than for "Just Cause" as that term is defined in his employment agreement, the Company is required to pay Mr. Moran: (i) the pro rata annual base salary to the date of termination; (ii) all accrued and unused vacation pay and reimbursable expenses owing to date of termination; and (iii) a retiring allowance equal to 12 months of his annual base salary as at the termination date.

Niel Erasmus – If Mr. Erasmus' employment is terminated other than for "Just Cause" as that term is defined in his employment agreement, the Company is required to pay Mr. Erasmus: (i) the pro rata annual base salary to the date of termination; (ii) all accrued and unused vacation pay and reimbursable expenses owing to date of termination; and (iii) a retiring allowance equal to 6 months of his annual base salary as at the termination date plus the average of any annual bonuses awarded to Mr. Erasmus in the two full calendar years prior to the calendar year in which the termination date falls.

For illustrative purposes, if these Named Executive Officers had been terminated on December 31, 2019, the following amounts would have been payable:

Name	Aggregate amount payable for base salary	Aggregate amount payable for bonus ⁽¹⁾	Aggregate amount payable for perquisites and benefits	Option-based awards – Assuming all awards vested ⁽²⁾	Total
Scott Nelson <i>President and Chief Executive Officer</i>	\$568,800	\$108,500	\$Nil	\$176,000	\$853,300
Jennifer Kaufield <i>Chief Financial Officer</i>	\$175,800	\$66,000	\$Nil	\$59,500	\$301,300
Kevin Moran <i>Vice President and Chief Technology Officer</i>	\$275,000	\$85,000	\$Nil	\$117,500	\$477,500
Niel Erasmus <i>Vice President, Mineral Sands</i>	\$110,000	\$47,000	\$Nil	\$1,500	\$163,800

Notes:

- (1) Bonus amounts payable to the Named Executive Officers for the year ended December 31, 2019 disclosed in the table above are based on the bonus amounts paid to such Named Executive Officers, in respect of the period ended December 31, 2019.
- (2) The value of option based awards was calculated using the closing price of the Shares on December 31, 2019, which was \$0.70 per Share, less the exercise price of the options. The table disclosure above provides the value of each Named Executive Officer's options should they vest upon a change of control, assuming that the Board has determined that such vesting of all options should occur. Such accelerated vesting is not provided for under the Name Executive Officers' employment agreements on termination, but may, at the discretion of the Board and on such terms as the Board sees fit, occur on a change of control. On the occurrence of a change in control, the Board may determine to accelerate the vesting of none or only some of the Named Executive Officers' options.

Director Compensation

Director Compensation Table

The following table sets forth all amounts of compensation provided to the Non-Management Directors for the Company's most recently completed financial year.

Name	Fees earned (\$)	Share-based awards (\$) ⁽¹⁾⁽²⁾	Option-based awards (\$)	Non-equity incentive plan compensation (\$)	Pension value (\$)	All other compensation (\$) ⁽²⁾	Total (\$)
David Macdonald (Non-Executive Chairman)	-	116,500	23,400	-	-	-	139,900
Bruce Griffin	-	25,500	34,000	-	-	-	59,500
Moss Kadey	-	41,800	16,400	-	-	-	58,200
Brant Sangster	-	72,800	16,400	-	-	-	89,200
John W. Stevens	-	85,300	16,400	-	-	-	101,700

Notes:

- (1) Non-Management directors have made elections under the DSU Plan to receive 100% of their applicable retainers and fees on a quarterly basis in DSUs in lieu of cash payments. See "*Discussion – Board Fees*" below.
- (2) As at December 31, 2019, the compensation payable to the Non-Management Directors for the quarter ended December 31, 2019 equaled \$86,375, which would have resulted in the Company issuing 116,722 DSUs to such Non-Management Directors (such number of DSUs being calculated based on the five-day volume weighted average price of the Shares on the Exchange for the period ended December 31, 2019). As at December 31, 2019, there were 109,627 DSUs available to settle compensation with Non-Management Directors. Given the Company's equity constraints, the Board resolved to defer the payment of \$5,251 in compensation to the Non-Management Directors (the "**Director Compensation Deferral**") and issue 109,627 DSUs to Non-Management Directors in settlement of \$81,124 of directors' compensation for the quarter ended December 31, 2019, with such DSUs being allocated among such Non-Management Directors on a *pro rata* basis to settle approximately 94% of the compensation owing to such Non-Management Directors for the quarter ended December 31, 2019. As such, the dollar amounts representing the Director Compensation Deferral have been included under "All other compensation".

Discussion

Significant factors necessary to understand the information disclosed in the Director Compensation Table above include board fees and DSUs.

Board Fees

During the fiscal year ended December 31, 2019, each of the Non-Management Directors was entitled to annual compensation in the amount of \$25,000 and the payment of \$1,200 per meeting in connection with attending meetings of the Board and meetings of the Board's committees. The Non-Executive Chairman of the Board was entitled to additional annual compensation in the amount of \$25,000. The Chairman of the Audit Committee was entitled to additional annual compensation in the amount of \$10,000. The Chairman of the Compensation Committee was entitled to additional annual compensation in the amount of \$8,000. On January 24, 2018, the board approved the establishment of the Commercialization Committee. The Chairman of the committee was entitled to additional annual compensation of \$30,000 with member compensation established at \$20,000 per annum.

Non-Management Directors participate in the DSU Plan, pursuant to which Non-Management Directors receive a portion of their compensation in the form of DSUs, which are not redeemable until after a Non-Management Director has retired from the Board. Each Non-Management Director has the right to elect at any time prior to August 15 of each financial year to be credited with DSUs in lieu of all or any part of the annual board retainer, annual chair retainer and any meeting fees otherwise payable to such Non-Management Director in cash in the immediately succeeding financial year. Each Non-Management Director will be credited with the percentage of elected DSUs in lieu of the applicable retainer or fees quarterly in arrears on the last day of each quarter in each year. DSUs will be settled by way of issuance of Shares when the director retires from all positions with the Company, forming a direct alignment between director remuneration and Shareholder interests. Management directors (i.e., Mr. Nelson) are not eligible to participate in the DSU Plan.

During the year ended December 31, 2019, each Non-Management Director received an additional 25% of their aggregate fees for each such quarter as bonus fees, of which 100% of each Non-Management Director's entitlement was settled by the issuance of DSUs. In aggregate, 466,424 DSUs were issued in settlement of \$336,500 in director fees and were priced at a weighted average price of \$0.72, being the greater of: (i) the weighted average price per Share on the Exchange during the five trading days preceding the issuance at the end of each fiscal quarter; and (ii) the closing share price at the end of each fiscal quarter. As noted above, as at December 31, 2019, the compensation payable to the Non-Management Directors for the quarter ended December 31, 2019 equaled \$86,375, which would have resulted in the Company issuing 116,722 DSUs to such Non-Management Directors (such number of DSUs being calculated based on the five-day volume weighted average price of the Shares on the Exchange for the period ended December 31, 2019). As noted above, \$5,251 in compensation remains outstanding to the Non-Management Directors which will be settled through the issuance of DSUs at a future date given the Company's equity constraints and the Director Compensation Deferral approved by the Board noted above.

DSUs

The Company adopted the DSU Plan on December 15, 2013 and the DSU Plan was approved by Shareholders at the annual and special meeting held January 23, 2014 and was subsequently amended, such amendments being approved by Shareholders at the annual and special meeting held February 12, 2015. The purpose of the DSU Plan is to promote the alignment of interests between directors and Shareholders while enabling the Non-Management Directors to participate in the long-term success of the Company through the grant of DSUs.

