**MANAGEMENT'S DISCUSSION AND ANALYSIS**
**FOR THE THREE AND NINE MONTH PERIODS ENDED SEPTEMBER 30, 2020**

Titanium Corporation Inc. ("Titanium" or the "Company") has prepared the following management's discussion and analysis ("MD&A") to provide information to assist investors and others in understanding the financial results for the three and nine-month periods ended September 30, 2020. This MD&A should be read in conjunction with Titanium's audited financial statements as at and for the year ended December 31, 2019 and the interim condensed unaudited financial statements for the three and nine-month periods ended September 30, 2020 (the "Financial Statements"). This MD&A is dated as of November 24, 2020. The Company is a development stage company whose common shares are listed on the TSX Venture Exchange under the symbol "TIC".

The above referenced material is available on Titanium's website at www.titaniumcorporation.com. The material can also be found, along with additional information about Titanium, on the System for Electronic Document Analysis and Retrieval ("SEDAR") at www.sedar.com.

The Financial Statements have been prepared in accordance with Canadian generally accepted accounting principles as set out in the Handbook of the Chartered Professional Accountants of Canada ("CPA Handbook") which incorporates International Financial Reporting Standards ("IFRS"). All amounts included in this MD&A are in Canadian dollars, unless otherwise specified.

*This MD&A contains forward-looking statements and information within the meaning of applicable Canadian securities laws (collectively, "forward-looking information") that reflect the current expectations of management about the future results, performance, achievements, prospects or opportunities for Titanium, including statements relating to the discussion of Titanium's research and development and commercialization plans under the heading "Titanium's Business"; the advantages of the Company's technology and the creation of a mineral sands industry; the timing expectations for completion of the post-Front End Engineering and Design ("FEED") project activities; the scope of activities that will be undertaken in the post-FEED project; the timing for completion of the ongoing minerals analysis and optimization of the minerals facility; the timing of completion of the internal optimization of the concentrator facility; the timing expectation for making an investment decision and proceeding with detailed engineering and construction of facilities; the Company's ongoing engagement with Indigenous communities and other stakeholders; the Company's ongoing investor outreach campaign and discussions with Canadian investment banks; the Company's continuing cash conservation program and expectations regarding the Company's current cash position; the Company's ongoing evaluation of financing opportunities, including grant and financing opportunities from applicable government programs and entering into funding agreements related thereto; the expected next steps for the Company as described in this MD&A under the headings "Update" and "Next Steps" and the impact of new accounting standards on the Company's financial statements. This forward-looking information generally can be identified by use of forward-looking words such as "may", "will", "expect", "estimate", "anticipate", "believe", "project", "should" or "continue" or the negative thereof or similar variations.*

*Forward-looking information is presented in this MD&A for the purpose of assisting investors and others in understanding certain key elements of our financial results and business plan, as well as our objectives, strategic priorities and business outlook, and in obtaining a better understanding of our anticipated operating environment. Readers are cautioned that such forward-looking information may not be appropriate for other purposes.*

*Forward-looking information, by its very nature, is subject to inherent risks and uncertainties and is based on many assumptions, both general and specific, which give rise to the possibility that actual results or events could differ materially from our expectations expressed in or implied by such forward-looking information and that our business outlook, objectives, plans and strategic priorities may not be achieved. Macro-economic conditions, including public health concerns (including the impact of the COVID-19 pandemic) and other geopolitical risks, the condition of the global economy and, specifically, the condition of the crude oil and natural gas industry including the collapse of global crude oil demand and prices and other commodity prices and demand in 2020, and the ongoing volatility in world markets may adversely impact oil sands producers' program plans, including proceeding with an investment decision in further post-FEED project activities or any final investment decision with respect to commercialization, which could materially adversely impact the Company. In addition to other factors and assumptions which may be identified in this MD&A, assumptions have been made regarding, among other things: the condition of the global economy, including trade, public health (including the impact of COVID-19) and other geopolitical risks, including the fact that any estimates of post-FEED project next steps, as well as the detailed engineering and construction period may be affected by the COVID-19 pandemic, the condition of the global economy and commodity prices, in particular crude oil prices; the stability of the economic and political environment in which the Company operates; the success of the post-FEED project activities, including the expected assessment of post-FEED engineering reviews for next steps as part of the post-FEED project activities; the ability of the Company to enter into commercial contracts with oil sands producers and to achieve commercialization of the CVW™ technology, including the anticipated scope of such commercial contracts; the focus of the post-FEED project on optimization of the concentrator facility and design and engineering of a tailings thickener and associated facilities, including the expected timing of completion thereof and commencement of optimization of the minerals facility; the ability of the Company to produce and sell a high quality zircon concentrate and a high $TiO_2$ ilmenite product, including the ability of the Company to redesign its minerals flowsheet and zircon circuitry to include production of these products; the ability of the Company to enter into commercial contracts with other strategic partners in relation to building and operating facilities, as required; the ability of the Company to continue with its cost reduction initiatives and to be supported by its current cash position; the ability of the Company to retain qualified staff; the ability of the Company to obtain financing on acceptable terms, including available grant and financing opportunities from government programs and finalizing funding agreements for such government programs, as well as any additional funding requirements required to complete the detailed engineering phase; the translation of the results from the Company's research, pilot programs, FEED project activities, post-FEED project activities and studies into the results expected on a commercial scale; the belief that the Company's technology will provide important environmental and economic benefits that will assist with the recovery of a resilient and sustainable energy industry in Alberta and Canada; the anticipated timing for the completion of detailed engineering and construction once all post-FEED project activities are completed and a final decision to proceed has been made; future oil and zircon prices and the impact of lower prices on activity levels and cost savings of oil sands producers; the impact of increasing competition; the ability to protect and maintain the Company's intellectual property; currency, exchange and interest rates; the regulatory framework regarding royalties, taxes and environmental matters in the jurisdictions in which the Company operates; and the ability of the Company to successfully market its CVW™ technology. The forward-looking information contained in this MD&A is based on*

*the results of our research, pilot programs, FEED project activities, post-FEED project activities and related studies and commercialization efforts described in this MD&A under the headings "Titanium's Business", "Update" and "Next Steps". The Company has not commercially demonstrated its technologies and there can be no assurance that such research, pilot programs, FEED project activities, post-FEED project activities and related studies will prove to be accurate nor that such commercialization efforts will be successful, as actual results and future events could differ materially from those expected or estimated in such forward-looking information. As a result, we cannot guarantee that any forward-looking information will materialize, and we caution you against relying on any of this forward-looking information. Accordingly, readers should not place undue reliance on forward-looking information.*

*Additional information on these and other factors are disclosed elsewhere in this MD&A, including under the heading "Discussion of Risks", and in other reports filed with the securities regulatory authorities in Canada from time to time and available on SEDAR (sedar.com).*

*The forward-looking information contained in this MD&A describes our expectations as of November 24, 2020 and, accordingly, is subject to change after such date. Except as may be required by Canadian securities laws, we do not undertake any obligation to update or revise any forward-looking information contained in this MD&A, whether as a result of new information, future events or otherwise.*

## Titanium's Business

The Company is a clean technology innovator focused on providing solutions to the mining sector of Canada's oil sands industry. The Company has developed a suite of technologies called Creating Value from Waste™ ("CVW™") that recovers bitumen, solvents, valuable minerals and water from oil sands froth treatment tailings. The Company expects that the recovery of bitumen, associated solvents and water will result in important and timely environmental improvements for the oil sands industry and the recovery of the lost commodities will support economic growth, jobs and diversification.

The Company operates in the mining sector of Canada's oil sands industry. In July 2017, the Company announced that it was working with Canadian Natural Resources Limited ("Canadian Natural") on a front end engineering and design project (the "FEED Project") for the first commercial implementation of CVW™ technology at Canadian Natural's Horizon oil sands site (the "Project"). The FEED Project was supported by $5 million of grant funding from Emissions Reduction Alberta ("ERA"), along with the Company funding $1.4 million and Canadian Natural funding $3.5 million. The FEED Project, associated reporting to ERA and collection of a 20% holdback were completed by August 2019. The Company and Canadian Natural are continuing to work together on optimizing the engineering design as part of the post-FEED Project activities and are planning the next phase of the Project, including minerals analysis and marketing, economic modeling and business structuring.

