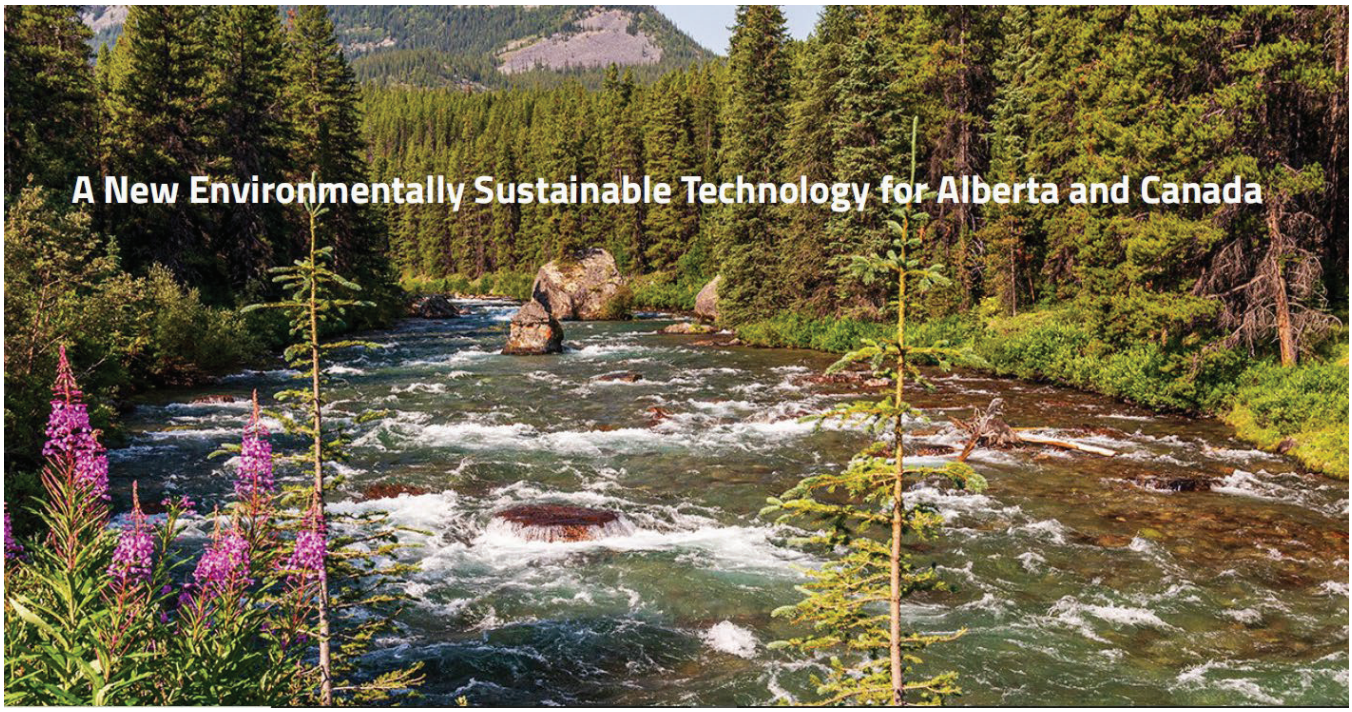
TITANIUM CORPORATION

CREATING VALUE FROM WASTE™



2020 Annual Report

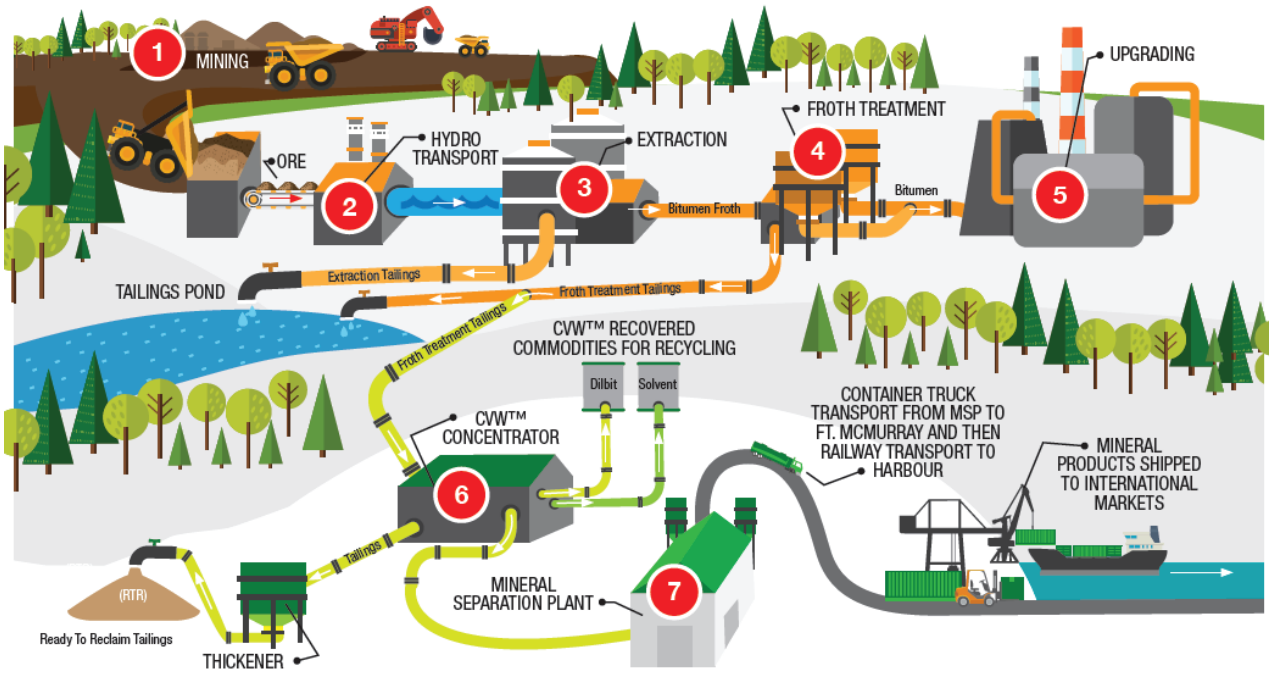
A New Sustainable Technology for Alberta and Canada

Titanium Corporation ("Titanium" or 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 recover bitumen, solvents, valuable minerals and water from oil sands froth treatment tailings. Titanium's technology is designed to intercept oil sands froth treatment tailings before discharge to tailings ponds, recover high quality commodities that are currently lost to tailings ponds and thicken these residual tailings for their permanent deposit in designated disposal areas.

Recovered commodities include naphtha, bitumen, and valuable minerals, such as zircon and titanium. The recovered bitumen can be upgraded in existing site facilities to synthetic crude oil (SCO) and the recovered naphtha, a high value product, will be recycled back to the oil sands facility for reuse. The production of minerals from oil sands tailings, including zircon, titanium and potentially rare earth elements, represents a new, diversified export industry for Alberta and Canada. The recovery of lost hydrocarbons will reduce fugitive methane and Greenhouse Gas (GHG) emissions from tailings ponds as well as reduce Volatile Organic Compound (VOC) and Secondary Atmospheric Aerosol (SOA) emissions and facilitate more efficient tailings remediation.

The new, high value minerals industry that will be created with the production and export of zircon concentrate and titanium mineral sand products involves essential ingredients in ceramics, coatings and many other everyday products that improve people's lives.

The illustration below shows the facilities at a typical oil sands mining extraction operation and illustrates the proposed integration of the Company's CVW™ technology (6 and 7) with them:



About Titanium Corporation

Titanium is an associate member of the Resource Diversification Council ("RDC"); a member of the Alberta Chamber of Resources ("ARC"), the Canadian Chamber of Commerce and the Zircon Industry Association ("ZIA"). The Company's shares are listed on the TSX Venture under the symbol "TIC".

Titanium wishes to gratefully acknowledge past funding from Emissions Reduction Alberta ("ERA"), Sustainable Development Technology Canada ("SDTC"), the Government of Alberta and the National Research Council Canada and the recent grant funding awards Environment and Climate Change Canada's Low Carbon Economy Fund, Natural Resources Canada's Clean Growth Program and continuing funding by ERA.

Annual Meeting: The Company will hold its annual and special meeting (the "Meeting") as a virtual only meeting via live audio webcast online at https://virtual-meetings.tsxtrust.com/1135 on Thursday, June 17, 2021 at 11:00 a.m. (Toronto time).

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Message to Shareholders

Our Company and business partners have weathered a challenging 2020. It was an extraordinary year marked by the COVID-19 global pandemic, government-mandated lockdowns and social distancing and an oil price war that together produced one of the steepest economic declines in history. Unprecedented fiscal and monetary stimulus and, starting in the fourth quarter of 2020, the successful development, testing and roll out of multiple vaccines have supported a sharp recovery in economic growth and oil prices. While uncertainties remain, with new variants and waves of infection, the outlook now looks much improved. Amidst these challenges, our Company, with the support of our business partners and the Federal and Alberta governments, has continued to successfully execute engineering programs throughout 2020 and into 2021 that are critical to the progress of the CVW™ Horizon Project.

A substantial engineering effort is required to integrate new process technology facilities into an existing operating oil sands site. Throughout 2020 and into 2021, our Company and Canadian Natural Resources Limited ("Canadian Natural") have been working together on validation and optimization engineering of the CVW™ project facilities. The main focus of the joint team in 2020 was the concentrator plant and thickener facilities along with associated utilities and integration. Follow-up engineering and cost estimating has continued in the first half of 2021. The minerals program advanced during 2020 with larger sampling programs and analysis. Changes in the minerals suite and minerals market dynamics have prompted a redesign of the minerals facility to produce a larger volume of a high TiO2 titanium ilmenite product and a higher quality zircon concentrate product. Engineering redesign started in the fourth quarter of 2020 and has continued into the first half of 2021. The total project engineering cost for 2020 was $5.45 million. After partner and government funding, our Company's share was $1.28 million. These engineering programs provide key inputs for updating capital cost estimates, economics, and planning for the next phase of the project.