A summary of the DSU Plan is included in this Circular under the heading "*Statement of Executive Compensation – Compensation Discussion and Analysis – Elements of Compensation – DSU Plan*".

Other Information

There were no repricings or any changes to the terms of the DSU Plan during the fiscal year ended December 31, 2019.

Other than as described below, the Company did not have any other share based or option based award programs for Non-Management Directors in place during the fiscal year ended December 31, 2019.

Incentive Plan Awards for Directors

Outstanding Option Based Awards and Share Based Awards

The following table sets forth for each Non-Management Director all awards outstanding at the end of the most recently completed fiscal year, including awards granted before the most recently completed fiscal year.

Name	Option-based Awards				Share-based Awards		
	Number of securities underlying unexercised options (#)	Option exercise price (\$)	Option expiration date	Value of unexercised in-the-money options ⁽³⁾ (\$)	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested (\$)	Market or payout value of vested share-based awards not paid out or distributed (\$) ⁽⁴⁾
David Macdonald	50,000 75,000 ⁽¹⁾ 50,000 ⁽¹⁾ 100,000 ⁽²⁾	0.69 0.80 1.07 0.41	June 9, 2024 April 30, 2023 April 21, 2022 February 16, 2021	500 - - 29,000	Nil	Nil	428,000
Bruce Griffin ⁽⁵⁾	75,000 ⁽¹⁾	0.67	August 7, 2023	2,300	Nil	Nil	9,200
Moss Kadey	35,000 50,000 ⁽¹⁾ 50,000 ⁽¹⁾ 100,000 ⁽²⁾	0.69 0.80 1.07 0.41	June 9, 2024 April 30, 2023 April 21, 2022 February 16, 2021	400 - - 29,000	Nil	Nil	228,200
Brant Sangster	35,000 50,000 ⁽¹⁾ 50,000 ⁽¹⁾ 100,000 ⁽²⁾	0.69 0.80 1.07 0.41	June 9, 2024 April 30, 2023 April 21, 2022 February 16, 2021	400 - 29,000 -	Nil	Nil	315,600
John W. Stevens	35,000 50,000 ⁽¹⁾ 50,000 ⁽¹⁾	0.69 0.80 1.07	June 9, 2024 April 30, 2023 April 21, 2022	400 - -	Nil	Nil	180,200

Notes:

- (1) Vesting of such options occurs over three years with one-third vesting every 12 months following the date of grant.
- (2) Vesting of such options occurs over 18 months with one-sixth vesting every three months following the date of grant.
- (3) The value of unexercised options was calculated using the closing price of the Shares on December 31, 2019, which was \$0.70 per Share, less the exercise price of the options.
- (4) The value of DSUs was calculated using the closing price of the Shares on December 31, 2019, which was \$0.70 per Share.
- (5) Mr. Griffin was appointed as a director of the Company effective August 7, 2019.

Incentive Plan Awards – Value Vested or Earning During the Year

The following table sets forth details of the value vested or earned by each Non-Management Director during the most recently completed financial year for each incentive plan award.

Name	Option-based awards - Value vested during the year (\$) ⁽¹⁾	Share-based awards - Value vested during the year (\$) ⁽²⁾	Non-equity incentive plan compensation - Value earned during the year (\$)
David Macdonald	Nil	116,500	Nil
Bruce Griffin ⁽³⁾	Nil	25,500	Nil
Moss Kadey	Nil	41,800	Nil
Brant Sangster	Nil	72,800	Nil
John W. Stevens	Nil	85,300	Nil

Notes:

- (1) The value vested during the year of option-based awards was calculated using the closing price of the Shares on April 22 and May 1, 2019 (the first trading day following the vesting date), which was \$0.70 and \$0.65 respectively, per Share, less the exercise price of \$1.07 and \$0.80 respectively for the options. There was no value associated with the vested stock option awards during 2019.
- (2) Non-Management Directors have made elections under the DSU Plan to receive certain percentages of their applicable retainers and fees on a quarterly basis in DSUs in lieu of cash payments. See "*Discussion – Board Fees*" above. The value of the DSUs during the year is calculated using the closing price of the Shares on the vesting date of the applicable DSUs.
- (3) Mr. Griffin was appointed as a director of the Company effective August 7, 2019.

Discussion

The significant terms of all plan based awards, including equity incentive plan awards, issued or vested, or under which options have been exercised, during the year, or outstanding at year end, are set out above in the Compensation Discussion and Analysis. No outstanding options held by directors were exercised during the financial year ended December 31, 2019.

Generally, each year the Board considers whether to grant additional options and/or DSUs to the directors. However, there are no definitive arrangements and such consideration is done after review, consideration and recommendation by the Compensation Committee.

Directors' and Officers' Liability Insurance and Indemnification

The Company maintains directors' and officers' liability insurance (containing industry standard exclusions and deductibles) in order to protect the Company and its directors and officers against any legal action which may arise due to alleged wrongful acts on the part of directors and officers of the Company. In addition, the Company, as provided for in the Company's by-laws, has entered into indemnity agreements with each of its directors and officers. The Board considers it desirable and in the best interests of the Company to enter into these agreements in order to set out the circumstances and manner in which the indemnified party may be indemnified in respect of certain liabilities or expenses which the indemnified party may incur as a result of acting as a director or officer of the Company.

Succession Planning

Attracting, developing and retaining a talented and experienced management team is critical to Titanium's success. The Board, in conjunction with the Compensation Committee, is responsible for reviewing, approving and implementing succession planning processes for Management, including the Chief Executive Officer, and for ensuring that criteria and processes are in place to identify, develop, appoint and retain senior executives that fit Titanium's strategic and operational needs as its business evolves. Succession planning involves two core objectives: (i) to evaluate and determine the Company's strategic and operational needs going forward, and (ii) to identify, develop, appoint and retain senior executives, including the Chief Executive Officer, and key employees to meet those needs.

In developing its succession plans, the Board has focused on two distinct time periods – the period leading up to commercialization during which the activity streams required to enable a commercialization decision to be reached are undertaken and completed ("**Pre-Commercialization Phase**") and the period after an investment decision is made which leads to engineering, procurement, construction and operations ("**Post-Commercialization Phase**"). During the Pre-Commercialization Phase, the Board's focus continues to be on ensuring the development, retention and full engagement of its senior management team. This reflects the intensity of the work activities currently underway, the current state of the Company's progress towards commercialization, the relative uniqueness of the experience and expertise developed within the team and the fact the Company's senior management team is small and functionally organized, with limited overlap. The Board has encouraged, and the Chief Executive Officer has actively sought, ways to provide senior management with

development opportunities, mentorship and enhanced responsibilities outside their core functional responsibilities to help accelerate their professional growth, to ensure a level of shared knowledge and experience and to build multiple customer, supplier and Government relationships across the senior management team. During this period, the Chief Executive Officer, with 15 years of experience and trusted relationships in advancing Titanium's CVW™ technology to commercialization, continues to play a key leadership role.

With the completion of the FEED project, the award of \$50 million of Government grants and continuing progress in other activity streams towards commercialization of a first project at Canadian Natural's Horizon site, succession planning for the Post-Commercialization Phase continues to be an area of importance. The Board and the Chief Executive Officer are working together to develop succession plans for the Board and senior management, including the Chief Executive Officer. This plan is also expected to identify areas where additional management resources will be required as the Company moves to the Post-Commercialization Phase, identify the attributes, skills and experience sets required to meet the Company's new strategic, operational and investor needs and develop processes to identify, attract and appoint strong qualifying candidates to fill these roles. Unless and until an investment decision is made and a business model is finalized, the additional management resources required cannot be defined with certainty. In this context, the Board has adopted a broad perspective on what commercialization may look like and has considered a wide range of potential business model outcomes.