While the Company and Canadian Natural have consciously demonstrated a strong focus on the post-FEED Project activities and continue to actively work towards commercialization of the Project, investment decisions in post-FEED Project activities are expected to be undertaken on a year-by-year basis and the timing of a final

investment decision with respect to commercialization of the Project is uncertain at this time. As a result, there is potential for delay or revision to the post-FEED Project activities and in turn the Project as a whole, which will be affected by, amongst other factors, the current state of the global economy, crude oil prices and public health concerns, including the COVID-19 pandemic. See "Discussion of Risks".

The oil sands mining sector surface mines deposits in northern Alberta's Athabasca Oil Sands region to extract bitumen (heavy oil trapped in the sands) for local upgrading into synthetic crude oil or for dilution and pipelining to refineries. Heavy minerals that naturally occur in these oil sands deposits are concentrated in tailings during the secondary bitumen extraction step referred to as 'froth treatment'. Oil sands producers currently use either a naphtha or paraffinic based solvent to process bitumen at the froth treatment stage. These solvent-based processes result in the loss of solvents, bitumen and heavy minerals in froth treatment tailings streams which are currently deposited in tailings ponds. The combination of solvent and bitumen losses to tailings ponds results in substantial volatile organic compounds ("VOCs") and greenhouse gas ("GHG") emissions from the ponds in the form of methane. Global Warming Potential ("GWP") is widely used as the measure of the relative climate impact of different GHGs. The 100–year GWP of methane is reported to be 28 to 36 times greater than $CO_2$ and the 20-year GWP is reported as 84 to 87 times greater.

Tailings management remains one of the more difficult environmental challenges for the oil sands mining sector. The Company believes that its CVW™ technology can assist the industry in meeting certain of the regulatory requirements of the Alberta Energy Regulator's (the "AER") Directive 85 outlined below. In particular, the Company's technology has the potential to address a number of the aspects of sub-objective 2 by mitigating risks associated with treated froth fluid fine tailings.

Oil sands tailings are comprised of water, fine clays, residual bitumen, salts and soluble organic compounds. They also contain solvents which are added to the oil sands during the separation process (froth treatment). In 2016 and 2017, the AER issued the first version of a new Directive 85 and a revised version, respectively, Fluid Tailings Management for Oil Sands Mining Projects, which sets out requirements for managing and reclaiming fluid tailings including the following requirements: existing operators were required to submit fluid tailing management applications by November 1, 2016; operators must minimize fluid tailings accumulation by ensuring that fluid tailings are treated and reclaimed progressively during the life of the mine; new fluid tailings must be ready to reclaim by ten years after the end of mine life, while legacy fluid tailings must be ready to reclaim by the end of mine life; and operators are required to report annually on the performance of their fluid tailings management plans.

In order to evaluate whether active treated tailings deposits are on a trajectory to meet the high-level objective, there are two sub-objectives of Directive 85 that address different aspects of performance: Sub-objective 1: the deposit's physical properties are on a trajectory to support future stages of activity; Sub-objective 2: to minimize the effect the deposit has on the surrounding environment and ensure that it will not compromise the ability to reclaim to a locally common, diverse, and self-sustaining ecosystem. Sub-objective 2 focuses on circumstances where the operator may propose management strategies, design features, or mitigation measures for risks associated with the specific nature of the deposit or its surrounding environment that could impact reclamation—for example, design features that control specific water movement such as drainage control systems, or management of risks associated with deposit characteristics such as treated froth fluid fine tailings, acidification, specific additives, or gas formation. If appropriate, an operator may propose and justify additional sub objectives.

Six large oil sands mining sites are currently in operation and produce in total approximately 1.6 million barrels per day of bitumen. These sites are currently operated by Canadian Natural (Horizon and Albian Sands sites), Suncor Energy Inc. (Base Plant and Fort Hills sites), Syncrude Canada and Imperial Oil Limited (Kearl). Expansion projects significantly increasing production at Canadian Natural's Horizon and Albian Sands sites and at Imperial's Kearl site have been completed in recent years. The Fort Hills oil sands mining project was commissioned in 2019. The expansions and the new site have significantly increased Canada's oil sands mining bitumen production from approximately 900,000 barrels per day in 2010 to almost 1.6 million barrels per day in 2019. The growth of the oil sands mining industry means that increased volumes of bitumen, solvents and heavy minerals will be lost in froth treatment tailings until new technology is adopted to recover this lost value. Growth also means that related GHG and VOC emissions will continue to rise.

Since 2008, the Company has been conducting a series of research and development ("R&D") and demonstration piloting programs including:

- Successfully executing a two-year research program endorsed by the Alberta Government and supported by a $3.5 million Alberta Energy Innovation Fund ("AEIF") grant received in March 2008. The key achievements of the program were the development of technologies to remove bitumen from heavy minerals and recover bitumen, solvents and water from froth treatment tailings.
- Following the research program, starting in 2010, the Company completed successful integrated demonstration pilot programs over a four-year period in collaboration with a consortium comprised of oil sands operators and the Federal and Alberta governments. Minerals flowsheet design and testing programs were also conducted in conjunction with the demonstration piloting. The programs were supported by $6.5 million of Federal government grants from Sustainable Development Technology Canada ("SDTC") which funded approximately 25% of the programs, approximately $0.4 million in funding was received from the

National Research Council's Industrial Research Assistance Program ("IRAP") and $1.1 million in Alberta Government funding was received from the Scientific Research and Experimental Development Program ("SR&ED").

- From 2017 to 2019, the Company and Canadian Natural conducted the FEED Project.
- In March 2019, the Company announced the award of $50 million in government funding toward the next phases of the Project. The Federal Government awarded $45 million from two clean technology programs; Environment and Climate Change Canada, through its Low Carbon Economy Fund ("LCEF") has conditionally committed to investing $40 million and NRCan's Clean Growth Program ("CGP") has conditionally committed to investing $5 million in Titanium's first of a kind sustainable technology, designed to remediate oil sands froth treatment tailings. ERA awarded $5 million from their Partner Intake Program aimed at improving environmental performance in Alberta's oil and gas sector. Funding from the LCEF and CGP programs are subject to finalizing funding agreements which will outline the conditions under which federal funding would be provided, including securing the remaining funding necessary to complete the Project, fulfilling all applicable requirements associated with the Project environmental assessments and Indigenous consultation requirements and finalizing the scope of the Project costs eligible for program funding.
- Since completion of the FEED Project and as part of the post-FEED Project activities in 2020, the Company and Canadian Natural have been working to optimize and validate the engineering of the concentrator, thickener and associated facilities and services and recently started optimization and engineering design modifications of the minerals facility. Minerals testing and analysis has been ongoing as well as completion of government grant funding agreements and pursuit of additional government funding.

The Company's technology has been developed to meet the current and future needs of all the major oil sands operators related to froth treatment tailings recovery and remediation. In addition to the anticipated benefits of additional commodity recoveries, emissions reductions, and methane abatement, the Company's technology affords several other opportunities to reduce the environmental footprint of mining oil sands operations. Based on the results of the Company's research programs, tailings dewater more effectively in subsequent tailings management operations toward meeting Government of Alberta regulations which require reductions in the volume of tailings. The removal of bitumen and solvents could also enable the direct reuse of hot froth treatment tailings water in other mineable oil sands services, reducing energy costs, river water usage and GHGs related to reheating cold pond water used in the bitumen extraction process.

Based on our research, pilot programs and studies, key economic drivers that support the adoption of Titanium's technology include: the commodity value of recovered bitumen and solvents currently lost to tailings ponds; the

value of recovered zircon and titanium products and the potential for the recovery of rare earth minerals; the value of emissions reductions under current and future regulatory regimes; potential energy cost reductions due to potential hot process water reuse; and potential cost reductions related to enhanced tailings remediation.

We believe that there is now a shared urgency by stakeholders to implement technology solutions that address a number of priority issues and concerns including: reducing operating costs, optimizing production and reducing environmental impacts; addressing the rising importance of Environmental, Social and Governance (ESG) issues, including action to address climate change, particularly for an increasing number of institutional asset managers globally; and the commitment by the Alberta and Federal governments to reducing carbon emissions and increased monitoring of oil sands emissions. Economic returns, incremental resource recovery, development of a new minerals industry and reduction of environmental impacts, we believe, all favour adoption of the Company's technology. Please refer to the material risks, uncertainties and other factors which may affect the Company which are described in more detail in this MD&A under the heading "Discussion of Risks".