In early 2020, we took aggressive actions to reduce costs and conserve cash in the face of uncertainty around the extent and duration of the pandemic and economic crisis. We safely retained our team and maintained our capability to continue to work effectively and efficiently with our business partners and governments. Securing government funding was invaluable in maintaining momentum during this challenging period.

Our management team voluntarily implemented compensation reductions, the largest component of our G&A expense. Management compensation (including salaries, deferred and equity-based compensation) was reduced by 27% for 2020 from 2019, contributing to an overall reduction of G&A expense of $0.4 million. R&D expense in 2020 was $1.8 million, a $0.2 million increase over 2019 as we maintained an active engineering program.

Titanium's CVW™ technology has been widely recognized by stakeholders as a "clean tech" sustainable technology that will reduce the environmental footprint of oil sands mining operations. Government funding programs, aimed at lowering Canada's carbon emissions, have been crucial to the development and progress of the CVW™ Horizon Project.

During 2020 and early 2021, the Company finalized several key government funding agreements including: a $5 million grant from Emissions Reduction Alberta; a $1.96 million contribution from Natural

Resources Canada's Clean Growth Program; and a $10 million grant from Sustainable Development Technology Canada. The Company also signed 2020 and 2021 Project Coordination Agreements with Canadian Natural that provide for cost and grant sharing between the parties (30% Titanium, 70% Canadian Natural) and set out the management structure, responsibilities, and administration of the engineering programs.

Wide adoption of Environmental, Social and Governance (ESG) principles by industry and the financial sector is creating opportunities for the clean tech sector including our Company. Technology and innovation have an important role to play in achieving ESG goals.

Our technology is closely aligned with the ESG objectives of the oil sands industry including reducing climate changing emissions, improving tailings management and remediation, conserving valuable resources, creating resource diversification, new jobs, and economic growth. Our Company has a unique competitive advantage in this area. The development of complex large-scale technologies from inception, through R&D, piloting, demonstration, and engineering for site integration is a long, costly, and very disciplined process. Through the combined talents of our joint project team and with the support of governments and industry, we have successfully reached an advanced stage of site engineering for the first commercial scale prototype implementation of our technology.

To all our business and government partners, our employees, and our shareholders, we thank you for your collective support during an unprecedented and testing year. We wish you, your families and colleagues good health and safety as we all look forward to a better 2021.

Sincerely,

David Macdonald
Chairman

Scott Nelson
President and Chief Executive Officer

Cautionary Notice

Certain statements made in this annual report constitute forward-looking statements and information ("forward-looking statements") that reflect the current expectations of management about the future results, performance, achievements, prospects or opportunities for Titanium Corporation Inc. ("Titanium" or the "Company"). Forward-looking statements, by their very nature, are subject to inherent risks and uncertainties and are based on several 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 statements.

More particularly, this annual report contains, without limitation forward looking statements pertaining, but not limited, to: the Company's belief that it will commercially demonstrate the Creating Value from Waste™ (CVW™) technology; the Company's beliefs regarding its position for growth; statements regarding the Company's access to government funding and grants; the Company's expectations regarding timing for the completion of its CVW™ technology; the expected expenditures required to complete the CVW™ technology; the expected demand for the mineral production resulting from the Company's CVW™ technology; the impact of the COVD-19 global pandemic on the mining and oil sands industries, volatility in the financial markets, disruptions to global supply chains and the Company's business, operations, access to customers and suppliers, availability of employees to carry out day-to-day operations and other resources; the Company's beliefs regarding its position to overcome current macro-economic challenges; and the Company's ability to enter into firm agreements with industrial customers. Although management believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance or achievement since such expectations are inherently subject to significant business, economic, operational, competitive, political and social uncertainties and contingencies and there can be no assurance that the Company's research, pilot programs, and FEED studies will prove to be accurate as actual results and future events could differ materially from those expected or estimated in such forward-looking statements. Unless otherwise noted, the data and anticipated future benefits contained in this annual report are based on results from the Company's demonstration piloting and have not been proven otherwise. As a result, the Company cannot guarantee that any of forward-looking statements will materialize and cautions readers against placing undue reliance on any of the forward-looking statements in this annual report.

The forward-looking statements involve substantial known and unknown risks and uncertainties, certain of which are beyond the Company's control and many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward looking statements made by the Company. Additionally, such forward looking statements are based on certain assumptions made by the Company in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors the Company believes are appropriate in the circumstances. **For a description of the assumptions and risks underlying the forward-looking statements in this annual report, refer to the end of this annual report under the heading "Disclaimer" and consult Titanium's management's discussion and analysis for the year ended December 31, 2020 dated April 27, 2021 included in this annual report and in other reports filed with the securities regulatory authorities in Canada from time to time and available on SEDAR (www.sedar.com). The forward-looking statements contained in this annual report are made as of the date hereof and the Company undertakes no obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise, unless so required by applicable securities laws.**

MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE YEAR ENDED DECEMBER 31, 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 year ended December 31, 2020. This MD&A should be read in conjunction with Titanium's audited financial statements as at and for the years ended December 31, 2020 and 2019 (the "Financial Statements"). This MD&A is dated as of April 27, 2021. 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 optimization and validation engineering project activities; the scope of activities that will be undertaken; the timing for completion of the ongoing minerals analysis and optimization of the minerals facility; the timing of completion of the optimization and validation of the concentrator and tailings thickener facility; the timing expectation for making an investment decision and proceeding with detailed engineering and construction of facilities; the Company's ongoing engagement with stakeholders; 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, and the ongoing volatility in world markets may adversely impact oil sands producers' program plans, including proceeding with an investment decision in further 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 ongoing impact of COVID-19) and other geopolitical risks, including the fact that any estimates of 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 optimization and validation engineering project activities, including the expected assessment of optimization and validation engineering reviews for next steps as part of the 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 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, optimization and validation engineering 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 optimization and validation engineering project activities are completed and a final decision to proceed with the project has been made; future oil and minerals 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, optimization and validation engineering 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, optimization and validation engineering 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 April 27, 2021 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 commenced 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 was formally completed in August 2019. The Company and Canadian Natural continue to work together on optimizing and validation of the engineering design

along with planning the next phase of the Project, including minerals analysis and marketing, economic modeling and business structuring.

The Company and Canadian Natural completed a validation and optimization engineering program in 2020 for the concentrator and thickener facilities and in the first quarter of 2021 are now focused on redesign and costing of the minerals and transload facilities and further engineering reviews of the concentrator facility. These work programs are integral for the commercialization of the Project and investment decisions for the next phases of the project are expected to be undertaken on a year-by-year basis. 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 project activities and in turn the Project as a whole, which could be affected by, amongst other factors, the ongoing COVID-19 pandemic and related public health concerns and restrictions, the current state of the global economy, and crude oil prices. 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. This $10 million program was supported by a grant from ERA for $5.0 million and the balance was paid for by the Company and Canadian Natural.
- In March 2019, the Company was awarded $50 million in government funding toward the next phases of the Project from the Canadian federal and Alberta provincial governments: (i) Environment and Climate Change Canada, through its Low Carbon Economy Fund ("LCEF"), conditionally committed to investing $40 million; (ii) Natural Resources Canada ("NRCan"), through its Clean Growth Program ("CGP"), committed to investing $5 million; and (iii) ERA, through its Partner Intake Program aimed at improving environmental performance in Alberta's oil and gas sector, committed to investing $5 million. The Company entered into contribution agreements with: (i) ERA regarding the investment of $5 million on September 28, 2020; and (ii) NRCan regarding the investment of $1.96 million on January 19, 2021. Funding from the LCEF program is 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.
- In 2020, the Company and Canadian Natural focused engineering resources on optimizing and validating the engineering of the concentrator, thickener and associated facilities and services. The focus during the

first four months of 2021 has involved the optimization and engineering design modifications for the minerals facilities. With the support of NRCan's funding announced in January 2021, the Company contracted third party engineering and analytical firms to complete redesign, validation, and optimization. Minerals testing and analysis is ongoing as well as completion of government grant funding agreements and pursuit of additional government funding for the Project.

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 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, conserving cash and securing additional government funding for the Project. See "Discussions of Risks". The reduction of base salaries in the range of 15 to 25% effective April 1, 2020 along with the suspension of variable compensation programs reduced overall compensation by 23% for the year ended December 31, 2020 compared to 2019. Travel and other discretionary expenses were reduced or eliminated altogether. Titanium is a development stage Company with no revenues and as such was not eligible for any of the Federal or Provincial programs related to wage or rent subsidies. The Company was successful in securing government funding related to the Project from ERA, NRCan and SDTC (see details under highlights). While these funding amounts were not reflected in the financial results for the year ended December 31, 2020, receipt of $1.7 million in contributions from these various programs in the first quarter of 2021 provided working capital to execute on the engineering and validation work currently underway.

In the second half of 2020 and into the first quarter of 2021, much of our country has experienced a second and third waves of the COVID-19 pandemic while economic conditions and oil prices have remained volatile. In 2020 and subsequently into 2021, many new projects were cancelled or suspended. Despite these challenges, the Project has continued with our joint team making steady progress on the validation and optimization engineering phase with additional government funding being awarded to the Project described in the overview and highlight details below.

Over the past year the Company and Canadian Natural's joint project engineering team has continued work on the Project utilizing internal resources, performing 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 was the optimization of the concentrator facility and the design and engineering of a tailings thickener and associated facilities. Optimization and redesign of the minerals facility, including further work by external minerals engineering firms, commenced in the fourth quarter of 2020 and is continuing into 2021. In parallel, the Company has been providing updates to Alberta and Federal government agencies who have awarded grant funding for the Project or have announced new funding programs, working with them toward finalizing funding contracts, assessing recently announced new programs for potential additional funding for the Project and making funding applications.