The Board, in conjunction with the Compensation Committee, is also reviewing whether and how the size, composition and structure of the Board might be changed as the Company moves to the Post-Commercialization Phase, to ensure that it has the skills, experience, relationships and structure to provide effective oversight of management and, where appropriate, to assist management in achieving the Company's objectives. The Company has not adopted any Board term limits or other specific mechanisms for Board renewal (see "*Statement of Corporate Governance Practices – Nomination of Directors*").

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table details all compensation plans under which equity securities of the Company are authorized for issuance as at December 31, 2019:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders ⁽¹⁾	4,755,000 Shares issuable pursuant to Options 1,769,616 Shares issuable pursuant to DSUs 1,639,520 Shares issuable pursuant to RSUs	\$0.73 Options Nil DSUs \$0.0001 RSUs	683,943
Equity compensation plans not approved by security holders	N/A	N/A	N/A
Total	8,164,136		683,943

Note:

- (1) For descriptions of the Option Plan, the DSU Plan and the RSU Plan, see "*Statement of Executive Compensation – Compensation Discussion and Analysis – Elements of Compensation – Long-term Incentives – Stock Option Plan*", "*– DSU Plan*" and "*– RSU Plan*", respectively.

INDEBTEDNESS OF DIRECTORS AND OFFICERS

Other than routine indebtedness, no current or former director, officer or employee of the Company or any of its subsidiaries, proposed nominee for election as a director of the Company or any associate or affiliate of any director, officer, employee or proposed nominee is, or at any time during the recently completed fiscal year was, indebted to the Company or any of its subsidiaries (in connection with a purchase of securities or otherwise) or to another entity where the indebtedness was the subject of a guarantee, support agreement, letter of credit or other similar arrangement or understanding provided by the Company or any of its subsidiaries.

INTEREST OF INFORMED PERSONS IN MATERIAL TRANSACTIONS

Except as disclosed under the heading "*Statement of Executive Compensation*", no transaction has been entered into since December 31, 2019 or is proposed to be entered into by the Company involving an officer or director of the Company, a proposed nominee for election as a director of the Company, a principal shareholder of the Company, an informed person (as such term is defined in NI 51-102) or any associate or affiliate of any such person or company which has materially affected or would materially affect the Company or any of its subsidiaries.

STATEMENT OF CORPORATE GOVERNANCE PRACTICES

NI 58-101 requires the Company to disclose annually in its information circular certain information relating to the Company's corporate governance practices.

Board of Directors

The Board currently consists of six (6) directors, five (5) of whom are considered by the Board to be "independent" within the meaning of NI 58-101, thereby facilitating the Board's exercise of independent supervision over Management. The following directors are considered by the Board to be independent: Brant Sangster, David Macdonald, John Stevens, Moss Kadey and Bruce Griffin.

Scott Nelson is Titanium's Chief Executive Officer and is thus not independent.

In determining independence, the Board considers a number of factors, including, but not limited to whether any Board member's relationship with the Company could be reasonably expected to interfere with the exercise of such member's independent judgment.

Directorships

Except as set out below, none of the Company's directors are presently a director of any other issuer that is a reporting issuer (or the equivalent) in Canada or a foreign jurisdiction.

Name	Company
Brant Sangster	Inter Pipeline Ltd.

Orientation and Continuing Education

The Board orients new directors by providing them with background and due diligence information, such as the minutes for the prior year's Board and Audit Committee meetings, a copy of the Exchange's Corporate Finance Manual, information respecting the Board's committees, information regarding directors' and officers' liability insurance, copies of all the Company's governance policies and a memorandum of the duties and liabilities of directors. In addition, new directors meet with the Chairman, the Chief Executive Officer and members of the management team. The Board provides continuing education for directors by arranging for presentations from members of management and outside advisors and circulating materials on new issues and developments, when applicable. Management presents to and refreshes the directors on the strategic plan of the Company.

Ethical Business Conduct

To encourage and promote a culture of ethical business conduct, the Board has adopted a Code of Business Conduct and Ethics (the "**Code**") that is applicable to the Company's employees, officers and directors. The Code requires the reporting of actual or potential violations of the Code or of any law or regulation, whether committed by employees of the Company or by others associated with the Company, to the Chair of the Audit Committee, on a confidential, anonymous basis, if desired. The Audit Committee is responsible for investigating each matter so reported and for taking corrective disciplinary actions, if appropriate, up to and including termination of employment. A copy of the Code is available on SEDAR at www.sedar.com.

Nomination of Directors

The Compensation Committee is responsible for assisting the Board in carrying out its corporate governance and nomination responsibilities. The Compensation Committee's responsibilities include formulating criteria for Board membership;

canvassing Board members for possible candidates; developing a list of potential candidates, as required; and recommending to the Board proposed nominees for election to the Board. The process of identifying new candidates generally involves the Compensation Committee determining the necessary skills required for the Board, and, when a vacancy occurs, the independent directors identifying candidates and then presenting them to the Board as a whole for consideration. The Company has not adopted any Board term limits or other specific mechanisms for Board renewal. At this time, the Board does not believe that it is in the best interest of the Company to establish term limits on a director's mandate or a mandatory retirement age. The Board is of the opinion that term limits may disadvantage the Company through the loss of beneficial contributions of directors who have developed increasing knowledge of the Company, its operations, and the industry over a period of time.

Compensation

The Compensation Committee is also responsible for assisting the Board in fulfilling its oversight responsibilities with respect to human resource and compensation matters. The Compensation Committee's responsibilities include recommending to the Board for approval the remuneration of the Chief Executive Officer, including salary, bonus, options and any other incentive plan; the annual compensation budget for staff of the Company; the number of Shares to be reserved under the Option Plan; the number of options to be granted pursuant to the Option Plan; salaries, target bonus awards, other incentive awards and options for the officers of the Company; implementation of or changes to compensation and benefits policies; and administering the DSU Plan and the RSU Plan. The process for determining compensation generally involves the Compensation Committee reviewing recommendations by management, assessing general sector practices and reviewing the circumstances under which compensation is warranted. Following such considerations, the Compensation Committee recommends to the Board for approval the compensation of the Chief Executive Officer and senior executive officers, including any grants of stock options and RSUs. For more information, see "*Statement of Executive Compensation*" in this Circular.

Other Board Committees

The Board presently has three standing committees being the Audit Committee, the Compensation Committee and the Commercialization Committee.

Commercialization Committee

The Company's Commercialization Committee is presently comprised of David Macdonald (Chair), John W. Stevens and Bruce Griffin. The Commercialization Committee's responsibilities include overseeing the strategy and activities of the Company's management in connection with the development, marketing and commercialization of its CVW™ technologies. The Commercialization Committee oversight mandate is achieved through: (i) the review, on at least an annual basis, of the Company's overall commercialization strategy and plans; (ii) the quarterly monitoring, evaluation and advising of the Board in respect of the Company's performance relative to such strategy and working with management to redress any performance shortfalls; (iii) the review, with management, of the overall marketing strategy and plans for engaging with potential adopters of the Company's CVW™ technologies; (iv) the review, with management, of the overall strategy and plans for engaging with the federal and provincial governments on matters potentially affecting commercialization, including fiscal terms for commodities recovered from tailings, terms of grant funding programs and the submission of grant funding applications; (v) the review and advisement of all material proposals relating to significant technology plans and commercialization made to prospective adopters of the Company's CVW™ technologies and the presentation of final proposals to the Board for approval prior to such proposals being provided to prospective adopters; and (vi) the coordination with management, when required or helpful, on the implementation of commercialization projects and the development of a process for monitoring key milestones during the implementation of commercialization projects and reporting metrics to track actual performance of commercialization projects against initial plans and expectations. Following such considerations, the Commercialization Committee reports to the Board on the activities of the Commercialization Committee and presents for approval all final commercialization project terms and agreements. For more information, see "*Statement of Executive Compensation*" in this Circular.