## Update

The COVID-19 pandemic and the collapse of oil demand and prices in 2020 introduced unprecedented uncertainties for Canada's oil sands industry, the global mineral sands industry and the Canadian economy. The duration and the extent of the impact of these events is not known but could adversely affect the progress, cost and timing of the Project. In response, the Company has taken measures to protect its balance sheet by reducing costs and conserving cash. See "Discussions of Risks".

In the third and fourth quarters of 2020, much of our country has been experiencing a second wave of the COVID-19 pandemic while economic conditions and oil prices have remained weak. In 2020, economic activity has declined with many new projects cancelled or suspended. Despite these challenges, the Project has been continuing with our joint team making steady progress on the optimization and validation engineering phase of the Project described in the overview and highlight details below.

During the first nine months of 2020, the Company and Canadian Natural's joint project engineering team has continued work on the Project utilizing internal resources, performing post-FEED engineering reviews, optimization and validation of the Project as well as continuing on-going minerals analysis programs. The main focus of the Project team in 2020 has been the optimization of the concentrator facility and the design and engineering of a tailings thickener and associated facilities. Optimization of the minerals facility, including further work by an external minerals engineering firm, commenced in the fourth quarter of 2020 and will continue into 2021. In parallel, the Company has been providing updates to the Alberta and Federal government agencies who

have awarded grant funding for the Project, working with them toward finalizing funding contracts and assessing recently announced new programs for potential additional funding for the Project. The internal optimization of the concentrator facility, including updating cost estimates, is expected to be substantially completed by the end of 2020.

## Highlights

Certain highlights for the three and nine-month periods ended September 30, 2020 are set out in more detail below:

- On September 28, 2020, the Company announced that ERA and Titanium signed a contribution agreement for the award of $5 million of grant funding for the Project. A portion of eligible Project costs will be reimbursed with the successful completion of specified milestones outlined in the agreement. $2.0 million in ERA grant funding is available for the detailed engineering phase of the Project with the balance of $3.0 million available for the procurement and construction phases.
- Engineering optimization and validation activities by the internal Project engineering team continued during the third quarter. This activity has been mainly focused on the concentrator facility with the objective of improving operability, enhancing environmental performance and reducing capital and operating costs. This work includes: changes to the plot plan to increase modularization, relocating certain equipment and reducing building sizes; the addition of a vapor recovery unit to the flotation circuit; the review of alternate flotation technologies and the addition of a tailings thickener which will process and remediate the tailings from the concentrator. The Project team expects to substantially complete the optimization phase of concentrator engineering by the end of the fourth quarter of 2020.
- Minerals testing and analysis of larger tailings samples commenced in the third quarter and is ongoing to provide current data for the engineering design of the minerals facility. In the fourth quarter, optimization engineering commenced for the minerals facility and will continue into 2021. IHC Robbins, an expert minerals engineering firm who have been providing engineering services to the Company throughout R&D and FEED programs, have been contracted for preliminary design of the minerals facility process flowsheet to incorporate production of a high-quality zircon sand concentrate and a high $TiO_2$ ilmenite product and other modifications.
- Prior to the COVID-19 pandemic, the Company conducted technical marketing and testing programs including meeting with potential minerals processors and customers, visiting their facilities, and providing minerals samples for customer testing. Based on results and feedback from these activities, the Company has adjusted its plans for the production of minerals products. The Company has identified an opportunity to produce a high $TiO_2$ ilmenite product for the North America pigment industry. This ilmenite product will

have a $TiO_2$ content of up to 72%. Work is underway to redesign the minerals flowsheet to incorporate production of this new product. This would enable the recovery of ilmenite which was rejected in previous flowsheets. In addition, the Company is adjusting the design of its zircon circuitry to produce a high-quality zircon concentrate to market to a growing concentrates processing industry in Asia. Several new minerals projects have adopted a concentrates strategy to address this market and reduce the costs of constructing and operating separation facilities at their project sites. Preliminary optimization and engineering of the minerals facility to incorporate these market-based product changes is underway.

- In addition to finalizing ERA, the Company continued to advance contracting with other government funding agencies providing updates on the impacts of the COVID-19 pandemic and the oil demand and price collapse on the Project. Funding from the government programs is subject to finalizing funding agreements which will outline the conditions under which funding would be provided. Of the $50 million of grant awards to the Company in 2019, approximately $7 million is designated for the engineering phase of the Project with the balance for the procurement and construction phases.
- Several new Alberta and Federal government funding programs aimed at reducing emissions, increasing energy efficiency and supporting new technology implementations have been announced in the third and fourth quarters of 2020. The Company is assessing these programs, is in discussions with governments to determine their applicability to the Project and is making further funding applications where applicable.
- On July 27, 2020, the Company announced Mr. Bruce Griffin will assume the role of Chair of the Commercialization Committee of the Board of Directors (the "Committee") of the Company. Mr. Griffin, who is currently a member of the Committee, will be replacing Mr. David Macdonald, who has been the Chair of the Committee since 2017. Mr. Macdonald will remain a member of the Committee.
- In response to the uncertainty created by the COVID-19 pandemic and the resulting delays to the Project, the Company implemented salary reductions in the range of 15% to 20% effective April 1, 2020 and is minimizing external expenditures in all areas to preserve cash. The Company is also continuing its other cash conservation programs including those under which management and directors receive a portion or all of their compensation and fees in restricted share units (“RSUs”) and deferred share units ("DSUs"), respectively. Due to equity plan limits, no DSUs have been issued to directors in the current year for settlement of director fees, however director fees have been accrued and are reflected as part of the deferred compensation liability on the balance sheet. There have been no RSUs issued to management during the current year due to equity plan constraints and the Company has suspended accruing management compensation to be settled with RSUs until such time the Company has the capacity to settle outstanding liabilities. This program was aimed to conserve cash and align management and the Board with shareholder interests. Since the inception of the program in 2015, the Company's directors have been receiving 100%

of their compensation in DSUs in lieu of cash compensation. To date, $3.9 million in management and Board cash compensation has been conserved through the program.

## Next Steps

Implementing Titanium's technology will require concentrator facilities to be built at an oil sands site which integrate with existing oil sands operations. Separate minerals separation facilities will be constructed to process cleaned heavy minerals received from the concentrator into minerals products and/or concentrates for sale into export markets. The facilities may be jointly owned and operated along with oil sands operators or other strategic partners. The Company has advanced proposals and flexible business models whereby oil sands operators may build and operate certain of the facilities or elect to have the Company, together with partners, build and operate certain of the facilities.

During the engineering design phase, the Company and Canadian Natural have undertaken a number of related post-FEED Project activities in anticipation of advancing commercialization of the Project including: pursuing and securing available Federal and Alberta government grant funding and other sources of funding for the potential construction phase of the Project; minerals market development activities; and discussions with potential partners for participation in the Project. As described earlier in this MD&A, the COVID-19 pandemic and the collapse of crude oil prices, have introduced unprecedented uncertainties for the global economy and many industries including oil sands and minerals related projects. The duration and extent of the impact of these events is not known but could adversely affect the progress and timing of the Company's post-FEED Project activities. See "Discussion of Risks".

The Company and Canadian Natural's next steps for the Project include optimization engineering, detailed engineering, finalizing the business model, engagement of potential partners, negotiation of a commercial structure, financing plans, securing government funding awards and making decisions to proceed with construction of the facilities. After the foregoing activities are completed and a final decision to proceed with the Project is made, detailed engineering and construction of the facilities are estimated to take approximately 33 months from commencement. All estimates of post-FEED Project next steps and any subsequent detailed engineering and construction time periods may be affected by a number of factors, including the impact of the COVID-19 pandemic and the collapse of global crude oil demand and prices as described above, and those factors described elsewhere in this MD&A. See "Discussion of Risks".

There is wide acceptance that innovation and new technologies will be the principal source of solutions for reducing both environmental impacts and operating costs in Canada's oil sands industry. Through a disciplined R&D approach and with cooperation from industry and governments, the Company believes that it has successfully

developed unique, practical technology solutions for oil sands froth treatment tailings waste that offer significant improvements to technologies currently used to address both environmental and economic challenges.