The April 2021 Federal Budget and the Government's recently announced targets to reduce Canada's GHG emissions to 40-45% below 2005 levels by 2030, reinforce the growing policy support for addressing climate change. The 2021 Federal Budget announced investments in innovation and new technologies including an additional $5 billion of funding over 7 years to increase funding to $8 billion for the Strategic Innovation Fund's Net Zero Accelerator. This fund aims to support projects that reduce green GHG emissions including through the scale up of clean technologies that accelerate industrial transformation and the development of process improvements which reduce the environmental footprint of current production through the use of new technologies.

Highlights

Certain highlights for the year ended December 31, 2020 and recent months are set out in more detail below:

- On January 19, 2021, Titanium announced that the Company and NRCan signed a Non-Repayable Contribution Agreement for $1.96 million of funding for eligible expenditures for a work program for the period April 1, 2020 to March 31, 2021 as part of the engineering phase of the Project. The work program includes validation engineering for the CVW™ Horizon Project facilities including the concentrator plant, minerals plant and transload facility and associated Class 3 capital cost estimates. During the first quarter of 2021, the project team is focused on minerals sample testing, minerals process engineering work to validate the resizing of the minerals plant and the front-end engineering design of a transload facility for rail shipment of minerals products.
- On December 22, 2020, Titanium announced that the Company and Canadian Natural entered into a 2020 Project Coordination Agreement ("PCA") which governed the 2020 engineering phase of the Project (the "2020 Program"). The PCA, effective January 1, 2020, set out the rights and responsibilities for the 2020 Program along with the cost sharing arrangement whereby Canadian Natural and Titanium were responsible for each parties share of the program costs which were 70% and 30%, respectively, for the total cost of the 2020 Program. During 2020, total optimization and validation engineering program costs, before government funding, were $5.45 million. Subsequent to year end, $1.2 million was received from government agencies as contributions for the 2020 Program with ERA contributing $0.8 million (less a 20% holdback) and NRCan contributing $0.4 million (less a 10% holdback). Titanium's 30% share of program costs after government funding was $1.28 million and Canadian Naturals' 70% share was $2.98 million.

- On December 21, 2020 the Company announced that SDTC had approved a $10 million contribution for the detailed engineering phase of the Project. The SDTC funding was subject to successful negotiation of a Project Funding Agreement ("PFA") with SDTC which was concluded on March 30, 2021. The start date for SDTC funding is December 1, 2020 and the Company received the first advance funding of $815,264 (less 10% holdback) on April 6, 2021 for completion of the first milestone due to be completed on April 30, 2021 under the agreement. 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 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 throughout the year and are continuing into the first half of 2021. The activities have been mainly focused on the concentrator facility with the objective of improving operability, enhancing environmental performance and reducing capital and operating costs. The 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 certain alternate types of equipment and the addition of a tailings thickener which will process and remediate the tailings from the concentrator. The Project team expects to conclude the optimization phase of concentrator engineering in the second quarter of 2021.
- Minerals testing and analysis of larger tailings samples commenced in the third quarter of 2020 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 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. The engineering unit of FWS Group is working in collaboration with IHC Robbins to engineer the non-process aspects of the minerals facility building and utilities, as well as full engineering for the minerals product handling transload facility.
- 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 and redesign the minerals facility. 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 concentrate processing industry in Asia or alternate markets. 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. Optimization and engineering of the minerals facility to incorporate these market-based product changes is well underway.

- In addition to finalizing ERA and NRCan's Clean Growth Program, the Company continued to advance contracting with other government funding agencies including SDTC. Funding from the government programs are subject to finalizing funding agreements which will outline the conditions under which funding would be provided. Of the $57 million of grant awards to the Company, approximately $14 million is designated for the engineering phase of the Project with the balance for the procurement and construction phases.
- On July 27, 2020, the Company announced that Mr. Bruce Griffin assumed the role of Chair of the Commercialization Committee of the Board of Directors (the "Committee") of the Company. Mr. Griffin, who was a member of the Committee, replaced Mr. David Macdonald. Mr. Macdonald had been the Chair of the Committee since 2017 and continues as 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 for the balance of the fiscal year and minimized external expenditures in all areas to preserve cash. In addition, the Company significantly reduced incentive pay for 2020, paid in Q1 2021, by 56% for an overall reduction of management compensation of 26%. 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. However, due to equity plan limitations, 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 limitations and the Company has suspended accruing variable management compensation to be settled with RSUs until such time the Company has the capacity to settle these

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 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 continuing COVID-19 pandemic and the collapse of crude oil prices in 2020, 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 validation and optimization 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. All estimates of post-FEED Project next steps may be affected by a number of factors, including the impact of the COVID-19 pandemic and the volatility 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 Annual Results

The following table presents a summary of selected annual financial information prepared under IFRS (Canadian dollar in millions except per share data):

	Fiscal Periods Ended		
	Twelve-month period ended Dec 31, 2020	Twelve-month period ended Dec 31, 2019	Twelve-month period ended Dec 31, 2018
Net (Loss) Income	**$ (3.4)**	$ 0.0	$ (7.6)
Net (Loss) Income per Share - Basic & Diluted	**$ (0.04)**	$ 0.0	$ (0.09)
Cash and Short-Term Investments	**$ 2.7**	$ 5.1	$ 0.8
Total Assets	**$ 2.7**	$ 5.1	$ 1.0

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):

	Q4 Dec 31, 2020	Q3 Sep 30, 2020	Q2 Jun 30, 2020	Q1 Mar 31, 2020
STATEMENT OF (LOSS) INCOME				
Net (Loss) Income	**$ (1.0)**	$ (0.78)	$ (0.74)	$ (0.90)
Basic and Diluted (Loss) per Share	**$ (0.011)**	$ (0.010)	$ (0.010)	$ (0.010)
	Q4 Dec 31, 2019	Q3 Sep 30, 2019	Q2 Jun 30, 2019	Q1 Mar 31, 2019
Net (Loss) Income	**$ (0.75)**	$ 0.03	$ 0.05	$ 0.40
Basic and Diluted (Loss) Income per Share	**$ (0.010)**	$ 0.001	$ 0.005	$ 0.005

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 engineering phase of the Project including engineering validation, optimization and planning for the potential implementation

of its technology at Canadian Natural's Horizon site. However, until optimization and validation 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 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 twelve-month periods ended December 31, 2020 compared to the three and twelve-month periods ended December 31, 2019:

As noted in the update section, in response to the COVID19 Pandemic and related economic uncertainties, the Company has taken measures to protect its balance sheet by reducing costs, conserving cash and securing additional government funding for the Project. The reduction of base salaries in the range of 15 to 20% effective April 1, 2020 along with the suspension of variable compensation programs reduced overall compensation by 26% for the year ended December 31, 2020 compared to 2019. Travel and other discretionary expenses were reduced or eliminated altogether. Titanium is a development stage Company with no revenues and as such was not eligible for any of the Federal or Provincial programs related to wage or rent subsidies. The Company was successful in securing government funding related to the project from ERA, NRCan and SDTC (see details under highlights). While these funding amounts were not reflected in the financial results for the year ended December 31, 2020, receipt of $1.7 million in contributions from these various programs in the first quarter of 2021 provided working capital to execute on the engineering and validation work currently underway.

For the three and twelve-month periods ended December 31, 2020, the Company reported net losses of $1.0 and $3.4 million, respectively. This resulted in a $0.01 loss per share for the current quarter and a $0.04 loss per share for the twelve-month period ended December 31, 2020. The net loss for the three-month period ended December 31, 2020 consisted primarily of G&A ($0.4 million) and R&D ($0.6 million) expenses in the current quarter compared to a net loss of $0.7 million for the three-month period ended December 31, 2019 consisting of G&A ($0.4 million) and R&D ($0.3 million). R&D project costs were higher in the current three-month period due to the validation engineering project work underway with Canadian Natural which was offset by lower G&A expenses due to cost reduction initiatives. For the year ended December 31, 2020 net loss of $3.4 million consisted primarily of G&A ($1.7 million) and R&D ($1.8 million) expenses compared to net income of $0.0 million for the year ended December 31, 2019. As noted above, the receipt of Project contributions related to the FEED Project in the prior

period offset 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 $2.7 million in cash at December 31, 2020 consisting of cash and interest-bearing investment accounts as compared to $5.1 million at December 31, 2019. The decrease in cash of $2.4 million since December 31, 2019 relates to funding the engineering validation 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			*Twelve months ended*		
	Dec 31, 2020	Dec 31, 2019	Increase (decrease)	Dec 31, 2020	Dec 31, 2019	Increase (decrease)
Compensation and benefits	$ 144	$ 146	$ (2)	$ 575	$ 674	$ (99)
Projects and other	435	124	311	1,043	608	435
Deferred compensation	29	10	19	50	85	(35)
Equity-based compensation	17	50	(33)	119	210	(91)
R&D costs	$ **625**	$330	**$ 295**	$ **1,787**	$1,577	**$ 210**
Recovery of project costs	-	-	-	-	(3,476)	3,476
Research tax credits	-	-	-	-	(71)	71
R&D net of recovery	$ **625**	$ 330	**$ 295**	$ **1,787**	$ (1,970)	**$ 3,757**

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 due to uncertainties related to the COVID-19 pandemic and oil price collapse impacting the timing of the Project. Project costs were higher by $0.3 million for the three-month period ended December 31, 2020 compared to the same period in 2019 due to minerals product development, ongoing testing and the Company's share of joint Project costs for engineering work by Canadian Natural. For the year ended December 31, 2020, R&D costs were higher by $0.2 million compared to the year ended December 31, 2019. This increase is primarily related to higher Project costs for the year ended December 31, 2020 offset by reductions in compensation and benefits described above. Some of the R&D costs incurred in 2020 were eligible for cost recovery under ERA and NRCan's contribution agreements. Subsequent to year end, the Company applied for and received