Assessments

To satisfy itself that the Board, its committees and its individual directors are performing effectively, the Board, through the Chairman, informally determines the needs of the Company as its development proceeds and considers the requisite skills and contribution of the directors at such stage of development. To assist in this assessment, the Compensation Committee facilitates a process which involves a formal director's questionnaire being provided to each director to review the

effectiveness of the Board and to assess if it is meeting its objectives. Assessments have historically been conducted periodically and are expected to be conducted annually commencing with the 2019 assessment. The results of the assessment are summarized by the Corporate Secretary and provided to the Chairman of the Compensation Committee as well as the Chairman of the Board. The Chairman of the Compensation Committee presents a summary of the results to the Board as a whole, with a discussion as to how the Board can improve its effectiveness, and communicates the results of the committee assessment to each committee Chairman. The assessment for 2019 was conducted in the first quarter of 2020.

Other Governance Related Policies

The Board has also adopted a Disclosure and Confidentiality Policy, an Investment Policy, an Insider Trading and Blackout Policy, Whistleblower Policy and Alcohol and Drug Policy.

Diversity Disclosure

The Company's senior management and the members of its Board have diverse backgrounds and expertise and were selected on the belief that the Company and its stakeholders would benefit from such a broad range of talent and experiences. The Board considers merit as the key requirement for board and executive appointments, and as such, it has not adopted any target number or percentage, or a range of target numbers or percentages, respecting the representation of women, Indigenous peoples (First Nations, Inuit, and Métis), persons with disabilities or members of visible minorities (collectively, "**members of designated groups**") on the Board or in senior management roles.

While the Company believes that diversity is important and thus considers diversity when reviewing, identifying and nominating candidates to director or senior management positions, the Company has not adopted a written diversity policy. The Company seeks to attract and maintain diversity at the executive and board of directors levels informally through the recruitment efforts of management in discussion with directors prior to proposing nominees to the Board as a whole for consideration (also see "*Statement of Corporate Governance Practices – Nomination of Directors*"). Considering the size of the Company, the Pre-Commercialization Phase of the Company's business and consistent with its view that all appointments should be made based on merit, the Board has refrained from setting specific diversity targets, including targets regarding the representation of members of designated groups on the Board. The Company currently has one woman serving in a senior management role, representing 25% of the Company's members of senior management and no members of designated groups holding positions on the Board (0%).

AUDIT COMMITTEE INFORMATION

National Instrument 52-110 – *Audit Committees* ("**NI 52-110**") of the Canadian Securities Administrators requires the Company to disclose annually in its information circular certain information relating to the Audit Committee and its relationship with the Company's independent auditors.

The Audit Committee's Charter

The Company's Audit Committee is governed by its audit committee charter, a copy of which is attached hereto as Schedule "B".

Composition of the Audit Committee

The Company's Audit Committee is presently comprised of John Stevens (Chair), David Macdonald and Brant Sangster. As defined in NI 52-110, each of the members of the Audit Committee is "financially literate" and is considered "independent".

Mr. Stevens is both an Ontario qualified lawyer and CPA(CA). He was employed in the public accounting profession from 1978 to 1980 with Clarkson Gordon. He subsequently obtained his law degree from Queen's University in 1983. From September 1982 to April 1983, Mr. Stevens was an associate professor at Queen's University and taught an undergraduate course in accounting offered by the Faculty of Commerce for two semesters. Mr. Stevens joined the Canadian law firm of Osler, Hoskin & Harcourt LLP in 1983, became a partner in the firm in 1991 and, from 1994 to 2000, was the Managing Partner of Osler's New York office. He practised in the corporate and commercial areas with emphasis on securities law, mergers and acquisitions and dealt with a broad range of finance, legal and corporate governance issues servicing the needs of many successful private and public companies. Since 2000, Mr. Stevens has been actively involved in the oversight of the financial management and reporting of Arva Limited's strategic investment companies.

Mr. Macdonald has spent almost 35 years in investment and merchant banking and has been a director of public and private companies and non-profit organizations which has provided him with extensive experience reviewing financial statements.

Mr. Sangster has extensive experience in Canada's energy industry. He retired in 2006 from a 25-year career with Petro-Canada, one of Canada's largest oil and gas companies at the time. In his most recent role as Senior Vice President for Petro-Canada, Mr. Sangster was responsible for the company's oil sands production and development, as well as Petro-Canada's participation in Syncrude. He was also a member of Petro-Canada's Executive Leadership Team, accountable for the effective integration of the planning and execution of oil sands business objectives with overall strategies and activities of Petro-Canada. Mr. Sangster is a director of Inter Pipeline Ltd. and an audit committee member from 2010 to 2017 and was a director of Canadian Oil Sands Limited. Mr. Sangster graduated from Dalhousie University with a Bachelor of Science degree in Chemical Engineering and obtained his ICD.D designation in 2014 from the Institute of Corporate Directors. Mr. Sangster, while a director of Harvest Operations Corporation, was the Chair of the Audit Committee for several months before the eventual sale.

Given the scope and nature of the Company's business, its financial statements and the accounting issues arising therefrom, all of the members of the Audit Committee have an understanding of the accounting principles used by the Company to prepare its financial statements, have the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and reserves and have experience in evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements.

Audit Committee Oversight

Since the commencement of the Company's most recently completed financial year, the Board has not failed to adopt a recommendation of the Audit Committee to nominate or compensate an external auditor.

Reliance on Certain Exemptions

Since the commencement of the Company's most recently completed fiscal year, the Company has not relied on the exemptions contained in section 2.4 or Part 8 of NI 52-110. Section 2.4 provides an exemption from the requirement that the Audit Committee must pre-approve all non-audit services to be provided by the auditors, where the total amount of the fees related to the non-audit services are not expected to exceed 5% of the total fees payable to the auditors in the fiscal year in which the non-audit services were provided. Part 8 permits a company to apply to a securities regulatory authority for an exemption from the requirements of NI 52-110, in whole or in part.

Pre-Approval Policies and Procedures

The Audit Committee has not adopted specific policies and procedures for the engagement of non-audit services. The Audit Committee reviews the engagement of non-audit services as required.

External Auditor Service Fees (By Category)

The fees billed by the Company's external auditor in each of the last two fiscal years for audit fees are as follows:

Fiscal Year Ending	Audit Fees	Audit-Related Fees	Tax Fees	All Other Fees
December 31, 2019	\$50,000	\$2,400	\$9,000	Nil
December 31, 2018	\$48,000	\$2,400	\$6,000	Nil

Services for which "Audit Related Fees" were billed comprised of reviews of the Company's unaudited first, second and third quarter financial statements.

Services for which "Tax Fees" were billed comprised of fees for professional services rendered by the Company's external auditor for tax compliance, tax advice and tax planning and assistance with the Company's scientific research and experimental development claims.