## Financial Information & Analysis

*Summary of Selected Quarterly Results*

The following table summarizes the financial results of the Company for most recently completed quarterly periods prepared under IFRS (Canadian dollars in millions except per share data):

| | **Q3 Sep 30, 2020** | Q2 Jun 30, 2020 | Q1 Mar 31, 2020 | Q4 Dec 31, 2019 |
|---|---|---|---|---|
| **STATEMENT OF (LOSS) INCOME** | | | | |
| Net (Loss) Income | **$ (0.78)** | $ (0.74) | $ (0.90) | $ (0.75) |
| Basic and Diluted (Loss) Income per Share | **$ (0.010)** | $ (0.010) | $ (0.010) | $ (0.010) |
| | **Q3 Sep 30, 2019** | Q2 Jun 30, 2019 | Q1 Mar 31, 2019 | Q4 Dec 31, 2018 |
| | | | | |
| Net (Loss) Income | **$ 0.05** | $ 0.40 | $ 0.40 | $ (1.1) |
| Basic and Diluted (Loss) Income per Share | **$ 0.001** | $ 0.005 | $ 0.005 | $ (0.010) |

Titanium is focused on achieving long-term financial success by implementing its innovative CVW™ technologies in commercial operations at oil sands sites. The Company is working with Canadian Natural on the detailed engineering phase including engineering optimization and planning for the potential implementation of its technology at Canadian Natural's Horizon site. However, until optimization and other Project activities are completed to the satisfaction of the parties, commercial arrangements and investment decisions are made, and facilities constructed and operating, the Company expects to continue to incur losses. Currently, quarterly (losses)/income are comprised of R&D and detailed engineering costs, and general and administrative ("G&A") expenditures. Changes in quarterly (losses)/income are dependent on the level of commercialization, R&D project activity, and the timing of payments related to project cost recovery that the Company has underway at any time.

The following explains the Company's financial results for the three and nine-month periods ended September 30, 2020 compared to the three and nine-month periods ended September 30, 2019:

For the three and nine-month periods ended September 30, 2020, the Company reported net loss of $0.78 and $2.3 million, respectively. This resulted in a $0.01 loss per share for the current quarter and a $0.03 loss per share for the nine-month period ended September 30, 2020. The net loss for the three month period ended September 30, 2020 consisted primarily of G&A ($0.34 million) and R&D ($0.44 million) expenses in the current quarter compared to net income of $0.3 million for the three-month period ended September 30, 2019 as the Company

received Project contributions for the FEED Project in the prior period which exceeded Project costs incurred and G&A expenses. For the nine-month period ended September 30, 2020 net loss of $2.4 million consisted primarily of G&A ($1.3 million) and R&D ($1.2 million) expenses compared to net income of $0.75 million for the nine-month period ended September 30, 2019. As noted above, the receipt of Project contributions related to the FEED Project in the prior period exceeded G&A and R&D expenses. For a development stage company, the net loss was in line with expectations.

The Company had an aggregate of $3.2 million cash at September 30, 2020 consisting of cash and interest-bearing investment accounts as compared to $5.1 million at December 31, 2019. The decrease in cash of $1.9 million since December 31, 2019 relates to funding the post-FEED Project costs, additional minerals development and testing work, and related public company and general and administrative expenditures.

**Research and Development Expenditures**

Below is a summary of the R&D expenditures by category ($ thousands):

| | *Three months ended* | | | | *Nine months ended* | | |
|---|---|---|---|---|---|---|---|
| | Sep 30, 2020 | Sep 30, 2019 | Increase (decrease) | | Sep 30, 2020 | Sep 30, 2019 | Increase (decrease) |
| Compensation and benefits | $ 143 | $ 174 | $ (31) | | $ 432 | $ 528 | $ (96) |
| Projects and other | 277 | 80 | 197 | | 608 | 484 | 124 |
| Deferred compensation | - | 25 | (25) | | 21 | 75 | (54) |
| Equity-based compensation | 20 | 51 | (31) | | 102 | 160 | (58) |
| R&D costs | $ **440** | $330 | **$ 110** | | $ **1,163** | $1,247 | **$ (84)** |
| Recovery of project costs | - | (991) | 991 | | - | (3,476) | 3,476 |
| Research tax credits | - | (71) | 71 | | | (71) | 71 |
| R&D net of recovery | $ **440** | $ (732) | **$ 1,172** | | $ **1,163** | $ (2,300) | **$ 3,463** |

R&D spending in the current quarter consisted primarily of compensation for technical staff, on-going minerals testing and evaluations, and the Company's share of joint project costs for engineering work by Canadian Natural.. Compensation and deferred compensation costs were lower due to the salary reduction initiatives implemented on April 1, 2020 to preserve cash because of uncertainties related to the COVID-19 pandemic and oil price collapse impacting the timing of the Project. Project costs were higher by $0.2 million for the three-month period ended September 30, 2020 compared to the same period in 2019 due to minerals product development and ongoing testing and the Company's share of joint project costs for engineering work by Canadian Natural. Recovery of Project costs was nil for the three-month period ended September 30, 2020 compared to $1.0 million for the three-month period ended September 30, 2019. For the nine-month period ended September 30, 2020, R&D costs were lower by $0.1

million compared to the nine-month period ended September 30, 2020. This reduction is primarily related to compensation and benefits described above offset by higher shared Project costs in the current nine-month period ended September 30, 2020. For the period ended September 30, 2019, Project costs were incurred during the first two months of the year as the Company concluded the FEED Project. The recovery in 2019 related to the collection of FEED contributions from ERA and Canadian Natural for the final FEED project milestones. Based on the level of post-FEED activity, R&D costs were in line with expectations.

## General and Administrative Expenditures

The following table provides details of G&A expenditures by category ($ thousands):

| | *Three months ended* | | | | *Nine months ended* | | |
|---|---|---|---|---|---|---|---|
| | Sep 30, 2020 | Sep 30, 2019 | Increase (decrease) | | Sep 30, 2020 | Sep 30, 2019 | Increase (decrease) |
| Compensation and benefits | $ 125 | $ 160 | $ (35) | | $ 427 | $ 549 | $ (122) |
| Deferred compensation | - | 57 | (57) | | 44 | 120 | (76) |
| Consulting and professional fees | 52 | 45 | 7 | | 184 | 135 | 49 |
| Directors fees -deferred compensation | 86 | 82 | 4 | | 270 | 254 | 16 |
| Travel | - | 20 | (20) | | 7 | 70 | (63) |
| Rent, insurance and office | 38 | 29 | 9 | | 102 | 91 | 1 |
| Investor relations and regulatory | 8 | 7 | 1 | | 84 | 68 | 16 |
| Equity-based compensation | 35 | 82 | (47) | | 173 | 243 | (70) |
| | **$ 344** | **$ 482** | **$ (138)** | | **$ 1,291** | **$ 1,587** | **$ (296)** |

G&A expenses for the three-month period ending September 30, 2020 were 29% lower at $0.34 million as compared to $0.48 million for the three-month period ended September 30, 2019. For the nine-month period ending September 30, 2020, G&A expenses were 19% lower at $1.3 million compared with $1.6 million in the comparable 2019 period. Management made voluntary salary reductions effective April 1, 2020 and significantly reduced other variable compensation to preserve cash and deal with the ongoing impact of the COVID-19 pandemic and the economic uncertainty related to the decline in oil prices. Professional fees in the quarter increased due to legal costs related to contract reviews for grant funding agreements offset by zero travel expenses in the quarter. For the nine-month period ended September 30, 2020, the increase in consulting and professional fees related to legal fees for shareholder matters and regulatory reporting requirements due to the COVID-19 pandemic. Investor relations costs increased during the nine-month period due to costs related to hosting the annual and special shareholder meeting in a virtual format to comply with public health measures and guidelines resulting from the COVID-19 pandemic. G&A cash expenses were lower by $39,000 during the quarter primarily related to compensation and travel

reductions, offset by professional fees and regulatory costs as compared to the three-month period in the prior year. Deferred and equity-based compensation costs were lower during the three-month and nine-month periods ended September 30, 2020 as the Company did not grant stock options in the current fiscal year and voluntarily reduced deferred compensation programs. These on-going initiatives together with rent reductions, group benefit premium reductions, workers compensation premiums refunds and other initiatives will continue to reduce G&A throughout the balance of the year.