$0.3 million as its share of funding from these agencies. This cost recovery will be recorded in the first quarter of 2021, consistent with the accounting policy of recognizing government funding once approval is received for the related milestones. For the year ended December 31, 2019, FEED 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			*Twelve months ended*		
	Dec 31, 2020	Dec 31, 2019	Increase (decrease)	Dec 31, 2020	Dec 31, 2019	Increase (decrease)
Compensation and benefits	$ 150	$ 176	$ (26)	$ 578	$ 725	$ (147)
Deferred compensation	36	(2)	38	30	175	(145)
Consulting and professional fees	43	31	12	228	166	62
Directors' fees -deferred compensation	92	86	6	361	341	20
Travel	-	30	(30)	7	100	(93)
Rent, insurance and office	34	29	5	135	120	15
Investor relations and regulatory	9	5	4	93	73	20
Equity-based compensation	31	85	(54)	204	327	(123)
	$ 395	**$ 440**	**$ (45)**	**$ 1,636**	**$ 2,027**	**$ (391)**

G&A expenses for the three-month period ending December 31, 2020 were consistent at $0.4 million as compared to $0.4 million for the three-month period ended December 31, 2019. For the year ended December 31, 2020, G&A expenses were 20% lower at $1.6 million compared with $2.0 million in the comparable 2019 period. Management implemented 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. Professional fees in the quarter increased due to legal costs related to contract reviews for grant funding and cost sharing agreements offset by zero travel expenses in the quarter. For the year ended December 31, 2020, the increase in consulting and professional fees related to legal fees for shareholder matters, regulatory reporting requirements due to the COVID-19 pandemic and legal reviews of government funding and cost sharing agreements. Investor relations costs increased during the year 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 $35,000 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 year ended December 31, 2020 as the Company did not grant stock options in the current fiscal year and reduced variable compensation programs. These on-going initiatives together with rent reductions, group benefit premium reductions, workers compensation premiums refunds and other initiatives have reduced G&A throughout the year.

Liquidity and Capital Resources and Recoverability

The Company had an aggregate liquidity of $2.7 million at December 31, 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 $2.4 million is the result of funding the Company's optimization and validation engineering program with Canadian Natural, general and administrative and public company expenditures. The ability of the Company to cover normal operating costs and detailed engineering programs will depend on the amount of future engineering programs and the amount of government funding the Company is able to apply for to those programs and the ability to attract external financing. Once there is more certainty with respect to the next phase of the Project and the supporting government funding, the Company will evaluate the funding requirements to determine the requirements for additional capital 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 $93 million as of December 31, 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 year ended December 31, 2020 was $2.4 million compared to $0.2 million provided by operating activities for the year ended December 31, 2019. For the year ended December 31, 2019, the Company received $3.5 million as recovery of FEED project costs from ERA and Canadian Natural. In 2020, the Company did not receive any cost recovery related to project costs. Subsequent to year end $0.3 million was received from ERA & NRCan as the Company's share of project cost recoveries related to the 2020 optimization and validation engineering program.

- Cash received from investing activities for the year ended December 31, 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 year ended December 31, 2019 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 year ended December 31, 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 amortized cost. 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 December 31, 2020, the Company had aggregate cash and short-term investments of $2.7 million (December 31, 2019 - $5.1 million) to settle current liabilities of $0.7 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.

The ability of the Company to cover normal operating costs and detailed engineering programs will depend on the amount of future detailed engineering programs and the amount of government funding the Company is able to apply for to those programs and the ability to attract external financing. Once there is more certainty with respect to the next phase of the Project 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 the future, additional funds will need to be raised to complete detailed engineering and construction, 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, development, and engineering 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 optimization and validation engineering Project activities currently ongoing and anticipated, or if our business plan is costlier than we anticipate, certain of currently anticipated 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 Project activities, including optimization of the concentrator, tailings thickener, and minerals facilities 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 have been subsequent waves 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, 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 pace 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, 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 optimization and validation engineering 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 had a significant adverse impact on global financial markets and commodity prices. If the economic climate in Canada, the United States or abroad remains volatile, 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 optimization and validation engineering Project activities. This would be expected ultimately to adversely impact the current and anticipated optimization and validation engineering 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, dramatic decreases in crude oil prices and other recent global events, oil sands producers may reduce, or continue to reduce, their capital programs and defer 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 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 optimization and validation engineering Project activities. With the completion of FEED, there are a number of other optimization and validation engineering 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, tailings thickener facility and the minerals and transload facilities; the filing of regulatory applications for the Project along with Indigenous engagement and commercial structure and financing related activities. These Project activities may take longer, be of a different scope and be costlier than currently expected.

Depending on the amount and scope of optimization and validation engineering 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 Project activities and continue to actively work towards commercialization of the Project, investment decisions in 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 Project activities, 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 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 may 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 reduced their capital programs in 2020 and may continue to reduce those programs in 2021. 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™ 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 and into 2021, 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 in light of the rollout of vaccine programs, 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 in 2020 and 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 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 and Alberta 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 in the Company's CVW™ Horizon Project. To secure this funding commitment, we will have to negotiate the terms and conditions under which such funding will be provided and enter into a definitive agreement with 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 may 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 and subsequent optimization and validation engineering 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, engineering design and optimization and validation. 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 capital and 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 volatility in global financial markets and commodity prices, amongst other factors, including the outlook for economic growth in China, it is unclear how long, or to what extent, these conditions will prevail.

The Chinese market has become a significant source of global demand for commodities, including zircon and titanium minerals. The volatility in China's economic growth could result in 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.

There are cyber-security threats that may jeopardize our reliance on information technology.

Our operations are dependent on the functioning of several information technology systems. Exposure of our information technology systems to external threats poses a risk to the security of these systems. Such cyber-security threats include unauthorized access to information technology systems due to hacking, viruses and other causes that can result in service disruptions, system failures and the disclosure, deliberate or inadvertent, of confidential business information. Significant interruption or failure of any or all of these systems could result in operational outages, delays, lost profits, lost data, increased costs, and other adverse outcomes. These factors could include a loss of communication links or reliable information, security breaches by computer hackers and cyber terrorists, and the inability to automatically process commercial transactions or engage in similar automated or computerized business activities.

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

CVW™ 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 for the year ended December 31, 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. See Note 3 in the 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 April 27, 2021:

Number of common shares issued and outstanding:	88,480,791
Number of common share awards granted and outstanding:	6,614,136
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. Daniel Erasmus, a registered professional engineer in the Province of Alberta and a member of CIM, is acting as the Qualified Person for the Company on the CVW Horizon project, for the purposes of this MD&A.

Independent auditor's report

To the Shareholders of Titanium Corporation Inc.

Our opinion

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of Titanium Corporation Inc. (the Company) as at December 31, 2020 and 2019, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IFRS).

What we have audited
The Company's financial statements comprise:

- the statements of financial position as at December 31, 2020 and 2019;
- the statements of income (loss) and comprehensive income (loss) for the years then ended;
- the statements of changes in shareholders' equity for the years then ended;
- the statements of cash flows for the years then ended; and
- the notes to the financial statements, which include significant accounting policies and other explanatory information.

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report.
We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.
Independence
We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada. We have fulfilled our other ethical responsibilities in accordance with these requirements.

Other information

Management is responsible for the other information. The other information comprises the Management's Discussion and Analysis, which we obtained prior to the date of this auditor's report and the information, other than the financial statements and our auditor's report thereon, included in the annual report, which is expected to be made available to us after that date.
Our opinion on the financial statements does not cover the other information and we do not and will not express an opinion or any form of assurance conclusion thereon.
In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the

financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.
If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard. When we read the information, other than the financial statements and our auditor's report thereon, included in the annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.
In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.
Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.
As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

The engagement partner on the audit resulting in this independent auditor's report is Alisa Sorochan.

/s/PricewaterhouseCoopers LLP

Chartered Professional Accountants

Calgary, Alberta
April 27, 2021

(expressed in Canadian dollars)	December 31, 2020 $	December 31, 2019 $
Assets		
Current assets		
Cash and cash equivalents	2,655,894	3,055,270
Short term investments	-	2,011,458
Goods and services tax receivable	9,913	7,947
Prepaid expenses	37,797	24,096
	2,703,604	5,098,771
Equipment (note 5)	5,445	6,009
Total assets	2,709,049	5,104,780
Liabilities		
Current liabilities		
Trade payables and other accrued liabilities	669,486	442,634
Deferred compensation (note 6)	705,251	344,903
Total liabilities	1,374,737	787,537
Shareholders' Equity		
Share capital (note 7)	75,686,611	75,686,611
Contributed surplus	19,147,030	18,742,991
Deficit	(93,499,329)	(90,112,359)
Total shareholders' equity	1,334,312	4,317,243
Total liabilities and shareholders' equity	2,709,049	5,104,780

Subsequent events (note 15)

Approved by the Board of Directors

"Scott Nelson" Director

"John Stevens" Director

The accompanying notes are an integral part of these financial statements.

(expressed in Canadian dollars)	Year ended December 31, 2020 $	Year ended December 31, 2019 $
Expenses		
General and administrative (note 11)	1,636,254	2,026,389
Research and development expense (recovery) (note 11)	1,786,308	(1,969,846)
Amortization	2,054	2,185
Operating loss	3,424,616	58,728
Other income		
Interest	(37,646)	(61,978)
Net (loss) income and comprehensive (loss) income	(3,386,970)	3,250
Basic and diluted (loss) income per share (note 8)	($0.04)	$0.00

The accompanying notes are an integral part of these financial statements.

