



## **MANAGEMENT DISCUSSION AND ANALYSIS FOR THE YEAR ENDED DECEMBER 31, 2016**

*The following management discussion and analysis ("MD&A") of financial results is dated May 1, 2017 and reviews the business of BacTech Environmental Corporation (the "Company" or "BacTech"), for the year ended December 31, 2016, and should be read in conjunction with the accompanying annual financial statements and related notes for the year ended December 31, 2016. This MD&A and the accompanying annual financial statements and related notes for the year ended December 31, 2016 have been reviewed by the Company's Audit Committee and approved by the Company's Board of Directors.*

*This MD&A contains certain forward-looking statements, such as statements regarding potential mineralization, resources and research results, and future plans and objectives of the Company, that are subject to various risks and uncertainties. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. Readers are cautioned not to place undue reliance on these forward-looking statements. Forward-looking statements contained herein are made as of the date of this MD&A and the Company disclaims, other than as required by law, any obligation to update any forward-looking statements whether as a result of new information, results, future events, circumstances, or if management's estimates or opinions should change, or otherwise.*

### **A. Core Business Strategy**

BacTech Environmental Corporation (the "Company" or "BacTech") was incorporated by REBgold Corporation ("REBgold" and formerly known as BacTech Mining Corporation) on October 5, 2010 under the *Canada Business Corporations Act*. Through the completion of the Plan of Arrangement, the Company was granted a perpetual, exclusive, royalty free license to use REBgold Corporation's proprietary bioleaching technology ("BACOX") in the remediation business for mining and was listed on the Canadian National Stock Exchange under the symbol "BAC".

The BACOX technology utilizes bacteria to liberate precious and base metals and has been traditionally used to treat difficult-to-treat sulphide ores and concentrates. The business plan for the Company is to apply the bioleaching technology to abatement and reclamation projects to remove harmful elements such as arsenic and sulphur from the environment, where this can be assisted by a positive cash flow from metal recovery. Examples of metals which can be extracted include gold, silver, cobalt, nickel, copper, uranium and zinc.

Bioleaching is an environmentally-friendly process technology for treating difficult-to-treat sulphide ores and concentrates. By replacing smelting and/or roasting with a bioleach process, the production of sulphur dioxide emissions which is the primary source of acid rain, and arsenic trioxide are eliminated. Furthermore, the capital and operating costs of a bioleach facility are significantly less when compared to other existing treatment methods.

## **B. Mineral Reclamation Projects**

### **Overview**

On May 24, 2016, BacTech announced that its 98% owned Bolivian subsidiary Empresa Minera Ambiental BacTech S.A. ("EMABSA"), had signed an Association Contract with Corporación Minera de Bolivia ("COMIBOL"), the state mining company of Bolivia. On September 15, 2016, the Bolivian government by Law N degrees 831, approved and ratified the agreement.

The ten-year contract calls for the environmental remediation and restoration of the "Antigua" tailings and an option on the "Nuevo" tailings, both situated at the Telamayu mill site. Telamayu is situated near the town of Atocha in the Department of Potosi. The agreement envisions three phases, with the first phase focused on the completion of a technical study on the Antigua tails. Included in the study will be the drilling of a grid of 10 metre holes, (drilling is now completed, see below for further information) that will provide information for a NI 43-101 study. In addition, tailings material will be used in metallurgical studies to determine the optimal flow chart for the proposed plant. Engineering of the plant will be conducted by Bumigeme Inc. of Montreal, Canada.

On April 22, 2015, the Company announced the launch of a new initiative to reduce the amount of mercury used in artisanal/small mining operations.

There are areas of northern Peru and southern Ecuador where artisanal miners are mining complex sulphide (refractory) mineralized material as the near-surface oxidized material becomes depleted. In many instances, mercury is used by the miners, who obtain as little as 10% of the contained gold from this difficult-to-treat mineralized material. The remainder of the material is then sold for little value and trucked 1,100 km to the southern Peru for eventual smelting. This presents a real opportunity for BacTech to make a large contribution to the reduction of mercury, arsenic and cyanide contamination in the environment while giving substantial increases in payment to small miners. This is achievable using relatively simple gravity and flotation circuits and BacTech's bioleaching technology to process the mineralized material, without using mercury and reducing other chemical requirements.

### **Bolivia**

In January 2013, the Company announced that it had signed a Memorandum of Understanding ("MOU") with the Corporación Minera de Bolivia ("COMIBOL"), the state-owned mining company, for the Telamayu tailings site in Bolivia. Telamayu is a former mill site and consists of two tailings deposits created through custom milling for numerous mines in the area. Highlights of the MOU include:

- COMIBOL and BacTech will be partners in a Joint Venture ("JV") Bolivian company;
- COMIBOL will provide the JV with suitable tailings for reprocessing and make existing infrastructure available;
- BacTech holds the right to export concentrates from the Telamayu Tailings site for bioleaching or conventional treatment at its discretion; and
- BacTech will provide all capital necessary to study the Telamayu tailings, including gravity, flotation and copper cementation test work.