**Liquidity and Capital Resources and Recoverability**

The Company had an aggregate of $3.2 million at September 30, 2020 consisting of cash and interest-bearing cash accounts as compared to $5.1 million at December 31, 2019. The decrease in cash and short-term investments of $1.9 million is the result of funding the Company's post-FEED Project activities, general and administrative and public company expenditures. While the Company has enough cash to cover normal operating cash costs for the next twelve months, the Company's ability to fund detailed engineering programs will depend on the jointly approved programs for 2021 and the amount of government funding the Company is able to secure for those programs. When there is more clarity with respect to the 2021 program and the supporting government funding, the Company will evaluate the funding requirements to determine if additional capital will be required within the next 12 months to support the continued development of the Project.

The Company is a development stage enterprise as it has yet to earn any revenues from its planned operations. The Company is devoting substantially all its efforts toward commercializing its proprietary technology and has an accumulated deficit of $92 million as of September 30, 2020. These accumulated losses are largely due to investments in the research, development, piloting and engineering of its CVW™ technologies. The recoverability of amounts expended is dependent on the ability of the Company to complete commercialization arrangements at oil sands sites and achieve future profitable operations. The Company is dependent on raising funds through the issuance of shares or other securities, loans, government grants and/or attracting partners to undertake further development and commercialization of its technology. While the Company has been successful in obtaining the necessary financing to develop the business to this point, there are no assurances that the Company will be successful in the future in these endeavors. See "Discussion of Risks" in this MD&A.

The following is a summary of the cash flow for the periods noted:

- Cash used in operating activities for the three and nine-month periods ended September 30, 2020 was $0.4 million and $1.9 million respectively, compared to an increase in cash of $0.75 and $0.63 million for three and nine-month periods ended September 30, 2019, respectively. During the three-month period ended September

30, 2019, the Company received payment of the final payments from ERA and Canadian Natural related to the FEED Project.

- Cash received from investing activities for the three and nine-month period ended September 30, 2020 was $2.0 million with the maturing of a GIC held as a short-term investment on August 30, 2020. This compares to a use of cash of $2.0 million for the three and nine-month periods ended September 30, 2020 with the purchase of a one year redeemable $2.0 million GIC at a Schedule I bank.

- Proceeds from financing activities was nil for the three and nine- month periods ended September 30, 2020 as compared to $4.1 million for the same periods in 2019 as the Company received proceeds from the completion of a private placement in the second quarter of 2019.

**Financial Instruments and Financial Risk Factors**

The Company has, for accounting purposes, designated its cash, cash equivalents, short term investments and goods and services tax receivable, as loans and receivables. Trade and other payables and accrued liabilities are classified for accounting purposes as other financial liabilities. The Company estimates that both the carrying and fair value amounts of the Company's financial instruments are approximately equivalent because of the short-term nature of the assets and liabilities. The Company manages the risks relating to the financial instruments by holding cash in interesting bearing accounts or investing in short-term highly liquid certificates of investment issued by Schedule I Canadian chartered banks. This discussion on risks is not all-inclusive and other factors may currently, or in the future, affect the Company and should also be read in conjunction with the other risks described under the heading "Discussion of Risks" in this MD&A.

*Financial risk*

The Company's activities expose it to a variety of financial, credit, liquidity and market risks, including interest rate and foreign exchange rate risks.

Financial risk management is carried out by the Company's management team with guidance from the Audit Committee and the Board. The Board also provides guidance for enterprise risk management.

*Credit risk*

Credit risk is the risk of loss associated with a counterparty's inability to fulfill its payment obligations. The Company's credit risk is primarily attributable to cash and cash equivalents and short-term investments. Cash and cash equivalents and short-term investments are held with Schedule I Canadian Chartered banks which are regularly

reviewed by management. Management believes that the credit risk with respect to financial instruments is minimal.

*Liquidity risk*

Liquidity risk is the risk that the Company will not have sufficient cash resources to meet its financial obligations as they come due. The Company's approach to managing liquidity risk is to ensure that adequate resources are available to meet its obligations as they come due. As at September 30, 2020, the Company had aggregate cash and short-term investments of $3.2 million (December 31, 2019 - $5.1 million) to settle current liabilities of $0.4 million (December 31, 2019 - $0.4 million). Currently, most of the Company's liabilities have contractual terms of 30 days or less with the remainder due within one year.

While the Company has enough cash to cover normal operating cash costs for the next twelve months, the ability to cover detailed engineering programs will depend on the approved programs for 2021 and the amount of government funding the Company is able to secure for those programs. Once there is more certainty with respect to the approved program and the supporting government funding, the Company will evaluate the funding requirements to determine if additional capital will be required within the next 12 months to support the continued development of the Project. In future, additional funds will need to be raised to complete detailed engineering, and to reach commercialization arrangements for the Project. Potential sources which may be available to the Company to fund its future cash requirements include, but are not limited to, new or additional government grants, loans, issuances of securities or some form of partnership or joint venture.

*Market risk*

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

a) *Interest rate risk*

The Company's current policy is to invest excess cash in interest bearing cash accounts, bankers' acceptances and guaranteed investment certificates issued by Schedule I Canadian banks. The income statement includes interest income associated with the Company's financial instruments. The Company periodically monitors its investments and the creditworthiness of the banks it holds investments in.

b) *Foreign currency risk*

The Company's reporting and functional currency is the Canadian dollar and most purchases are transacted in Canadian dollars. Some research and development expenses are denominated in Australian dollars and, to a lesser extent, US dollars. The Company does not hold any significant balances in foreign currencies to give rise to exposure to foreign exchange risk. Any impact from fluctuations in foreign exchange rates would be minimal and therefore the Company does not hedge its foreign exchange risk.

## Discussion of Risks

An investment in our common shares is risky. Investors should carefully consider the risk factors set out below and consider all other information contained herein and in our other public filings before making an investment decision. The risks and uncertainties described below and elsewhere in this MD&A are not the only ones the Company faces. Additional risks and uncertainties, including those that the Company is not currently aware of or that management of the Company currently deems immaterial, may also adversely affect the Company's economics, operating results, financial condition, prospects for commercialization and the profitability of commercial projects.

***We may not be able to successfully execute our business plan.***

The execution of our business plan poses many challenges, including those as further described in this discussion of risks, and is based on a number of assumptions. We may not be able to successfully execute our business plan. In addition, we cannot guarantee that we will be able to leverage our relationships with oil sands producers or that commodity prices will support the capital expenditures required by oil sands producers for the implementation and development of our CVW™ process. We may not be able to proceed past the engineering phase with oil sands producers to develop a commercial project. If we experience significant cost overruns on our programs, including the post-FEED Project activities currently ongoing and anticipated, or if our business plan is costlier than we anticipate, certain currently anticipated post-FEED Project activities may be delayed or eliminated, resulting in changes or delays to our commercialization plans, or we may be compelled to secure additional funding (which may or may not be available) to execute our business plan. Additionally, we are expecting to complete certain post-FEED Project activities, including internal optimization of the concentrator facility which may take additional time and resources. We cannot predict with certainty our future revenues or results from our operations. If the assumptions on which our revenue or expenditure forecasts are based change, the benefits of our business plan may change as well.

In recent months, there has been a second wave of the pandemic and the duration and the extent of the impact of these events is not known but could adversely affect the progress and timing of the CVW™ Horizon Project. Concerns over the COVID-19 pandemic and the decrease in global demand for crude oil in 2020, global economic conditions, fluctuations in interest rates and foreign exchange rates, stock market volatility, energy costs,

geopolitical issues, OPEC+ actions, inflation, the availability and cost of credit, the volatility of major stock exchanges, the deceleration of economic growth in the People's Republic of China and trade disputes between the United States and the People's Republic of China have all contributed to increased economic uncertainty, diminished expectations for the global economy and precipitated the reduction of oil sands producers' capital spending budgets, which could have a significant impact on the Company's ability to complete its ongoing post-FEED Project activities. In addition, continued hostilities in the Middle East and the occurrence or threat of terrorist attacks in the United States or other countries could adversely affect the economies of Canada, the United States and other countries. The unprecedented and rapid outbreak of the COVID-19 virus in addition to continued concerns about global economic growth have had a significant adverse impact on global financial markets and commodity prices. If the economic climate in Canada, the United States or abroad continues to deteriorate, worldwide demand for petroleum products could continue to diminish, which would further impact the crude oil and bitumen industry, including the oil sands producers and in turn affect the ability of the Company to continue with the post-FEED Project activities. This would be expected ultimately to adversely impact the current and anticipated post-FEED Project activities. As a result, these activities may be delayed or eliminated, resulting in changes or delays to our commercialization plans and potentially higher costs.