(expressed in Canadian dollars)	Share capital $	Contributed surplus $	Deficit $	Shareholders' equity(deficit) $
Balance – January 1, 2020	75,686,611	18,742,991	(90,112,359)	4,317,243
Comprehensive (loss) income for the year	-	-	(3,386,970)	(3,386,970)
Equity-based compensation	-	322,915	-	322,915
Deferred Compensation settled with RSUs/DSUs	-	81,124	-	81,124
Balance – December 31, 2020	75,686,611	19,147,030	(93,499,329)	1,334,312

	Share capital $	Contributed surplus $	Deficit $	Shareholders' equity(deficit) $
Balance – January 1, 2019	71,998,590	17,332,100	(90,115,609)	(784,919)
Comprehensive income for the year	-	-	3,250	3,250
Issuance of common shares net of share issue costs	4,056,474	-	-	4,056,474
Fair value of warrants issued in connection with common shares	(610,330)	610,330	-	-
Fair value of DSUs released	241,877	(241,877)	-	-
Equity-based compensation	-	536,850	-	536,850
Deferred Compensation settled with RSUs/DSUs	-	505,588	-	505,588
Balance – December 31, 2019	75,686,611	18,742,991	(90,112,359)	4,317,243

The accompanying notes are an integral part of these financial statements.

(expressed in Canadian dollars)	December 31, 2020 $	December 31, 2019 $
Cash (used in) provided by		
Operating activities		
Net (loss) income for the year	(3,386,970)	3,250
Items not affecting cash		
Amortization	2,054	2,185
Accrued interest income	-	(11,458)
Equity-based compensation	322,915	536,850
	(3,062,001)	530,828
Net change in non-cash working capital items		
Deferred compensation expense	441,472	600,234
Goods and services tax receivable	(1,966)	125,018
Prepaid expenses and other assets	(13,701)	(6,582)
Trade and other payables and accrued liabilities	226,852	(1,092,060)
Cash (used in) provided by operating activities	(2,409,344)	157,439
Investing activities		
Purchase of equipment	(1,490)	-
(Purchase) redemption of short-term investments	2,011,458	(2,000,000)
Cash provided by (used in) investing activities	2,009,968	(2,000,000)
Financing activities		
Common shares issued, net of issue costs (note 7)	-	4,056,474
(Decrease) increase in cash and cash equivalents	(399,376)	2,213,914
Cash and cash equivalents – beginning of year	3,055,271	841,357
Cash and cash equivalents – end of year	2,655,894	3,055,271

The accompanying notes are an integral part of these financial statements.

1 Reporting entity and nature of operations

Titanium Corporation Inc. (the "Company" or "Titanium") is a public company domiciled in and governed by the laws of Canada. Titanium was formed upon the amalgamation of Titanium Corporation of Canada Limited and NAR Resources Ltd. under the *Business Corporations Act* (Ontario) on July 24, 2001. On March 19, 2009, the Company was continued under the *Canada Business Corporations Act*. The Company does not have any subsidiaries.

The Company's principal business office is 736 8th Avenue, SW, Calgary, Alberta, T2P 1H4 and the Company's registered office is located at Suite 2400, 525 8th Avenue, SW, Calgary, Alberta, T2P 1G1. The Company's common shares are listed on the TSX Venture Exchange under the ticker symbol "TIC".

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 has completed demonstration piloting which was the culmination of several years of progressive research and development ("R&D") of its proprietary technology and is working towards the first commercial implementation of the CVW™ technology at an oil sands site.

The financial statements are prepared using International Financial Reporting Standards ("IFRS") that are applicable to a going concern which contemplates the realization of assets and settlement of liabilities in the normal course of business as they come due. The Company is considered 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. The recoverability of amounts expended on R&D is dependent on the ability of the Company to implement its technology at one or more oil sands sites and achieve future profitable operations. Until commercial operations are established, the Company will continue to incur losses and is dependent on raising funds through the issuance of shares, loans, government grants and/or attracting partners in order to undertake further development and commercialization of its technology. While the Company has been successful in obtaining the necessary financing to develop its' business to this point, there are no assurances that the Company will be successful in the future in these endeavours. In addition, in 2020 recent world events including the COVID-19 pandemic and the collapse of oil demand and prices introduced unprecedented uncertainties for industries and economies globally. These include sectors directly related to the Company's CVW™ technology including 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 and timing of the Project.

2 Basis of presentation

These financial statements of the Company have been approved by the Board of Directors on April 27, 2021. These financial statements are presented in Canadian dollars, which is the Company's functional currency.

The financial statements of the Company have been prepared in accordance with IFRS as issued by the international accounting standards board and IFRIC interpretations.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Company's

accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements, are disclosed in Note 3.

3 Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements unless otherwise noted.

Critical accounting estimates and judgements

The preparation of financial statements in accordance with IFRS requires management to make critical accounting estimates and judgements that affect the amounts reported in the financial statements and accompanying notes. These estimates and judgements 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 judgements used in the preparation of the Company's financial statements.

a) Government Assistance

i) 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.

ii) The research tax credits are not certain until received; as such judgement is applied to determine when receipt is delivered prior to recording the credit.

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-based compensation 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.

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.

Basis of measurement

The financial statements have been prepared using the historical cost convention except for the measurement of stock-based payments and warrants, which are measured at fair value.

Foreign currency

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation at period end exchange rates of monetary assets and liabilities denominated in currencies other than the Company's functional currency are recognized in the statement net (loss) income and comprehensive (loss) income.

Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and bank balances net of outstanding cheques which have not cleared the bank at year end.

Short term investments

Short term investments were comprised of certificates of investment with original maturity dates of twelve months or less which are all redeemable within 30 days of the issue date. The Company's short-term investments were held with Schedule 1 Canadian banks where management believed the risk of loss to be minimal.

Equipment

Equipment is recorded at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset.

Depreciation is recorded on the declining balance basis at rates between 20% and 50% as appropriate for the type of equipment.

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

Intangible assets

Internally generated intangible assets and research and development expenditures

Expenditures on research activities are recognized as an expense in the period in which they are incurred. Development costs are also expensed in the period incurred unless the Company believes these development projects meets generally accepted criteria for capitalization and amortization under IAS 38 Intangible Assets. An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognized if all the following conditions exist:

- Technical feasibility of completing the intangible asset so it will be available for use or sale;
- The intention to complete the intangible asset and use or sell it;
- The ability to use or sell the intangible asset;
- Demonstrate how the intangible asset will generate probable future economic benefits;
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and,
- The ability to measure reliably the expenditures attributable to the intangible asset during its development.

The amount recognized for internally generated intangible assets is the sum of the expenditures incurred from the date the intangible assets first meets the conditions listed above. Subsequent to recognition, internally generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses.

Where no internally generated intangible asset can be recognized, development expenditures are recognized as an expense in the period in which they are incurred.

Government assistance

Government grants are not recognized until there is reasonable assurance that the Company has complied with the conditions contained in the grant agreements.

Share capital

Common shares are classified as shareholders' equity. Incremental costs directly attributable to the issue of common shares and share options are recognized as a deduction from shareholders' equity, net of any tax effects.

Equity-based award plan

The Company has an equity-based award plan for its directors, officers, employees and consultants to encourage ownership of common shares. The equity plan is designed to advance the Company's interests by providing additional incentives for plan participants and to retain and attract valued directors, officers, employees and consultants. The Company grants equity-based awards to officers, employees and non-executive directors at the discretion of the board of directors. The associated equity-based compensation expenses are recognized as components of general and administrative and research and development expense.

Income taxes

Income tax expense comprises current and deferred tax. Income tax expense is recognized in profit or loss except to the extent that it relates to items recognized directly in shareholders' equity or in other comprehensive income (loss).

Current tax is the expected tax payable or receivable on the taxable income or loss for the period, using tax rates enacted or substantially enacted at the reporting date, and any adjustment to tax payable in respect of prior years.

Deferred tax is recognized with respect to temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is measured at

the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted at the reporting date. Deferred tax assets and liabilities are offset if they relate to income taxes levied by the same tax authority on the same taxable entity.

A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future tax profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Earnings (loss) per share

The Company presents basic and diluted earnings (loss) per share ("EPS") data for its common shares. Basic EPS is calculated by dividing the profit or loss attributable to common shareholders of the Company by the weighted average number of common shares outstanding during the period. Diluted EPS is determined by adjusting the profit or loss attributable to shareholders and the weighted average number of common shares outstanding, for the effects of all potentially dilutive common shares. The Company's potentially dilutive common shares comprise equity-based awards granted to its employees and directors and warrants issued in connection with the private placement. The number of common shares included with respect to equity awards and warrants are computed using the treasury stock method.

Financial instruments

The Company's financial assets include cash and cash equivalents, short term investments and GST receivable. Financial liabilities include accounts payable and accrued liabilities,

Financial instruments are recognized when the Company becomes a party to the contractual provisions of the instrument. Financial assets and liabilities are not offset unless the Company has the legal right to offset and intends to settle on a net basis or settle the asset and liability simultaneously.

The Company characterizes its fair value measurements into a three-level hierarchy depending on the degree to which the inputs are observable, as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

a) Classification

The Company classifies its financial instruments in the following categories: at fair value through profit and loss ("FVTPL"), at fair value through other comprehensive (loss) income ("FVTOCI"), or at amortized cost. The Company determines the classification of financial assets at initial recognition. The classification of financial instruments is driven by the Company's business model for managing the financial assets and their contractual cash flow characteristics.

b) Measurement

Financial assets and liabilities at FVTPL

Financial assets and liabilities carried at FVTPL are initially recorded at fair value and transaction costs are expensed in the statements of net (loss) income. Realized and unrealized gains and losses arising from changes in the fair value of the financial assets and liabilities held at FVTPL are included in the statement of net (loss) income in the period in which they arise. Where management has opted to recognize a financial liability at FVTPL, any changes associated with the Company's own credit risk will be recognized in other comprehensive (loss) income.