ADDITIONAL INFORMATION

Additional information relating to the Company is available on SEDAR at www.sedar.com and the Company's website at www.titaniumcorporation.com. Financial information is provided in the Company's comparative financial statements and management's discussion and analysis for the year ended December 31, 2019. Shareholders may contact the Chief Financial Officer at the Company's registered office to request copies of the Company's financial statements and management's discussion and analysis.

BOARD APPROVAL

The contents and sending of this Circular have been approved by the directors of the Company.

DATED this 11th day of May, 2020.

BY ORDER OF THE BOARD

"David C.W. Macdonald"

David C.W. Macdonald
Chairman

SCHEDULE "A"

AMENDED AND RESTATED BY-LAW L

A by-law relating generally to the transaction of the business and affairs of

TITANIUM CORPORATION INC.

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**TITANIUM CORPORATION INC.
AMENDED AND RESTATED BY-LAW 1**

**ARTICLE 1
INTERPRETATION**

1.01 Definitions:

In this by-law, unless the context otherwise requires:

- (a) "**Act**" means the *Canada Business Corporations Act* or its successor, as amended from time to time, and the regulations thereunder;
- (b) "**board**" means the board of directors of the Corporation;
- (c) "**by-law**" means a by-law of the Corporation;
- (d) "**Corporation**" means Titanium Corporation Inc. and its successors;
- (e) "**holiday**" means Saturday, Sunday and any other day that is a holiday as defined in the *Interpretation Act* (Canada) or its successor, as amended from time to time;
- (f) "**person**" includes an individual, body corporate, sole proprietorship, partnership or syndicate, an unincorporated association or organization, a joint venture, trust or employee benefit plan, a government or any agency or political subdivision thereof, and a person acting as trustee, executor, administrator or other legal representative;
- (g) "**recorded address**" means, with respect to a single shareholder, the address of such holder most recently recorded in the securities register of the Corporation; with respect to joint shareholders, the first address appearing in the securities register in respect of their joint holding; and with respect to any other person, but subject to the Act, the address of such person most recently recorded in the records of the Corporation or otherwise known to the Secretary of the Corporation; and
- (h) "**shareholder**" means a shareholder of the Corporation.

Terms defined in the Act, unless otherwise defined herein or the context otherwise requires, shall have the same meaning herein as in the Act.

1.02 Number, Gender and Headings:

Words importing the singular include the plural and vice-versa, words importing any gender include the masculine, feminine and neuter genders, and headings are for convenience of reference only and shall not affect the interpretation of the by-laws.

1.03 By-laws Subordinate to Other Documents:

The by-laws are subordinate to, and should be read in conjunction with, the Act and the articles of the Corporation.

1.04 Computation of Days:

The computation of time and any period of days shall be determined in accordance with the Act and the provisions of the *Interpretation Act* (Canada) or its successor, as amended from time to time.

**ARTICLE 2
MEETINGS OF SHAREHOLDERS**

2.01 Meetings:

A meeting of the shareholders shall be held at such place, at such time, on such day and in such manner as the board may, subject to the Act and any other applicable laws, determine from time to time, for the purpose of transacting such business as is properly brought before such meeting.

2.02 Persons Entitled to be Present:

The only persons entitled to attend a meeting of shareholders shall be those persons entitled to notice thereof, those entitled to vote thereat, the directors, the auditors of the Corporation and any others who although not entitled to notice thereof or to vote thereat are entitled or required under any provision of the Act, the articles or any by-law to be present at the meeting. Any other persons may be admitted only on the invitation of the chairman of the meeting or with the consent of the meeting.

2.03 Participation in meeting by electronic means:

If the directors of the Corporation call a meeting of shareholders and the Corporation makes available a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during the meeting, any person entitled to attend that meeting of shareholders may participate in the meeting, in accordance with the Act, by means of such communication facility. A person participating in the meeting by such means shall be deemed to be present at the meeting.

2.04 Electronic meetings:

Subject to the Act and the consent of the directors, if the directors or the shareholders of the Corporation call a meeting of shareholders pursuant to the Act, the directors or the shareholders, as the case may be, may determine that the meeting shall be held entirely by a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during the meeting. The directors may establish procedures regarding the holding of meetings of shareholders by such means.

2.05 Chairman, Secretary and Scrutineer:

The Chairman of the board or such other person being an officer or director of the Corporation designated by the board, shall be chairman of any meeting of shareholders. If no such person is present within 15 minutes after the time appointed for the holding of the meeting, the persons present and entitled to vote shall choose one of their number to be chairman of the meeting. The Secretary or any other officer in attendance shall act as secretary of the meeting. If none of such persons are present, the chairman shall appoint another person, who need not be a shareholder, to act as secretary of the meeting. One or more scrutineers, who need not be shareholders, may be appointed by the chairman or by a resolution of the shareholders.

2.06 Quorum:

The quorum for the transaction of business at any meeting of shareholders shall be at least two persons present at the opening of the meeting who are entitled to vote thereat either as shareholders or proxyholders.

2.07 Voting:

- (a) Except as otherwise required by the Act, the articles or a by-law, at each meeting of shareholders every question proposed for consideration by the shareholders shall be decided by a majority of the votes duly cast thereon.

- (b) At each meeting of shareholders, voting shall be by show of hands unless a ballot is required by the chairman or demanded by a shareholder or proxyholder entitled to vote at the meeting. Upon a show of hands, every person present and entitled to vote on the show of hands shall have one vote on the show of hands. Whenever a vote by show of hands has been taken upon a question, unless a ballot or such question is required or demanded and such requirement or demand is not withdrawn, a declaration by the chairman of the meeting that the vote upon the question was carried, carried by a particular majority, not carried or not carried by a particular majority, and an entry to that effect in the minutes of the meeting, shall be prima facie evidence of the result of the vote without proof of the number or proportion of votes cast for or against.
- (c) On any question proposed for consideration at a meeting of shareholders, a ballot may be required by the chairman or demanded by any person present and entitled to vote, either before or after any vote by show of hands. If a ballot is so required or demanded and such requirement or demand is not withdrawn, a poll upon the question shall be taken in such manner as the chairman of the meeting shall direct. Subject to the articles, upon a ballot each person present shall be entitled to one vote in respect of each share which such person is entitled to vote at the meeting on the question.
- (d) Any vote referred to in this Section 2.07 may be held, in accordance with the Act, partially or entirely by means of a telephonic, electronic or other communication facility, if the Corporation has made available such a facility in accordance with the Act. Any person participating in a meeting of shareholders under Section 2.03 or 2.04 and entitled to vote at the meeting may vote, in accordance with the Act, by means of the telephonic, electronic or other communication facility that the Corporation has made available for such purpose in accordance with the Act.