***We are dependent upon oil sands producers to adopt and integrate our CVW™ process in their oil sands operations.***

Our success depends on the willingness and capacity of oil sands producers to adopt and integrate our CVW™ process into their own oil sands operations. For oil sands producers to adopt and implement our CVW™ process, we will have to negotiate commercial terms for the implementation of these technologies. This will require the interest and cooperation of the oil sands producers. The cost and complexity of integrating our CVW™ process is uncertain and will vary depending on the site and the objectives of each oil sands producer. We can offer no guarantee we will be able to conclude such commercial negotiations on reasonable terms or at all. Additionally, given the current market conditions, dramatic decreases in crude oil prices and other recent global events, oil sands producers have already or may be reducing, or continue to reduce, their capital programs and temporarily deferring planned activities, which could result in delays in, or resistance to, adopting the Company's CVW™ technology.

Furthermore, any integration, design, construction, or operational problems encountered by oil sands producers associated with adopting and integrating our CVW™ process could adversely affect the market opportunity for our CVW™ process and our financial results.

As described elsewhere in this MD&A, the Company and Canadian Natural have completed the FEED Project for the implementation of the Company's CVW™ technology at Canadian Natural's Horizon oil sands site. The successful completion of this phase does not provide any guarantee that Canadian Natural will proceed with a

subsequent Engineering Procurement and Construction ("EPC") phase or the future commissioning of the Company's CVW™ technology, which forms a part of the post-FEED Project activities. With the completion of the FEED Project, there are a number of other post-FEED Project activities required to be undertaken by the Company and Canadian Natural prior to proceeding with the EPC phase, including the continuation of minerals evaluation and testing; engineering optimization, including development of the Project scope, and the evaluation of capital and operating costs; as well as the optimization of the concentrator facility and the minerals facility; the filing of regulatory applications for the Project along with Indigenous engagement and commercial structure and financing related activities These post-FEED Project activities may take longer, be of a different scope and be costlier than currently expected.

Depending on the amount and scope of post-FEED Project activities or length of time these activities may take to complete, the Company may be required to raise additional capital through the issuance of securities, loans, new or additional government grants and/or some form of partnership or joint venture to fund these costs. There can be no guarantee that the Company will be able to raise additional capital or funding on acceptable terms or at all. Each of these processes may take longer and be costlier than expected, may not be on terms favourable to the Company or may not materialize into binding agreements for a commercially scaled version of our CVW™ process at all. As such, there is still uncertainty and risk that our CVW™ process will not be adopted on a commercial scale.

While the Company and Canadian Natural have consciously demonstrated a strong focus on the post-FEED Project activities and continue to actively work towards commercialization of the Project, investment decisions in post-FEED Project activities are expected to be undertaken on a year-by-year basis and a final investment decision with respect to commercialization of the Project is uncertain at this time. As a result, there is the potential for delay or revision to the post-FEED Project activities and in turn the Project as a whole, which will be affected by, amongst other factors, the current state of the global economy, global crude oil prices and current public health concerns, including those relating to the COVID-19 pandemic.

***Crude oil and bitumen price fluctuations are beyond our control and may affect the ability and willingness of oil sands producers to evaluate our CVW™ process or enter into commercial projects with us.***

Crude oil and bitumen price fluctuations are beyond our control and may have a material adverse effect on the willingness of oil sands producers whether to adopt and integrate our CVW™ process in existing or new oil sands projects and on the economics, operating results, financial condition and profitability of any commercial projects involving our CVW™ process.

The financial condition, operating results and future growth of oil sands producers are substantially dependent on prevailing and expected prices of oil and bitumen. Prices for oil are subject to large fluctuations in response to

changes in supply and demand, geo-political uncertainty and a variety of additional factors, including access to markets and sufficient transportation capacity, all of which are beyond the control of oil sands producers.

Global crude oil prices are expected to remain volatile for the near future because of market uncertainties over the supply and demand of these commodities due to the current state of the world economy, current public health concerns, including the COVID-19 pandemic, shale oil production in the United States, OPEC+ actions, political uncertainties, sanctions imposed on certain oil producing nations by other countries, conflicts in the Middle East and ongoing credit and liquidity concerns, among other factors.

Many crude oil and bitumen companies have already reduced and may continue to reduce their 2020 capital programs and are temporarily deferring planned activities as a result of the dramatic decreases in global crude oil prices and other global events that occurred in the first quarter of 2020 and remain ongoing. Prolonged periods of low crude oil and bitumen prices as well as political and other economic uncertainty, could result in certain oil sands producers reducing, further reducing or eliminating their spending on new capital-intensive projects (as opposed to sustaining capital expenditures or existing projects) which could have a material adverse effect on the timing and/or willingness of oil sands producers to adopt and integrate our CVW$^{TM}$ process into their existing and future oil sands operations.

***Global or national health concerns, including the outbreak of pandemic or contagious diseases, such as the recent COVID-19 (coronavirus), may adversely affect the Company***

The Company's business, operations and financial condition could be materially adversely affected by the outbreak of epidemics or pandemics or other health crises. In December 2019, COVID-19 was reported to have surfaced in Wuhan, China. On January 30, 2020, the World Health Organization declared the outbreak a global health emergency and on March 11, 2020, the World Health Organization declared the outbreak a pandemic as it has spread throughout the world. Global reactions to the COVID-19 pandemic, including the current resurgence of the swift spread of COVID-19 in the third and fourth quarters of 2020, have led to, among other things, significant restrictions on travel, business closures, school closures, quarantines, restrictions on public gatherings, various degrees of social distancing measures and a general reduction in consumer activity. While these effects are expected to be temporary, the duration of the business disruptions locally, nationally, and internationally and the related financial impact cannot be reasonably estimated at this time. Such public health crises can result in volatility and disruptions in the supply and demand for crude oil and natural gas, global supply chains and financial markets, as well as declining trade and market sentiment and reduced mobility of people, all of which could adversely affect commodity prices, interest rates, credit ratings, credit risk and inflation. In particular, global crude oil prices significantly weakened in response to the COVID-19 pandemic and demand for crude oil and natural gas also significantly declined worldwide. The risks to the Company of such public health crises also include risks to

employee health and safety and a slowdown or temporary suspension of operations in geographic locations impacted by an outbreak. At this point, the extent to which the COVID-19 pandemic may impact the Company is uncertain; however, it is possible that the COVID-19 pandemic may have a material adverse effect on the Company's business, results of operations and financial condition. All of these considerations may also have a material adverse effect on Canadian Natural, which could in turn affect Canadian Natural's ability to proceed with the current post-FEED Project activities and would then have a material adverse effect on the Company's business, results of operations and financial condition.

Should an employee or visitor in any of the Company's facilities, offices or work sites become infected with a serious illness that has the potential to spread rapidly, this could place the Company's small workforce at risk. The COVID-19 pandemic is one example of such an illness. The Company takes every precaution to strictly follow industrial hygiene and occupational health guidelines. There can be no assurance that this virus or another infectious illness will not impact the Company's personnel and ultimately its operations.

***We expect to continue incurring losses and consuming cash for several years and will likely need to raise additional capital, the availability of which cannot be assured.***

We expect to incur continued losses until we can produce sufficient revenues to cover our costs. If we are unable to successfully implement our business plan, our cash requirements may increase, and we may find it difficult to raise additional funding and continue operations. We expect our cash reserves will be reduced due to future operating losses, and we cannot provide certainty as to how long our cash reserves will last or whether we will be able to access additional capital when necessary in order to carry on business.

***Titanium expects to rely on funding commitments from the Governments of Canada to pay part of the project costs associated with the first implementation of Titanium's Creating Value from Waste™ clean technology, the availability of which cannot be assured.***

Environment and Climate Change Canada, through the LCEF, has conditionally committed to investing $40 million and NRCan's CGP has conditionally committed to investing $5 million in the Company's CVW™ Horizon Project. To secure these funding commitments, we will have to negotiate the terms and conditions under which such funding will be provided and enter into definitive agreements with the responsible government agencies within prescribed time periods. Changes in governments and delays or other difficulties in satisfying pre-conditions for the signing of such definitive agreements create uncertainty in securing these and other government funding commitments. We can offer no guarantee that we will be able to conclude such negotiations and enter into such definitive agreements on reasonable terms or at all.