BacTech had previously announced assay results from a composite sample taken in May 2012 from one of the two tailings sites. Silver and copper values were 282 g/t and 2.24% respectively, illustrating the high-grade nature of the tailings. This compared favorably with COMIBOL's results from a 2005 sampling and assay program that reported 258 g/t Ag and 1.05% Cu. BacTech enlisted the services of SGS Bolivia S.A. to oversee the sampling of some 2,000 bags of tailings assembled by COMIBOL. In essence, material

was bagged at 1 meter intervals by COMIBOL from 8 test holes of roughly 10 meters in depth. A "pipe" was used to extract a sample from every bag and a larger sample of 200 kg was created. This larger sample was bagged and secured at site before making its way to Lima, Peru. From there, the samples were shipped to Inspectorate Exploration and Mining Services Ltd. ("Inspectorate") in Vancouver, Canada for assaying.

COMIBOL has estimated that there are approximately 500,000 to 600,000 tonnes at the Antigua tailings site. Across the river lies an additional estimated 3-4 million tonnes of tailings from similar sources at the Nuevo tailings site. To date, no investigation has been initiated at the larger site. In addition, there are two additional tailings sites within 50 km that could be investigated in the future.

In 2014, the Company initiated the next steps to evaluate this project. On April 28, 2014 the Company announced the initial flotation results for the Telamayu tailings which are as follows: *(The Company has not investigated or verified the sampling program conducted by COMIBOL.)*

#### Assay chart

Element	Unit of measure	Telamayu Tailing Comp.
Ag	g/mt	275.0
Au	g/mt	0.24
As	ppm	3,145
Sb	ppm	853.61
Cu	ppm	22417
Bi	ppm	557.97
Sn	ppm	1,571.8

#### Flotation results

Element	Maximum Metal Recovered to Concentrate	Recovery
AG	35 oz/t	60 – 64%
CU (i)	4.2 – 4.4 %	33 -35%
AS	0.65%	n/a

(i)Copper recovery is 33-35% of the remaining unoxidized sulphides in the tailings.

(ii) The tonnages provided by COMIBOL are of a historical nature and have not been confirmed by the Company. BacTech is not treating the historical estimate as current mineral resources or mineral reserves as they are not NI 43-101 compliant. The Qualified Person ("QP") for the above information is Gary Williams, P.Geo.

It was noted that roughly 50% of the sulphides in the sample had been oxidized. Two rougher kinetic flotation tests were carried out on the sample at different grinds to evaluate the tailings response to flotation. Results from these preliminary tests showed that after four stages of rougher flotation approximately 15% of the material was removed to a bulk rougher concentrate assaying 31-35oz/t silver (60-64% recovery), 4.2-4.4% (33-35% recovery) copper and 0.65% arsenic. There is also tin in the tailings that will be investigated for recovery. Additional tests will be undertaken to attempt to improve the recoveries for the silver component.

The copper recovery into concentrate at first glance would appear to be disappointing but upon further investigation it appears that approximately one half of the copper was extracted before flotation into the grind/wash water. If this is the case then recoveries of up to 80% were achieved if the wash water is included in the calculation. That is to say an operation may include a washing process from which the soluble copper is recovered prior to flotation.

## Current Status Fiscal 2016

The definitive agreement has been under negotiation since the beginning of March 2015 and has now been fully signed as of May 24, 2016 and subsequently ratified by the Bolivian legislature in September 2016.

On July 7, 2016, BacTech provided an update on the status of the Telamayu project. The Company recently arranged for a site visit by Bumigeme Inc., a Montreal-based engineering company to visit the Telamayu mill site in Bolivia. The purpose of the trip was to undertake a due diligence review on behalf of the Montreal-based engineering company. The following benefits were identified by the engineers:

- Availability of ample space in the existing plant;
- Water in sufficient quantity;
- Good power costs and availability (four cents to five cents per kilowatt-hour);
- New tailings site to be built at a small distance from the existing mill;
- Qualified manpower available locally; and
- Space for offices and housing is available.

The engineers made the following recommendations for the next phase of the project:

- Drilling of five holes twinning COMIBOL test pits dug in 2004;
- Subsequent coring, sampling and analysis of the tailings (a 500-metre program), confirming the concentrations of tin and gold, in addition to silver and copper;
- Preparation of a 400-kilogram sample for new metallurgical test work;
- Completing a National Instrument 43-101 resource estimation, report and recommendations.

Special attention will be given to the tin content of the tailings. Additional sampling and analysis will determine whether the high tin concentrations generated by COMIBOL in 2004 exploration wells are, in fact, correct, in which case the tin values would exceed the silver values and greatly enhance the economics of the project.