Financial assets and liabilities at amortized cost

Financial assets and liabilities at amortized cost are initially recognized at fair value plus or minus transaction costs and are subsequently carried at amortized cost less any impairment.

c) Impairment of financial assets at amortized cost

Financial assets at amortized cost

Financial assets are measured at amortized cost and are assessed at each reporting date using an expected credit loss model ("ECL") to determine whether the financial asset is impaired. The Company applies the simplified approach to providing for ECLs prescribed by IFRS 9, which permits the use of the lifetime expected loss provision for all trade receivables. A combination of historical and forward-looking information is used to determine the appropriate loss allowance provisions. ECLs are a probability -weighted estimate of all possible default events over the expected life of the financial asset which is based on credit quality since initial recognition of the financial asset.

Non-financial assets

Non-financial assets are tested for impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable. For the purpose of measuring recoverable amounts, assets are grouped at the lowest levels for which there are separately identifiable cash flows ("cash-generating units" or "CGUs"). Recoverable amount is the higher of an asset's fair value less costs to dispose and value in use (being the present value of the expected future cash flows of the relevant asset or CGU, as determined by management). The Company evaluates impairment losses for potential reversals when events or circumstances warrant such consideration.

Financial liabilities

The Company has the following non-derivative financial liabilities: trade and other payables, and accrued liabilities. Such financial liabilities are classified as other liabilities and are initially measured at fair value less any directly attributable transaction costs. Subsequent to initial recognition these financial liabilities are measured at amortized cost using the effective interest method.

4 Government Assistance

i) Government Grants and Project Cost Recovery

a. On October 19, 2017, the Company entered into a contribution agreement with Emissions Reduction Alberta ("ERA") to fund a portion of the cost of the Front End Engineering and Design ("FEED") project for the implementation of Titanium's CVW™ technology at Canadian Natural Resources Limited's ("Canadian Natural") Horizon site. The contribution agreement provided for funding up to the lesser of $5.0 million or 50% of the cost of the FEED project. In addition, the Company had an agreement with Canadian Natural to

fund up to $3.7 million of the project costs. The Company was the lead proponent and overall project manager, responsible for contracting with engineering and other firms required for the project, managing and funding these contracts, project controls, reporting progress against agreed milestones and collecting partner funding contributions upon milestone achievement from ERA and Canadian Natural. Eligible costs related to the project were recognized as R&D expenses when incurred and recovery of project costs were recognized with the collection of ERA and Canadian Natural contributions. During 2019, the Company received a total of $3,475,800 of cash contributions towards project costs consisting of milestones 4 and 5 and ERA's 20% holdback payment. The FEED project was formally completed in May 2019.

b. On September 28, 2020, the Company entered into a contribution agreement with ERA for the award of $5 million of grant funding for the CVW™ Horizon project, a joint project with Canadian Natural. A portion of the eligible costs incurred by participants in connection with the project will be reimbursed with the successful completion of the specified milestones outlined in the agreement. A maximum of $2.0 million in grant funding is available for the detailed engineering phase with the balance of $3.0 million of the grant available for the procurement and construction phases. Eligible costs related to the project are recognized as R&D expenses when incurred and the eventual recovery will be recognized with the collection of the ERA contribution.

c. On December 22, 2020 the Company and Canadian Natural entered into a 2020 Project Coordination Agreement ("PCA") which governed the 2020 engineering phase of the CVW™ Horizon Project (the "2020 Program"). The PCA, effective January 1, 2020, set out the rights and responsibilities for the 2020 Program along with the cost sharing arrangement whereby Canadian Natural and Titanium were responsible for their share of the program costs which were 70% and 30%, respectively, for the total cost of the 2020 Program. Also government grant proceeds related to the 2020 Program shall be shared between the parties on the same ratio. During 2020, total program costs, before government funding, were $5.45 million with Titanium's 30% share being $1.63 million and Canadian Natural's being $3.82 million. Titanium's share of program costs was fully reflected in R&D costs before any proceeds received from government funding agencies. Subsequent to year end (note 15) the Company received $1.0 million as a contribution towards 2020 Program costs from ERA and NRCan's Clean Growth Program. The Company will recognize $0.3 million in the first quarter of 2021 as a recovery of R&D project costs representing its share of the grants.

ii) Scientific Research and Experimental Development (SR&ED) Tax Incentive Program

The Alberta SR&ED tax credit program provides a refundable tax credit to qualified corporations that incur eligible R&D expenditures in the province of Alberta. The Company received funds related to its 2018 claim in the amount of $70,639 on August 26, 2019. The program was eliminated in 2019.

5 Equipment

	December 31, 2020 $	December 31, 2019 $
Cost	102,342	102,342
Additions	1,490	-
Accumulated amortization	(98,387)	(96,333)
Net carrying value	5,445	6,009

6 Deferred Compensation

The Company has arrangements with its directors and officers to receive a portion of their compensation in the form of either Restricted Share Units ("RSUs") or Deferred Share Units ("DSUs"). During the year ended December 31, 2020, $441,472 (December 31, 2019, $600,234) was recognized as deferred compensation expense. The deferred compensation liability of $705,251 (December 31, 2019 $344,903) represents an accrual for deferred compensation that was approved but not settled due to current plan limitations. Upon settlement, the outstanding liability will be reclassified to contributed surplus.

7 Share capital

Authorized

Unlimited number of common shares without par value have been authorized. Details of share capital balances are as follows:

	December 31, 2020		December 31, 2019	
	Common shares #	Amount $	Common shares #	Amount $
Opening Balance	88,480,791	75,686,611	82,076,874	71,998,590
Proceeds on issuance of common shares, net of issue costs (i)	-	-	6,089,485	4,056,474
Fair value of warrants issued in connection with common share issuance (i)	-	-	-	(610,330)
Fair value of DSUs released	-	-	314,432	241,877
Balance – Closing	88,480,791	75,686,611	88,480,791	75,686,611

Warrants

In connection with the private placement noted above, the Company issued 3,044,742 common share purchase warrants exercisable at $1.40 per common share for a period of three years expiring May 9 (2,913,242) and May 30 (131,500), 2022. A value of $610,330 was attributed to the warrants issued to investors in connection with the private placement based on the Black-Scholes pricing model and was recorded as part of contributed surplus on the statement of financial position. If the warrants are

exercised before expiry, the fair value will be reclassified as share capital. The assumptions used in the Black-Scholes pricing model for the fair value of the warrants were as follows:

Risk free interest rate	1.57%
Expected life	3.0
Expected volatility	75%
Fair value per whole warrant	$0.20

Equity-based compensation

The Company has equity plans for its directors, officers, employees and consultants to encourage ownership of common shares and align with the longer-term interest of Company shareholders. The equity plans are designed to advance the Company's interests by providing additional incentives for plan participants and to retain and attract valued directors, officers, employees and consultants. The Company grants equity-based awards at the discretion of the Board of Directors. The associated equity-based compensation expenses are recognized as components of general and administrative and research and development expenses. The Company adopted "rolling" equity-based plans that include stock options, DSUs and RSUs. The number of common shares issuable under all such plans at any time is limited to 10% (rolling) of the issued and outstanding common shares of the Company in the aggregate. The plans are subject to annual approval by the Company's shareholders.

The equity plans are comprised of the following components:

a) Stock options
Once a stock option is granted, the compensation costs for options granted is based on the estimated fair value of the options at the time of grant. The cost is recognized as a component of general and administrative or research and development expenses over the vesting periods of the options with a corresponding increase to contributed surplus within shareholders' equity. Upon exercise of the stock option, both the consideration received and the fair value of the option are recognized as share capital.

b) DSUs
As part of the Company's long-term incentives for non-executive directors, a deferred share unit plan was established representing a component of director compensation. DSU awards vest immediately upon grant and are settled with the issuance of one common share for one DSU when a director's service ceases. The compensation expense for DSUs awarded to non-executive directors is based on the fair value at the time the award is granted. The fair value means, at any date, the higher of (i) the weighted average price per share at which the common shares have traded on the TSXV during the last five (5) trading days prior to the relevant date and (ii) the closing price of the common shares on the date prior to the relevant date. The expense is recognized as a component of general and administration expense with a corresponding increase to contributed surplus within shareholders' equity. Upon redemption, the fair value of the award is reclassified from contributed surplus to share capital.

c) RSUs
As part of the Company's long-term incentives for officers and other key employees of the Company, a restricted share unit plan was established representing a component of compensation. The RSU plan provides participants with the opportunity to acquire RSUs in order to participate in the long-term success of the Company. The vesting schedule for RSU awards is specified by the Board of Directors on the grant date. Once the award is vested, the RSU can be settled, at the option of the holder, with the issuance of one common share in exchange for one RSU and a nominal cash payment. The compensation expense for RSUs awarded is based on the fair value of the award at the time of grant and amortized over the specified vesting period. The fair

value means, at any date, the higher of (i) the weighted average price per share at which the common shares have traded on the TSXV during the last five (5) trading days prior to the relevant date and (ii) the closing price of the common shares on the date prior to the relevant date. The cost is recognized as a component of general and administration and/or research and development expense with a corresponding increase to contributed surplus, within shareholders' equity. Upon redemption, the fair value of the award is reclassified from contributed surplus to share capital.

Summary of equity plan awards

The number of common shares issuable under all plans at any time is limited to 10% (rolling) of the issued and outstanding common shares of the Company in the aggregate.

A summary of the equity plans for the periods ended December 31, 2020 and 2019 is as follows:

	2020 #	2019 #
Equity Award Pool (10% of common shares outstanding)	8,848,079	8,848,079
Less Awards Granted:		
Stock Options	(4,755,000)	(4,755,000)
DSUs	(1,769,616)	(1,659,989)
RSUs	(1,639,520)	(1,639,520)
Available Pool	683,943	793,570

The components of stock-based compensation are summarized below.