Even if definitive agreements are entered into, the terms and conditions of such agreements may not be favorable to the Company or may otherwise be subject to conditions which the Company cannot satisfy. For instance, the

governments' obligations to fund payment of eligible-Project costs will be subject to the satisfaction of several conditions, including the successful completion of other government funding programs, Titanium's compliance with the other terms and conditions of the government funding agreements and within the time periods required, and Titanium securing, within certain prescribed time periods, the remaining funding necessary to complete the Project. Given the need to first secure satisfactory commercial arrangements with an oil sands producer to adopt and integrate our CVW™ process, Titanium may not be able to comply with the current government-imposed deadlines to secure, within certain prescribed time periods, the remaining funding necessary to complete the Project. As such, an extension of time to satisfy that condition will be required from the responsible government agencies in order to secure such funding commitments, the availability of which cannot be assured. Even if such an extension is granted, no assurance can be given that Titanium will be able to satisfy the other conditions necessary to receive payment of eligible-Project costs.

If the government funding commitments are not available, the Company may be required to raise additional capital through the issuance of securities, loans, new or additional government grants and/or some form of partnership or joint venture to fund the costs that would have otherwise been paid for with government funding. No assurances can be given that the Company will be able to raise additional capital or funding on acceptable terms or at all.

***We could lose or fail to attract the personnel necessary to run our business.***

Our success depends in large part on our ability to attract and retain key management, engineering, scientific and operating personnel. As we develop additional capabilities and expand the scope of our operations, we will require additional skilled personnel. Recruiting personnel for the oil sands and waste remediation industry is often highly competitive. Other companies have significant capital resources and other business activities as compared to the Company. We may not be able to continue to attract and retain qualified executive, managerial, technical and operational personnel needed for our business. Our failure to attract or retain qualified personnel could have a material adverse effect on our business.

***The breadth and complexity of changes to Canadian federal and provincial environmental laws make it difficult for oil sands producers to predict the potential financial impacts of these changes on oil sands producers and their operations which may affect the timing and willingness of oil sands producers to evaluate our CVW™ process or enter into commercial projects with us.***

A number of statutes, regulations and frameworks are under development or have been issued by various Canadian federal and provincial regulators that affect oil sands developments, including changes relating to such issues as tailings management, water use, air emissions and land use. The breadth and complexity of these changes and proposed changes make it difficult for oil sands producers to predict the potential financial impacts of these changes on them and their operations. Because it is not currently possible to predict the nature of any future requirements

or the impact on oil sands producers and their business, financial condition, results of operations and cash flow, oil sands producers may be unwilling to evaluate our CVW™ process or proceed past the engineering design phase and enter into commercial projects with us until these uncertainties and risks are better understood.

***Our potential customer base is concentrated, and we are subject to risks from those customers' internal research and development of competing tailings management strategies.***

Based on the current stage of our CVW™ process, our potential customer base is limited to the mining sector of Canada's oil sands industry now consisting of Canadian Natural (Horizon and Albian Sands sites), Suncor Energy Inc. (Base Plant and Fort Hills sites), Syncrude Canada and Imperial Oil Limited (Kearl), each of whom may prefer other methods of dealing with froth treatment tailings that do not include our CVW™ process.

As our CVW™ process has the potential to replace existing methods of dealing with froth treatment tailings, competition for our process will come from current oil sands producers, from improvements to current methods of dealing with froth treatment tailings and from new alternative methods of dealing with froth treatment tailings.

Additionally, oil sands producers are working on developing alternative methods of dealing with froth treatment tailings, such as thickening and dewatering methods, which could meet current regulatory requirements. The industry may elect to use such methods or develop others as alternatives to adopting the Company's technology.

While the Company has completed the FEED Project for the implementation of the Company's CVW™ technology at Canadian Natural's Horizon oil sands site, Canadian Natural is not required to proceed past this phase nor has it agreed to adopt the Company's CVW™ technology on a commercial scale.

Other companies, research facilities and universities are actively engaged in the research and development of processes for dealing with froth treatment tailings. Each of these organizations has the potential to develop competing processes that would diminish the competitiveness of our CVW™ process. These organizations, including the oil sands producers themselves, have substantial financial resources, research and development capabilities, and other resources, which give them significant competitive advantages over us.

***The CVW™ process has not been commercially demonstrated and process recoveries on a commercial level are uncertain.***

To date, we have focused primarily on R&D and engineering design. The CVW™ process is a new process and consequently we have no experience operating on a large-scale commercial basis. As such, the recovery of bitumen, heavy minerals, solvent and water in commercial projects and the environmental impacts of using the CVW™ process involves uncertainty. There can be no assurance that the Company's CVW™ process will recover bitumen, heavy minerals, solvent and water at the expected levels, with the expected environmental benefits and/or operating costs or on the expected schedule.

***We are dependent on the composition of froth treatment tailings for quantity and quality of bitumen, solvents and minerals.***

There is inherent variability and uncertainty regarding the composition of the feed tailings that may be processed by the CVW™ process from different oil sands sites in commercial projects and over time from the same site, which could impact realized recovery rates, product volumes, revenues and unit operating costs significantly.

More specifically, there is uncertainty relating to the volumes of bitumen, heavy minerals, solvent and water that may be recovered from froth treatment tailings using the CVW™ process due to uncertainties in froth tailings composition and process recovery rates. While there have been many Athabasca basin studies that have assessed the composition of oil sands ores, as well as extensive sampling conducted by the Company and some of its potential oil sands commercialization partners on live froth treatment tailings at various oil sands sites, there remains uncertainty about the levels of bitumen, solvent and heavy minerals, and the composition of such heavy minerals, in any froth treatment tailings streams that may be used in a commercial project. These could vary substantially and adversely from the levels and composition expected by the Company. As such, actual production, and the net revenues and cash flows to be derived therefrom, may vary from time to time, and over the life of a commercial project from expected levels, and such variations may be material.

***We have no experience operating our CVW™ process on a commercial basis and there are uncertainties involved with commercial project execution.***

The execution of commercial projects once negotiated involves risks associated with the planning, engineering, cost, construction, integration, commissioning and start-up of new CVW™ facilities with existing or new oil sands operations. Risks include failures in the specification, design or technology selection; determining and agreeing upon a scope for the project; building the project in the approved time and at the agreed cost; and meeting agreed performance targets, including capital and operating costs, efficiency, recoveries and maintenance costs. Actual results in the execution of any commercial projects could materially and adversely vary from expected outcomes. Many factors can affect key outcomes, including general economic, business and market conditions, the availability and cost of qualified personnel, key materials and equipment, the complexity of managing multiple suppliers and contractors, the complexity of building within existing operating sites, weather conditions, changing government regulations, approval requirements, permits and public expectations.

Capital cost overruns or delays in achieving commercial implementation could have a material adverse effect on the Company's business, financial condition, results of operations and cash flow. Moreover, commercial implementation may require substantial capital and we do not know whether we will be able to secure sufficient

funding on terms acceptable to us or at all. Our failure to complete commercial implementation or financing could have a material adverse effect on our business and financial results.

***We are dependent on oil sands operators for froth treatment tailings volumes.***

There are numerous uncertainties involved with estimating the quantities of froth treatment tailings that may be available for processing in future commercial projects using the CVW™ process. The quantity of froth treatment tailings available will depend on a number of factors, including the overall volumes of oil sands ore mined and processed by oil sands operators, their extraction and froth treatment efficiency, and the amount and timing of any operational downtime due to planned or unplanned slowdowns, shutdowns or other restrictions on production. The availability of froth treatment tailings for processing will depend on oil sands operators' froth tailings volumes, over which the Company has no control.

***Heavy minerals price fluctuations are beyond our control and may have a material adverse effect on our business, operating results, financial condition and profitability.***

The ability of the Company to develop, finance and operate minerals facilities in the future will be significantly affected by the price of zircon and titanium in the world market. In particular, zircon prices have fluctuated widely since 2009 and are affected by numerous factors beyond the Company's control such as global and regional supply and demand (particularly from China), global or regional political, economic or financial conditions, the cost of substitutes, interest rates, inflation or deflation, and fluctuations in the value of the United States dollar and foreign currencies. There is a high degree of uncertainty regarding the future price of zircon and other minerals that could have an adverse effect on the Company's ability to develop, finance and operate minerals facilities.