2.08 Proxies:

- (a) Signatures to instruments of proxy need not be witnessed and may be printed, lithographed, electronically produced as permitted by the Act or otherwise reproduced thereon. The chairman of the meeting shall determine the authenticity of all signatures.
- (b) The board may also permit particulars of instruments of proxy for use at or in connection with any meeting or any adjournment thereof to be transmitted by facsimile, telegraphed, telexed, cabled or otherwise electronically transmitted to the Secretary of the Corporation or such other agent as the board may from time to time determine prior to any such meeting, and, in such event, such instruments of proxy, if otherwise in order, shall be valid and any votes cast in accordance therewith shall be counted.
- (c) The chairman of any meeting of shareholders may also in his or her discretion, unless otherwise determined by resolution of the board, accept (i) instruments of proxy which have been transmitted by facsimile, telegraphed, telexed, cabled or otherwise electronically transmitted and (ii) facsimile, telegraphic, telex, cable or electronic communication as to the authority of anyone claiming to vote on behalf of or to represent a shareholder, in each case whether or not an instrument of proxy conferring such authority has been lodged with the Corporation, and any votes cast in accordance with such facsimile, telegraphic, telex, cable or electronic proxy or communication accepted by the chairman shall be valid and shall be counted.
- (d) A proxy may be signed and delivered in blank and filled in afterwards by the Chairman of the board, the President or the Secretary.
- (e) It shall not be necessary to insert in the proxy the number of shares owned by the appointor.
- (f) The board may, at the Corporation's expense, send out forms of proxy in which certain directors or officers are named, which may be accompanied by stamped envelopes for the return of the forms, even if the directors so named vote the proxies in favour of their own election as directors.
- (g) A proxy shall be acted upon only if it shall have been deposited with the Corporation or an agent thereof specified in the notice calling the meeting of shareholders prior to the time specified in the notice or such later time before the time of voting as the chairman of the meeting may determine, or, where no such time is

specified in such notice, if it has been received by the Corporation or an agent thereof or the chairman of the meeting or any adjournment thereof before the time of voting.

(h) A proxy is valid only at the meeting in respect of which it is given or any adjournment thereof.

2.09 Procedure at Meetings:

The chairman of any meeting of shareholders shall conduct the procedure thereat in all respects and his or her decision on all matters or things, including but without in any way limiting the generality of the foregoing, any question regarding the validity or invalidity of any instruments of proxy or ballot, shall be conclusive and binding upon the shareholders, except as otherwise provided in the by-laws of the Corporation. Any business may be brought before or dealt with at any adjourned meeting which may have been brought before or dealt with at the original meeting.

**ARTICLE 3
DIRECTORS**

3.01 Meetings:

Meetings of the board may be convened at such place, at such time, on such day and in such manner as any two directors or the Chief Executive Officer or any other officer designated by the board may determine.

3.02 Notice:

Notice of the time and place or manner of participation for every meeting of the board shall be sent to each director not less than 48 hours (excluding holidays) before the time of the meeting. Reference is made to Article Seven.

3.03 First Meeting of New Board:

Each newly constituted board may hold its first meeting without notice on the same day as the meeting of shareholders at which the directors are elected.

3.04 Appointments:

From time to time the board may appoint a Chairman of the board and a Lead Director of the board.

3.05 Chairman:

The Lead Director of the board, if any, or in his or her absence, the Chairman of the board, or in his or her absence, the Chief Executive Officer (if elected a director), or in the absence of all of them, a director designated by the meeting, shall be the chairman of any meeting of the board.

3.06 Quorum of Directors:

The number of directors from time to time required to constitute a quorum for the transaction of business at a meeting of the board shall be two fifths (2/5) of the number of directors so fixed or determined at that time (or, if that is a fraction, the next largest whole number of directors).

3.07 Voting:

At all meetings of the board each director shall have one vote and every question shall be decided by a majority of the votes cast on the question. In the case of an equality of votes, the chairman of the meeting shall not be entitled to a second or casting vote.

3.08 Signed Resolutions:

Any resolution in writing may be signed in counterparts and if signed as of any date shall be deemed to have been passed on such date.

3.09 Remuneration:

Directors may be paid such remuneration for acting as directors and such sums in respect of their out-of-pocket expenses incurred in performing their duties as the board may determine from time to time. Any remuneration or expenses so payable shall be in addition to any other amount payable to any director acting in another capacity and receiving remuneration therefor.

3.10 Committees:

Unless otherwise determined by the board, each committee of the board may fix its quorum, elect its chairman and secretary and adopt rules to regulate its procedure, provided that, the procedure of each committee shall be governed by the provisions of this by-law which govern proceedings of the board so far as the same can apply except that a meeting of a committee may be called by any member thereof (or by any member or the auditor, in the case of the audit committee), notice of any such meeting shall be given to each member of the committee (or each member and the auditor, in the case of the audit committee) and the meeting shall be chaired by the chairman of the committee or, in his or her absence, another member of the committee. In the absence of the secretary of any committee at any meeting, another member of the committee shall so act. Each committee shall keep records of its proceedings and transactions and shall report all such proceedings and transactions to the board in a timely manner.

**ARTICLE 4
OFFICERS AND EMPLOYEES**

4.01 Appointment of Officers:

From time to time the board may appoint a President, one or more Executive Vice- Presidents, one or more Senior Vice-Presidents, one or more Vice-Presidents, a Treasurer, a Secretary, a Controller and such other officers as the board may determine, including one or more assistants to any of the officers so appointed, may designate one officer as Chief Executive Officer of the Corporation and one officer as Chief Financial Officer of the Corporation and may revoke any such designation.

4.02 Terms of Employment or Service:

Every officer shall hold office at the pleasure of the board. The board may settle from time to time the terms of employment of the officers and other persons appointed by it.

4.03 Powers and Duties of Officers:

The board may from time to time specify the duties of each officer, delegate to him or her powers to manage any business or affairs of the Corporation (including the power to sub-delegate) and change such duties and powers, all insofar as not prohibited by the Act. To the extent not otherwise so specified or delegated, and subject to the Act, the duties and powers of the officers of the Corporation shall be those usually pertaining to their respective offices.

**ARTICLE 5
INDEMNIFICATION OF DIRECTORS AND OFFICERS**

5.01 Indemnity:

Subject to the limitations in the Act, but without limitation of the right of the Corporation to indemnify any individual under the Act or otherwise to the full extent permitted by law, the Corporation:

- (a) shall indemnify every director and officer of the Corporation, every former director and officer of the Corporation and every other individual who acts or acted at the Corporation's request as a director or officer, or an individual acting in a similar capacity, of another entity, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by the individual in respect of any civil, criminal, administrative, investigative or other proceeding in which the individual is involved because of that association with the Corporation or other entity, provided:
- (i) the individual acted honestly and in good faith with a view to the best interests of the Corporation, or, as the case may be, to the best interests of the other entity for which the individual acted as director or officer or in a similar capacity at the Corporation's request; and
 - (ii) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual had reasonable grounds for believing that the individual's conduct was lawful.
- (b) shall advance moneys to every director, officer and other individual for the costs, charges and expenses of a proceeding referred to in Section 5.01(a), however, the individual shall repay the moneys if the individual does not fulfil the conditions of Sections 5.01(a)(i) and 5.01(a)(ii); and
- (c) shall, with the approval of a court, indemnify an individual referred to in Section 5.01(a), or advance moneys under Section 5.01(b), in respect of an action by or on behalf of the Corporation or other entity to procure a judgment in its favour, to which the individual is made a party because of the individual's association with the Corporation or other entity as described in Section 5.01(a) against all costs, charges and expenses reasonably incurred by the individual in connection with such action, if the individual fulfils the conditions set out in Sections 5.01(a)(i) and 5.01(a)(ii).

From time to time the board may determine that this Section shall also apply to the employees of the Corporation who are not directors or officers of the Corporation or to any particular one or more or class of such employees, either generally or in respect of a particular occurrence or class of occurrences and either prospectively or retroactively (to any date not earlier than the date of this by-law). From time to time thereafter the board may also revoke, limit or vary such application of this Section.

5.02 Limitation of Liability:

So long as he or she acts honestly and in good faith with a view to the best interests of the Corporation, no person referred to in Section 5.01 (including, to the extent it is then applicable to them, any employees referred to therein) shall be liable for any damage, loss, cost or liability sustained or incurred by the Corporation, except where so required by the Act.