Summary of stock options

A summary of the Company's stock option activity for the periods ended December 31, 2020 and 2019 is as follows:

	2020		2019	
	Number of common stock options #	Weighted average exercise price $	Number of common stock options #	Weighted average exercise price $
Opening balance outstanding	4,755,000	$ 0.73	3,875,000	$ 0.74
Granted	-	-	880,000	$ 0.69
Options outstanding	4,755,000	$ 0.73	4,755,000	$ 0.73
Options exercisable	3,759,999	$ 0.73	2,691,668	$ 0.67

The following table summarizes the options outstanding as at December 31, 2020:

Range of exercise price	Number of stock options #	Weighted average remaining contractual life years	Weighted average exercise price $	Number of options exercisable #	Weighted average exercise price $
0.00 – 0.49	1,550,000	0.13	$0.41	1,550,000	$0.41
0.50 – 0.99	2,005,000	2.82	$0.75	1,043,333	$0.77
1.00 – 1.50	1,200,000	1.41	$1.12	1,166,666	$1.12
	4,755,000	1.59	$0.73	3,759,999	$0.73

Stock-based compensation expense has been presented in the statement of net (loss) income and comprehensive (loss) income as a non-cash component of research and development and general and administrative expense (note 11). The fair value of each stock option is accounted for in the statement of net (loss) income and comprehensive (loss) income, over the vesting period of the options, and the related credit is recorded in contributed surplus.

There were no stock option grants during the current year however the weighted average assumptions used in the Black Scholes pricing model for the fair value of stock options granted in 2019 were as follows:

	December 31, 2019
Exercise price of stock option	$0.69
Risk free interest rate	1.41%
Expected life (years)	4.3
Expected volatility	93.14%
Fair value per stock option	$0.47

Summary of DSUs

A summary of the DSU activity for the periods ended December 31, 2020 and 2019 is as follows:

	2020		2019	
	Number of DSUs #	Weighted average share price at time of grant $	Number of DSUs #	Weighted average share price at time of grant $
Outstanding Jan 1	1,659,989	$0.75	1,472,223	$0.78
Granted	109,627	$0.74	502,198	$0.66
Released	-	-	(314,432)	$0.73
DSUs outstanding	1,769,616	$0.75	1,659,989	$0.75

Summary of RSUs

A summary of the RSU activity for the periods ended December 31, 2020 and 2019 is as follows:

	2020			2019		
	Number of RSUs #	Exercise price $	Weighted Average share price at time of grant $	Number of RSUs #	Exercise price $	Weighted Average share price at time of grant $
Outstanding Jan 1	1,639,520	$0.0001	$0.75	1,312,822	$0.0001	$0.81
Granted	-	-	-	326,698	$0.0001	$0.53
RSUs outstanding	1,639,520	$0.0001	$0.75	1,639,520	$0.0001	$0.75

8 Basic and diluted (loss) income per share

As the Company incurred losses for the year ended December 31, 2020 and insignificant income for year ended December 31, 2019, the impact of potentially issuable common shares upon the exercise of DSUs, RSUs, stock options and warrants would be anti-dilutive, therefore basic and diluted loss per share are the same.

The following table sets forth the reconciliation of basic and diluted (loss) income per share for the years ended December 31:

	2020 $	2019 $
Net (loss) income and comprehensive income (loss)	(3,386,970)	3,250
Weighted average number of common shares for basic and diluted loss per share	88,480,791	86,162,838
Basic and diluted (loss) income per share	($0.04)	$0.00

9 Income taxes

The tax recovery on the Company's income (loss) before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to losses of the entity as follows:

	December 31, 2020 $	December 31, 2019 $
Net (loss) income before income taxes	(3,386,970)	3,250
Tax calculated at applicable statutory rates applicable to loss 24% (26.5% 2019)	(812,873)	861
Change in temporary differences for which no deferred income tax asset was recognized	629,327	(4,432)
Stock-based compensation expense not deductible for tax purposes	183,453	301,327
Prior year losses deducted	-	(299,131)
Other expenses not deductible for tax purposes	93	1,375
Tax expense (recovery)	-	-

The applicable rate is 24% (2019 – 26.5%). Deferred income taxes are computed at 24%. The movement in deferred income tax assets and (liabilities) during the year is as follows:

Deferred tax asset	December 31, 2020 $	December 31, 2019 $
Opening balance	15,761,000	16,750,000
Current change for the year	(615,000)	(989,000)
Closing balance	15,146,000	15,761,000
Asset not recognized	(15,146,000)	(15,761,000)
Net deferred tax asset	-	-

Deferred income tax assets are recognized for loss carry-forwards and other deductible temporary differences to the extent that the realization of the related tax benefit through future taxable profits is probable. Based on this test, the Company did not recognize deferred income tax assets of $15,146,000 (December 31, 2019 – $15,761,000) in respect of tax losses and other deductible temporary differences amounting to $63,111,000 (December 31, 2019– $59,475,000) that can be carried forward against future taxable income.

The components of the unrecognized deferred tax asset are as follows:

Components of deferred tax assets:	December 31, 2020 $	December 31, 2019 $
Capital assets (tangible and intangible)	813,000	942,000
SR&ED expenditures	5,105,000	5,637,000
Deferred financing costs	46,000	62,000
Capital and non-capital losses	9,182,000	9,120,000
Closing balance	15,146,000	15,761,000
Deferred tax asset not recognized	(15,146,000)	(15,761,000)
Net deferred tax asset	-	-

The Company did not recognize the benefits of non-refundable federal research and development investment tax credits ("ITCs") amounting to $4,730,300 (December 31, 2019 - $4,730,300). These tax credits can be carried forward against future federal income tax payable.

The non-capital losses and ITC's will expire as follows:

	Federal non-capital loss carry-forwards $	Alberta non-capital loss carry-forwards $	ITC's $
2024	-	-	449,600
2025	-	-	231,000
2026	3,556,000	3,556,000	473,000
2027	1,737,000	1,737,000	300,000
2028	-	-	279,000
2029	4,193,000	4,193,000	517,000
2030	3,114,000	3,114,000	861,000
2031	4,877,000	4,877,000	1,026,000
2032	2,274,000	2,274,000	182,000
2033	652,000	652,000	313,000
2034	2,773,000	2,773,000	-
2035	1,954,000	1,954,000	-
2036	1,765,000	1,765,000	-
2037	1,655,000	1,655,000	-
2038	1,083,000	1,083,000	-
2039	5,912,000	5,912,000	98,700
2040	2,714,000	2,714,000	-
	38,259,000	38,259,000	4,730,300

10 Segmented information

Operating segments

The Company has one reporting segment engaged in the commercialization of its proprietary CVW™ technology for the recovery of bitumen, solvent, heavy minerals and water from oil sands froth treatment

tailings. As the operations comprise a single reporting segment, amounts disclosed in the financial statements represent those of the single reporting unit. In addition, the Company's equipment is all located in Canada.

11 Expenses by nature

General and administrative expenses consist of the following:

	December 31, 2020 $	December 31, 2019 $
Compensation and benefits	577,898	724,807
Director fees - deferred compensation (note 6)	361,472	340,733
Equity-based compensation (note 7)	203,996	327,348
Deferred compensation expense (note 6)	30,000	174,501
Consulting and professional fees	227,827	166,071
Rent, insurance and office	135,196	119,582
Travel	7,101	100,060
Investor relations and regulatory	92,764	73,289
General and administrative expenses	1,636,254	2,026,389

For the year ended December 31, 2020 the Company recorded $30,504 ($28,800 -2019) in general and administrative expenses related to short term leases. There is a ten-month commitment of $21,000 expiring on October 31, 2021 related to office facilities.

Research and development expenses consist of the following:

	December 31, 2020 $	December 31, 2019 $
Projects, rent and other	1,042,829	608,095
Compensation and benefits	574,560	673,995
Equity-based compensation (note 8)	118,919	209,503
Deferred compensation expense (note 6)	50,000	85,000
Total research & development expenses	1,786,308	1,576,593
Recovery of project costs	-	(3,475,800)
Research tax credits	-	(70,639)
R&D expense (recovery) net	1,786,308	(1,969,846)

12 Compensation of key management

Compensation awarded to key management[i] included:

	December 31, 2020 $	December 31, 2019 $
Salaries and short-term employee benefits	1,152,457	1,398,802
Equity-based compensation	322,915	536,850
Directors' fees-deferred compensation expense	361,472	340,733
Deferred compensation expense	80,000	259,501
	1,916,844	2,535,886

[i] Key management includes all directors and officers of the Company.

13 Financial instruments and financial risk factors

The Company has for accounting purposes, designated its cash and cash equivalents, short-term investments, goods and services tax receivables as loans and receivables. Trade payables and accrued liabilities are classified for accounting purposes as other financial liabilities.

As of December 31, 2020, 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 has classified the financial instruments measured at fair value in accordance with a three-level hierarchy. The hierarchy groups financial assets and liabilities into three levels based on the significance of inputs used in measuring the fair values of the financial assets and liabilities. The fair value hierarchy has the following levels:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The level within which the financial asset or liability is classified is determined based on the lowest level of significant input to the fair value measurement. The Company's cash and cash equivalents and short-term investments have been subject to level 2 valuation. Assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the placement within the fair value hierarchy.

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 of Directors. The Board of Directors 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 recovery of project costs and related holdbacks and receivables. Cash and cash equivalents and short-term investments are held with Schedule I Canadian Chartered banks which are reviewed by management. Management believes that the credit risk concentration with respect to cash is minimal. The recovery of project costs is dependent on the Company meeting milestone obligations under contribution agreements. Management believes that credit risk associated with funding commitments from ERA and NRCan is low due to the project governance, credit quality of participants, reporting requirements to achieve milestones and the fact that all associated contributions were collected during the prior years.

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 it will have sufficient liquidity to meet liabilities when due by monitoring actual and projected cash flows. The Board of Directors reviews and approves the operating plan as well as any material transactions outside the ordinary course of business. This oversight process is also supplemented by a continuous and detailed cash forecasting process. The Company is dependent on raising funds through the issuance of shares, loan facilities, government grants and/or attracting partners in order to undertake further development and commercialization of its technology (note 1). As at December 31, 2020, the Company had aggregate cash balance of $2,655,894 (December 31, 2019 - $3,055,270) to settle current cash liabilities of $669,486 (December 31, 2019 - $442,634). Most of the Company's financial liabilities have contractual terms of 30 days or less.