As provided elsewhere in this discussion of risks, as a result of the COVID-19 pandemic, trade disputes between the United States and China and the recent rapid decline in global financial markets and commodity prices, amongst other factors, including the outlook for economic growth in China and it is unclear how long, or to what extent, the deceleration will continue to last.

The Chinese market has become a significant source of global demand for commodities, including zircon and other minerals. The deceleration in China's economic growth could result in further lower prices and demand for the products from our CVW™ process, which would have a negative impact on the Company. We could also experience these negative effects if demand from China slowed for other reasons, such as increased self-sufficiency, trade barriers, or certain thrifting initiatives by customers.

Additionally, mineral price declines could adversely affect our continued development of, and eventual commercial production from, our CVW™ process. These declines could impair the economic feasibility to develop, finance and operate minerals facilities. Depending on the price of and demand for zircon and other minerals, the Company

may not be able to proceed with the development of minerals facilities. Additionally, continuing to commercially develop our CVW™ process may not be feasible. Even if the continued commercial development of our CVW™ process is ultimately determined to be economically viable, the need to conduct such a reassessment may cause substantial delays and interrupt operations until the reassessment can be completed.

***Forecasting our financial and business results due to fluctuations in commodity prices creates complexities and may restrict our access to funding for our commercialization plan.***

Due to the stage of development of our business, it is difficult to predict our future revenues or results of operations accurately. We are also subject to normal market and financial risks such as credit risks, foreign currency risks and fluctuations in commodity prices. As a result, it is possible that in one or more future quarters, our operating results may fall below the expectations of investors and securities analysts. Not meeting investor expectations may materially and adversely impact the trading price of our common shares and restrict our ability to secure required funding to pursue our commercialization plans.

***The royalty regime in Alberta and other fiscal incentives may not encourage oil sands operators to enter into commercialization agreements and could significantly reduce the value of the Company's CVW™ process and technologies.***

The prospects for commercializing the CVW™ process, and the Company's operating cash flow from commercial projects, will be affected by the applicable royalty regime, any future changes to the royalty regime by the Government of Alberta and any Alberta or Federal fiscal incentives. The Province of Alberta receives royalties linked to price and production levels on the production of natural resources from lands in which it owns the mineral rights, including lands with new and existing oil sands projects. The Government of Alberta may not implement a fiscal regime for minerals and bitumen from oil sands tailings that incentivizes oil sands operators to enter commercialization agreements. Further, the Government of Alberta may implement a regime that adversely affects the results of operations, financial condition or prospects of the Company or its oil sands partners. In addition, the Company may not be successful in obtaining Alberta or Federal fiscal incentives as part of the commercialization process.

***Exchange rate fluctuations are beyond our control and may have a material adverse effect on our business, operating results, financial condition and profitability.***

Our revenues will be affected by fluctuations in the exchange rate between the Canadian dollar and the United States dollar. Once a commercial deal is arranged, we would expect to generate a significant portion of our revenues in United States dollars while a significant portion of our operating expenses and capital expenditures are in Canadian dollars. As a result, any decrease in the value of the United States dollar relative to the Canadian dollar reduces the amount of Canadian dollar revenues we realize on sales, without a corresponding decrease in expenses. Exchange rate fluctuations are beyond our control, and the United States dollar may depreciate against the Canadian

dollar in the future, which would result in lower revenues and margins. In order to reduce the potential negative effect of a weakening United States dollar, we may enter into various hedging programs. However, if the Canadian dollar increases in value, it will negatively affect our financial results.

***We depend on our intellectual property and our failure to protect that intellectual property could adversely affect our future growth and success.***

Our success depends in part on our ability to protect our intellectual property rights. We rely on patent, trade secret, trademark and copyright laws to protect our intellectual property. However, our patent position remains subject to complex factual and legal issues, which may give rise to uncertainty as to the validity, scope and enforceability of a particular patent. Accordingly, there is no assurance that effective patent, trade secret, trademark and copyright protection will always be available for our intellectual property rights, both in Canada and other countries.

We also seek to protect our proprietary intellectual property, including intellectual property that may not be patented or patentable, in part by confidentiality agreements and, if applicable, inventors' rights agreements with our strategic partners and employees. We can provide no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, or that such persons or institutions will not assert rights to intellectual property arising out of these relationships.

***We may be involved in intellectual property legal proceedings that cause us to incur significant expenses or prevents us from selling the CVW$^{TM}$ process.***

We may become subject to legal proceedings in which it is alleged that we have infringed the intellectual property rights of others or commence legal proceedings against others who we believe are infringing upon our rights. Our involvement in intellectual property litigation could result in significant expense to us, adversely affecting the development of sales of the challenged process or intellectual property and diverting the efforts of our technical and management personnel, whether or not such litigation is resolved in our favour. In the event of an adverse outcome as a defendant in any such litigation, we may, among other things, be required to: (a) pay substantial damages; (b) cease the development, use, sale or importation of processes that infringe upon other patented intellectual property; (c) expend significant resources to develop or acquire non-infringing intellectual property; (d) discontinue processes incorporating infringing technology; or (e) obtain licenses to the infringing intellectual property. We may not be successful in such development or acquisition or such licenses may not be available on reasonable terms. Any such development, acquisition or license could require the expenditure of substantial time and other resources and could have a material adverse effect on our business and financial results.

***There are operational hazards involved in the CVW$^{TM}$ process.***

CVW$^{TM}$ projects will involve the typical risks associated with recovering, transporting and processing hydrocarbons, including fires, explosions, gaseous leaks, migration of harmful substances and spills. A casualty

occurrence might result in the loss of life and equipment, as well as injury, property damage or the interruption of the operations of a commercial project. The Company may not carry adequate insurance with respect to all potential casualties, damages, losses and disruptions. Losses and liabilities arising from uninsured or under-insured events could have a material adverse effect on the Company's results of operations, financial condition and prospects.

***We may consider new business opportunities.***

We may consider expanding our business beyond what is currently contemplated in our business plan. Depending on the financing requirements of a potential acquisition or new process opportunity, we may be required to raise additional capital through the issuance of equity or debt. If we are unable to raise additional capital on acceptable terms, we may be unable to pursue a potential acquisition or new process opportunity.

## Related Party Transaction

There were no related party transactions in the three and nine months ended September 30, 2020.

## Off Balance Sheet Arrangements

The Company does not have any off-balance sheet arrangements.

## Critical Accounting Estimates and Judgements

The preparation of financial statements in accordance with IFRS requires management to make critical accounting estimates and judgments that affect the amounts reported in the financial statements and accompanying notes. These estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The resulting accounting estimates will, by definition, seldom equal the actual results. Management considers the following areas to be those where critical accounting policies affect the significant estimates and judgments used in the preparation of the Company's financial statements.

a) Government assistance

   The recovery of government grants and partner project contributions requires judgement to determine when reasonable assurance exists that the Company has complied with conditions contained in the applicable contribution agreements.

b) Recognition of intangible assets

Determining the commencement of capitalization of development costs requires judgement to determine when conditions exist to capitalize costs related to the development of intangible assets.

c) Fair value of stock options

Determining the fair value of stock options requires judgment related to the choice of a pricing model, the estimation of stock price volatility, the expected term of the underlying instruments, the estimation of the risk-free interest rate and the rate of forfeiture of the options granted.

d) Fair value of warrants

Determining the fair value of warrants requires judgement related to the choice of a pricing model, the estimation of stock price volatility, the expected term of the underlying instruments and the estimation of the risk-free interest rate.

## Other Information

**Outstanding Share Data - as of November 24, 2020:**

| | |
|---|---|
| Number of common shares issued and outstanding: | 88,480,791 |
| Number of common share awards granted and outstanding: | 8,164,136 |
| Number of warrants – Private Placement units[1] | 3,044,742 |

[1] These common share purchase warrants of the Company were issued to participants in the May 2019 private placement. Each unit consisted of one common share of the Company and one-half of one common share purchase warrant. The Company issued an aggregate of 3,044,742 common share purchase warrants. Each whole warrant is exercisable to purchase one common share at a price of $1.40 per common share until May 9 (2,913,242) and May 30 (131,500), 2022.

## Compliance

Mr. Neil Dawson, of Australia, and a registered member of AusIMM is the independent consultant who acts as the Qualified Person for the Company on the CVW™ project.