5.03 Indemnities Not Limiting:

The provisions of this Article Five shall be in addition to and not in substitution for or limitation of any rights, immunities and protections to which a person is otherwise entitled.

**ARTICLE 6
SHARE CERTIFICATES AND DIVIDENDS**

6.01 Share Certificates:

Share certificates shall be in such forms as the board by resolution shall approve from time to time.

6.02 Replacement of Share Certificates:

The Secretary or any other officer of the Corporation may prescribe either generally or in a particular case reasonable conditions, in addition to those provided in the Act, upon which a new share certificate may be issued

in place of any share certificate which is claimed to have been lost, destroyed or wrongfully taken, or which has become defaced.

6.03 Registration of Transfer:

No transfer of shares need be recorded in the register of transfers except upon presentation of the certificate representing such shares endorsed by the appropriate person in accordance with the Act, together with reasonable assurance that the endorsement is genuine and effective, and upon compliance with all other conditions set out in the Act.

6.04 Dividends:

Subject to the Act and the articles, the board may from time to time declare dividends payable to the shareholders according to their respective rights and interests in the Corporation. A dividend payable to any shareholder in money may be paid by cheque payable to the order of the shareholder and shall be mailed to the shareholder by prepaid mail addressed to him or her at his or her recorded address unless he or she directs otherwise. In the case of joint holders, the cheque shall be made payable to the order of all of them, unless such joint holders direct otherwise in writing. The mailing of a cheque as aforesaid, unless it is not paid on due presentation, shall discharge the Corporation's liability for the dividend to the extent of the amount of the cheque plus the amount of any tax thereon which the Corporation has properly withheld. If any dividend cheque sent is not received by the payee, the Corporation shall issue to such person a replacement cheque for a like amount on such reasonable terms as to indemnity, reimbursement of expenses and evidence of non-receipt and of title as the Secretary or any other officer may require.

6.05 Unclaimed Dividends:

Any dividend unclaimed after a period of 6 years from the date on which the same has been declared to be payable shall be forfeited and shall revert to the Corporation.

**ARTICLE 7
SEVEN - NOTICE**

7.01 Notices To Shareholders, Directors:

Any notice or document required or permitted to be sent by the Corporation to a shareholder or director may be sent by prepaid Canadian mail addressed to, or may be delivered personally to, such person at his or her last recorded address or may be sent by any means of facsimile transmission or by the creation or provision of an electronic document or may be sent by any other means permitted under the Act, subject to compliance with any applicable provisions of the Act. A notice sent by facsimile transmission or electronic document shall be deemed to have been received when sent or provided to a designated information system. If two or more persons are registered as joint holders of any share, any notice shall be addressed to all of such joint holders but notice to one of such persons shall be sufficient notice to all of them. If the address of any shareholder does not appear in the records of the Corporation, then any notice or document may be delivered to such address as the person sending the notice or document may consider to be the most likely to reach promptly such shareholder.

7.02 Changes in Recorded Address:

The Secretary or any other officer may change the recorded address of any person in accordance with any information such officer believes to be reliable.

7.03 Omissions and Errors:

The accidental omission to give any notice to any person, or the non-receipt of any notice by any person or any immaterial error in any notice shall not invalidate any proceeding or action taken at any meeting held pursuant to such notice or otherwise founded thereon.

**ARTICLE 8
MISCELLANEOUS**

8.01 Execution of Documents:

Any contracts or documents to be executed by the Corporation may be signed, including through the use of electronic signatures, as contemplated by the Act, by any two of the Chairman of the board, Lead Director of the board, the Chief Executive Officer, the Chief Financial Officer, the President, an Executive Vice-President, a Senior Vice-President, a Vice-President, the Secretary, the Treasurer or the Controller or by any one of the foregoing persons and a director. In addition, the board may from time to time indicate who may or shall sign any particular contract or document or class of contracts or documents. Any officer of the Corporation may affix the corporate seal, if any, to any contract or document and may certify a copy of any resolution or of any by-law or contract or document of the Corporation to be a true copy thereof. Subject to the Act, and if authorized by the board, the corporate seal of the Corporation, if any, and the signature of any signing officer may be mechanically or electronically reproduced upon any contracts or documents of the Corporation. Any such facsimile signature shall bind the Corporation notwithstanding that any signing officer whose signature is so reproduced may have ceased to hold office at the date of delivery or issue of such contracts or documents.

8.02 Voting Rights in Other Bodies Corporate:

The signing officers of the Corporation may execute and deliver proxies and arrange for the issuance of voting certificates or other evidence of the right to exercise the voting rights attaching to any securities held by the Corporation. Such instruments, certificates or other evidence shall be in favour of such person or persons as may be determined by the officers executing such proxies or arranging for the issuance of voting certificates or such other evidence of the right to exercise such voting rights. In addition, the board may from time to time direct the manner in which and the person or persons by whom any particular voting rights or class of voting rights may or shall be exercised.

8.03 Incentive Plans:

For the purposes of enabling directors, officers, employees of, and consultants to, the Corporation and its affiliates to participate in the growth of the Corporation and of providing effective incentives to such directors, officers, employees and consultants, the board may establish such plans (including stock option plans and stock purchase plans) and make such rules and regulations with respect thereto, and such changes in such plans, rules and regulations, as the board may deem advisable from time to time. From time to time the board may designate the directors, officers, employees and consultants entitled to participate in any such plan. For the purposes of any such plan, the Corporation may provide such financial assistance by means of loan, guarantee or otherwise to directors, officers, employees and consultants as is permitted by the Act or by any other applicable legislation.

8.04 Dealings with Registered Shareholder:

Subject to the Act, the Corporation may treat the registered owner of a share as the person exclusively entitled to vote, to receive notices, to receive any dividend or other payment in respect of the share and otherwise to exercise all the rights and powers of a holder of the share. The Corporation may, however, treat as the registered shareholder any executor, administrator, heir, legal representative, guardian, committee, trustee, curator, tutor, liquidator or trustee in bankruptcy who furnishes appropriate evidence to the Corporation establishing his or her authority to exercise the rights relating to a share of the Corporation.

8.05 Withholding Information from Shareholders:

No shareholder shall be entitled to discovery of any information respecting the Corporation's business which, in the opinion of the board would not be in the best interests of the shareholders or the Corporation to communicate to the public. The board may from time to time determine whether and to what extent and at what time and place and under what conditions and regulations the accounts, records and documents of the Corporation or any of them shall be open to the inspection of shareholders or other persons and no shareholder or other person shall

have any right of inspecting any account, record or other document of the Corporation except as conferred by the Act or by any other applicable legislation or as authorized by the board.

8.06 Repeal of Existing By-Law 1:

Upon this by-law becoming effective, the previous by-law 1 of the Corporation shall be repealed without prejudice to any action taken thereunder.

ADOPTED by the directors of the Corporation on, and effective as of, April 7, 2020, subject to confirmation by the shareholders of the Corporation.

CONFIRMED by the shareholders of the Corporation on _____, 2020.

SCHEDULE "B"

TITANIUM CORPORATION INC.

CHARTER OF THE AUDIT COMMITTEE

The audit committee (the "**Audit Committee**") assists the Board of Directors (the "**Board**") in overseeing the financial controls and reporting of Titanium Corporation Inc. and any and all subsidiary corporations (collectively, the "**Company**"). The Audit Committee also monitors whether the Company complies with financial covenants and legal and regulatory requirements governing financial disclosure matters and financial risk management.