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 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. 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.

14 Capital management

The Company considers its shareholders' equity as its capital, which at December 31, 2020 totalled $1,284,312 (December 31, 2019 $4,317,243). The reduction in shareholders' equity is related to the operating loss incurred during the year. The Company does not have any bank debt or externally imposed capital requirements. The Company's capital management objectives are to manage its cash and cash equivalents prudently; to minimize the expenditures on general and administrative costs to ensure funds are available to continue to advance the commercialization of CVW™ projects; and to access available government funding for research and development and commercialization.

Management reviews its capital management approach on an ongoing basis and believes that its current approach, given the relative size and stage of the Company, is appropriate.

15 Subsequent Events

i) On January 19, 2021 the Company announced the completion of a Non-Repayable Contribution Agreement with Natural Resources Canada ("NRCan") for $1.96 million. The contribution is for funding of eligible expenditures of a work program for the period April 1, 2020 to March 31, 2021 as part of the detailed engineering phase of the CVW™ Horizon Project. On March 23, 2021 the Company received $392,078 (less a 10% holdback) as a contribution for project costs incurred during the period April 1, 2020 to December 31, 2020. Under the cost sharing agreement with Canadian Natural, funding received from NRCan is allocated 70% to Canadian Natural and 30% to Titanium.

ii) On December 21, 2020 the Company announced Sustainable Development Technology Canada ("SDTC") approved a $10 million contribution for the engineering phase of the CVW™ Horizon Project. The SDTC funding is subject to successful negotiation of a Project Funding Agreement ("PFA") with SDTC which was concluded on March 30, 2021. The start date for SDTC funding is December 1, 2020 and the Company received the first advance funding of $815,264 (less 10% holdback) on April 6, 2021 for completion of the first milestone due to be completed on April 30, 2021 under the agreement.

iii) On March 11, 2021, the Company announced the completion and payment of the first milestone for $800,000 (less a 20% holdback) from ERA for engineering costs incurred for the engineering phase of the CVW™ Horizon Project. The ERA payment is the first under the $5 million ERA Contribution Agreement previously announced on September 28, 2020. The payment is with respect to 2020 Program costs totaling $5.4 million incurred by Titanium and Canadian Natural and shared $1.6 million and $3.8 million, respectively. The net payment of $640,000 was allocated on a 30% (Titanium - $192,000) and 70% (Canadian Natural - $448,000) basis under the 2020 Project Coordination Agreement, previously announced on December 22, 2020.

iv) On April 15, 2021 the Company announced the signing of the 2021 Program Coordination Agreement ("PCA") with Canadian Natural which governs the January 1, 2021 to April 30, 2021 engineering phase of the CVW™ Horizon Project (the "2021 Program"). The PCA, effective January 1, 2021, sets out the rights

and responsibilities under which the parties have been operating with respect to the 2021 Program. Under the PCA, the 2021 Program includes completion of validation and optimization of the overall plant design and the updating of the capital cost estimate for the concentrator plant, tailings thickener and associated utilities. The 2021 Program also includes the engineering redesign and updating of the capital cost estimate for the mineral separation plant, associated utilities and the minerals product transload facility. The PCA provides that Canadian Natural and Titanium shall be responsible for 70% and 30%, respectively, of the total cost of the 2021 Program and government grant proceeds related to the 2021 Program shall be shared between the parties on the same ratio.

This annual report 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; the advantages of the Company's technology and the creation of a mineral sands industry; the timing expectations for completion of the optimization and validation engineering project activities; the scope of activities that will be undertaken in the optimization and validation engineering; the timing for the completion of its CVW™ technology and the expectations regarding the making of an investment decision and proceeding with engineering and construction of facilities; the expected expenditures required to complete the CVW™ technology; the Company's continuing cash conservation program; 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 Company's beliefs regarding its position for growth; statements regarding the Company's access to government funding and grants; the expected demand for the mineral production resulting from the Company's CVW™ technology; the impact of the COVD-19 global pandemic on the mining and oil sands industries, volatility in the financial markets, disruptions to global supply chains and the Company's business, operations, access to customers and suppliers, availability of employees to carry out day-to-day operations and other resources; the Company's beliefs regarding its position to overcome current macro-economic challenges; the Company's ability to enter into firm agreements with industrial customers; and the expected next steps for the Company as described in this annual report including in the management's discussion and analysis under the headings "Update" and "Next Steps".

Forward-looking information is provided in this annual report in the discussion of Titanium's research and development results and the expected benefits of Titanium's technology and results of the implementation of Titanium's technology on a commercial scale. This forward-looking information generally can be identified by use of forward-looking words such as "may", "will", "expect", "estimate", "anticipate", "believe", "could", "might", "intend", "project", "should" or "continue" or the negative thereof or similar variations and expressions.

Forward-looking information is presented in this annual report for the purpose of assisting readers in understanding certain key elements of our business plan and results of the research and development phase of our technology, 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 are 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 on going 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, other commodity prices and the changes in global demand for crude oil, and the ongoing significant volatility in world markets may adversely impact oil sands producers' program plans, including proceeding with an investment decision in further 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 annual report, forward-looking information and assumptions have been made regarding, among other things: the condition of the global economy, including trade, public health (including the impact of the COVID-19 pandemic) and other geopolitical risks, including the fact that any estimates of project next steps, as well as the 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 optimization and validation 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, as required; 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; the translation of the results from the Company's research, pilot programs, FEED project activities, optimization and validation engineering 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 optimization and validation activities are completed and a final decision to proceed has been made; future oil and zircon prices; 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 annual report is based (in whole or in part) on the results of our research, pilot programs FEED project activities, optimization and validation engineering activities and related studies and commercialization efforts described in this annual report. The Company has not commercially demonstrated its technologies and there can be no assurance that such research, pilot programs, FEED project activities, optimization and validation engineering activities and related studies will prove to be accurate 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.

The actual results could differ materially from those anticipated in this forward-looking information as a result of, including but not limited to, the following risk factors:

- ability to execute the Company's business plan and obtain commercial contracts with oil sands producers;
- oil sands producers adopting and integrating the CVW™ technology with their operations;
- expectations regarding the ability of the Company to raise capital;
- risks and uncertainties associated with the Company's CVW™ technology to operate on a commercial scale;
- ability to obtain funding;
- continued volatility in market prices for crude oil;
- global or national health concerns, including the COVID-19 pandemic;
- liabilities inherent in oil operations;
- competition for, among other things, capital and skilled personnel;
- ability to obtain and maintain government grants and funding;
- incorrect assessments of the value of the Company's research and development program;
- operational execution or technical difficulties in connection with operating the CVW™ technology;
- fluctuations in foreign exchange interest rates and stock market volatility;
- uncertainties associated with changes in legislation including, but not limited to, changes in income tax laws and to crude oil and natural gas royalty frameworks;
- ability to obtain and maintain intellectual property, including patents for the CVW™ technology;
- inadequate protection of the Company's intellectual property or potential litigation with respect to any intellectual property infringements;
- the impact of Canadian federal and provincial governmental regulation on the Company and the crude oil and natural gas industry;
- the impact of Alberta and/or Federal Governments changing focus away from climate change initiatives;
- competition for the development of similar technology;
- expected future oil sands production and bitumen losses;
- prospective results of operations, financial position or cash flows that are based on assumptions about future economic conditions and courses of action; and
- risks and uncertainties associated with liquidity and capital resources.

Readers are cautioned that the foregoing lists of forward-looking information, assumptions and risk factors are not exhaustive. For addition descriptions of the assumptions and risks underlying the forward-looking information in this annual report, consult Titanium's management's discussion and analysis for the year ended December 31, 2020 dated April 27, 2021 included with this annual report and in other reports filed with the securities regulatory authorities in Canada from time to time and available on SEDAR (www.sedar.com).

The forward-looking information contained in this annual report describes our expectations as of May 3, 2021 and, accordingly, are 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 annual report whether as a result of new information, future events or otherwise. The forward-looking information contained in this annual report and are expressly qualified by this cautionary statement.

CORPORATE INFORMATION

DIRECTORS

David C.W. Macdonald[1, 2,3]
Chairman and Director

Moss Kadey[2]
Director

Scott Nelson
Director

Brant G. Sangster[1,2]
Director

John W. Stevens[1,3], CPA, CA
Director

Bruce Griffin[3]
Director

[1] Member of the Audit Committee
[2] Member of the Compensation and Corporate Governance Committee
[3] Member of the Commercialization Committee

MANAGEMENT

Scott Nelson
President & Chief Executive Officer

Jennifer Kaufield, CPA, CA
Vice President Finance & Chief Financial Officer

Lindsay Cox
Corporate Secretary

Dr. Kevin Moran
Executive Vice President & Chief Technology Officer

Niel Erasmus
Vice President Mineral Sands

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Calgary, Alberta
Canada T2P 1G1

SHAREHOLDER INFORMATION

Titanium Corporation welcomes inquiries from shareholders, analysts, media representatives and other interested parties. Questions relating to investor relations or media inquiries should be directed to:

Investor Relations: Scott Nelson 403.561.0439 or by email: snelson@titaniumcorporation.com
Jennifer Kaufield 403.874.9498 or by email: jkaufield@titaniumcorporation.com

Shareholders' questions relating to address changes and Share certificates should be directed to Titanium Corporation's Transfer Agent:

TMX Trust Company, #301 - 100 Adelaide Street West, Toronto, Ontario. M5H 4H1
T: 1-416.361.0930 TF: 1-866.600.5869 F: 1-416.361.0470

Investor Inquiries: TMXEInvestorServices@tmx.com