COMPOSITION AND QUORUM

The Audit Committee is composed of a minimum of three and a maximum of five members. A majority of the members of the Audit Committee must qualify as independent directors in accordance with National Instrument 52-110 of the Canadian Securities Administrators ("**NI 52-110**") as determined by the Board. Each member of the Audit Committee must be financially literate, capable of reading and understanding a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements. At least one member of the Audit Committee must have accounting or related financial experience, being the ability to analyze and interpret a full set of financial statements, including notes thereto, in accordance with generally accepted accounting principles.

Independent members of the Audit Committee may not receive, directly or indirectly, any compensation from the Company other than compensation received in their roles as directors and committee members and must be free of any material relationship with the Company which could, in the view of the Board, be reasonably expected to interfere with the exercise of a member's independent judgment. The Board shall, in making any such determination, exercise its discretion in accordance with the guidance contained in NI 52-110.

The quorum at any meeting of the Audit Committee is a majority of its members.

The Compensation and Corporate Governance Committee shall review the candidacy of any director being considered for the Audit Committee prior to the invitation being extended to such director to join the Audit Committee and shall periodically review the composition of the Audit Committee.

AUTHORITY

The Audit Committee has the authority to:

1. engage independent counsel and other advisors as it determines necessary to carry out its duties;
2. set and pay the compensation for any advisors employed by the Audit Committee; and
3. communicate directly with any auditors performing audit, review of attest services for or on behalf of the Company.

RESPONSIBILITIES

The Audit Committee has the following responsibilities:

With respect to financial reporting

1. Assuming overall responsibility for the disclosure of all financial and related information by the Company in accordance with all legal and regulatory requirements, both with respect to content and timing governing the dissemination of such information.

2. Reviewing the annual financial statements and accompanying notes, the external auditors' report thereon, the annual management's discussion and analysis ("**MD&A**") and the related press release announcing the Company's earnings, and obtaining explanations from management on all significant variances with comparative periods, before recommending their approval by the Board and their release.
3. Reviewing the quarterly financial statements, the interim MD&A and the related press release announcing the Company's earnings before recommending their approval by the Board and their release.
4. Reviewing the financial information contained in the annual information form, annual report, prospectuses and other documents, as applicable, containing similar financial information extracted or derived from the Company's financial statements before their public disclosure or filing with regulatory authorities in Canada and periodically assessing the adequacy of the procedures established to review the Company's public disclosure of such financial information.
5. Reviewing with management and the external auditors the quality and not just the acceptability of the Company's accounting policies and any changes that are proposed to be made thereto, including (i) all critical accounting policies and practices used, (ii) any alternative treatments of financial information that have been discussed with management, the ramification of their use and the external auditors' preferred treatment, and (iii) any other material communications with management with respect thereto, and reviewing the disclosure and impact of contingencies and the reasonableness of the provisions, reserves and estimates that may have a material impact on financial reporting.
6. Reviewing with the external auditors any audit problems or difficulties and management's response thereto and resolving any disagreement between management and the external auditors regarding financial reporting.
7. Reviewing periodically any policies of the Company with respect to the communication of financial and related information to ensure that they conform with applicable legal and regulatory requirements.

With respect to risk management and internal controls

1. Monitoring the quality and integrity of the Company's system of internal controls and management information systems, through discussions with management and the external auditors.
2. Reviewing all audit plans of external auditors and arranging for any additional independent audit procedures deemed necessary by the Audit Committee to gain reasonable assurance that the combined evaluation and testing of internal financial controls is comprehensive, coordinated and cost-effective.
3. Overseeing management's reporting on internal controls.
4. At least annually, reviewing a report of the external auditors describing the Company's internal quality-control procedures, any material issues raised by the most recent reviews of internal controls and management information systems or by any inquiry or investigation by governmental or professional authorities and any recommendations made and steps taken to deal with any such issues.
5. Monitoring the execution of all audit plans.
6. Ensuring that persons auditing internal controls are always ultimately accountable to the Audit Committee and the Board.
7. Establishing procedures for:
 - (a) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and

- (b) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

With respect to the external auditors

1. Overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, including the resolution of disagreements between management and the external auditor regarding financial reporting.
2. Reviewing the annual written statement of the external auditors regarding all their relationships with the Company and discussing any relationships or services that may impact on their objectivity or independence.
3. Making recommendations to the Board concerning the appointment and, if appropriate, the termination (both subject to shareholder approval) of the external auditor to be nominated for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company and monitoring their qualifications, performance and independence.
4. Approving the performance of all non-audit services to be provided to the Company by the Company's external auditors.
5. Approving and overseeing the disclosure of all audit services provided by the external auditors to the Company or any of its subsidiaries, determining which non-audit services the external auditors are prohibited from providing and, exceptionally, approving and overseeing the disclosure of permitted non-audit services to be performed by the external auditors.
6. Making recommendations to the Board concerning the basis and amount of the external auditors' fees for both audit and authorized non-audit services.
7. Reviewing the audit plan with the external auditors and management and approving the scope, extent and schedule of such audit plan.
8. Reviewing and approving the Company's hiring policies for partners, employees or former partners or employees of the present and former external auditors.
9. Ensuring the respect of legal requirements regarding the rotation of applicable partners of the external auditors, on a regular basis, as required.
10. Ensuring that the external auditors are always accountable to the Audit Committee and the Board.
11. Making arrangements for sufficient funds to be available to effect payment of the fees of the external auditors and of any advisors or experts retained by the Audit Committee.

With respect to the Chief Financial Officer

1. Annually reviewing the performance of the Chief Financial Officer.

With respect to the Company's insurance policies

1. Annually reviewing all of the Company's insurance policies.

METHOD OF OPERATION

1. Meetings of the Audit Committee are held at least quarterly, and as required.

2. The Chair of the Audit Committee develops the agenda for each meeting of the committee in consultation with the Chief Financial Officer. The agenda and the appropriate material are provided to members of the Audit Committee on a timely basis prior to any meeting of the Audit Committee.
3. The Chair of the Audit Committee reports regularly to the Board on the business of the Audit Committee.
4. The Audit Committee has at all times a direct line of communication with the Company's auditors.
5. The Audit Committee meets on a regular basis without management or the external auditors.
6. The Audit Committee meets separately with management and the auditors at least annually, and more frequently as required.
7. The Audit Committee may, in appropriate circumstances, engage external advisors, subject to advising the Chair of the Board thereof.
8. The Audit Committee annually reviews its mandate and reports to the Board on its adequacy and publication requirements.
9. The Compensation and Corporate Governance Committee annually supervises the performance assessment of the Audit Committee and its members.

Nothing contained in this mandate is intended to expand applicable standards of conduct under statutory or regulatory requirements for the directors of the Company or the members of the Audit Committee. Even though the Audit Committee has a specific Charter and its members may have financial experience, they do not have the obligation to act as auditors or to perform auditing, or to determine that the Company's financial statements are complete and accurate. Members of the Audit Committee are entitled to rely, absent knowledge to the contrary, on (i) the integrity of the persons and organizations from whom they receive information, (ii) the accuracy and completeness of the information provided, and (iii) representations made by management as to the non-audit services provided to the Company by the external auditor. The Audit Committee's oversight responsibilities are not established to provide an independent basis to determine that (i) management has maintained appropriate accounting and financial reporting principles or appropriate internal controls and procedures, or (ii) the Company's financial statements have been prepared and, if applicable, audited in accordance with generally accepted accounting principles.

The purposes and responsibilities outlined in this Charter are meant to serve as guidelines rather than inflexible rules and the Audit Committee may adopt such additional procedures and standards as it deems necessary from time to time to fulfill its responsibilities.

Dated: November 13, 2019