On February 21, 2017, the Company announced the results of the first 47 samples (35 routines and 12 control samples) from 3 holes drilled on a 60-hole drill program (approximately 600 m in total) at the Company's joint venture Silver-Copper-Tin tailings remediation project at Telamayu, Bolivia.

The purpose of the program is to verify earlier work carried out by BacTech's partner, Mining Corporation of Bolivia ("COMIBOL"), the Bolivian state mining company, and to provide material for upcoming metallurgical work. Additional results will be released in one batch over the next few weeks.

The results from the 3 first holes are as follows (weighted average, uncut):

Hole ID	X	Y	Z	From	To	Width, m	Gold, g/t	Silver, g/t	Tin, %	Copper Soluble, %	Copper Total, %
G5X	788 769	7 681 660	3 671	0,00	12,20	12,20	0,12	396,10	1,55	0,97	1,69
H5	788 774	7 681 687	3 671	0,50	12,10	11,60	0,26	504,87	1,56	0,87	1,75
F6	788 775	7 681 642	3 671	0,50	11,90	11,40	0,28	260,11	2,55	0,16	0,29

Admittedly, only 8% of the material has been assayed to date, **but these values have exceeded our expectations.** For further information about the drill program and results please refer to the press release dated February 21, 2017 by BacTech.

The Company started the drill program in the last week of November 201, 6 and was completed by the end of March 2017. The collected core samples from the drill program were submitted to assay laboratories in Oruro, Bolivia and Canada. This will be the underpinning of a resource estimation following the guidelines established by Canadian National Instrument 43-101 reporting.

Direct expenditures on the project since the signing of the contract has totalled \$159,538, This includes the costs of the project staff located in Bolivia as well as the start of the drill program for phase one of the project.

### Future Plans

Following the completion of the drill program, the Company will start the metallurgical test work to determine the appropriate method for metal recovery (see the company's previous press releases). A complete NI 43-101 compliant preliminary economic assessment (PEA) will then be completed.

The second phase will be the design and construction of a processing plant that will create concentrates of silver, tin and copper using conventional processing. There will be contributions from gravity separation, flotation concentration, and copper precipitation from water creating the final products leaving site.

There is considerable infrastructure at the mill site including power, rail, a mill housing and a local workforce. The Telamayu mill has processed ores from the surrounding mines for over 70 years, with the Antigua and Nuevo tailings created from the operation. The existing infrastructure should lead to reduced capital costs.

The final stage is the commercialization of the plant which is expected to be completed within the next 12 to 15 months. All three stages require the posting of a performance bond that is released upon completion of each phase. BacTech has posted a bond of \$42,000 to cover the initial phase.

### **Ecuador**

On January 27,2016 the Company provided a Corporate on update on its activities and plans for the project in Ecuador. The following is the Company's vision for an Ecuadorian project, as reported in the press release, that includes the use of bioleaching to treat high-arsenic gold concentrates, resulting in a reduction in mercury use.

### Industry background

With the significant increase in the price of gold over the past 10 years, there has been a corresponding surge in the number of artisanal gold miners (AGM) globally. An AGM is someone who produces small amounts of ore, usually using rudimentary methods and tools. There are literally hundreds of thousands of these AGMs in the countries of Peru, Ecuador and Colombia, according to Dr. Marcelo Veiga of the University of British Columbia (UBC) School of Mining, a specialist in this field. Over 30 million people globally participate in at least one facet of the industry, and collectively, AGMs produce an estimated 10 million ounces of gold (Barrick Gold Corp. produced 5.5 million ounces in 2016).

### The Problem

After mining the ore, AGMs typically use mercury as an amalgamator of gold and silver, and the resulting environmental damage is significant. The use of mercury to obtain gold from arsenopyrite-rich

material can be an exercise in futility, as normally less than 10 per cent of the gold is separated from this refractory type of ore. This is due to the gold being physically encapsulated within the arsenopyrite, which is unreactive and impervious to mercury amalgamation. The increased use of mercury over the past 10 years has led to many governments and non-governmental organizations looking for a solution to the problem. Interested readers should visit the company's website (under newsroom, May 24, 2016) to view a video produced by a documentary company, Vice, on AGM mining in Colombia that illustrates the health risks of dealing with mercury. The long-term effects of mercury exposure to humans have been well documented.

In Ponce Enriquez, southern Ecuador, steps were taken with the assistance of Dr. Veiga and the Canadian government to build sulphide flotation plants to produce arsenopyrite concentrates that are easier to ship and treat using methods other than mercury amalgamation. For the most part, especially in the case of simple sulphides, this led to a noticeable reduction in the use of mercury. However, in cases where arsenopyrite is the main refractory mineral, it provided a double-edged sword, namely, very good gold grades in the concentrates but also prohibitively high arsenic levels (over 10 per cent), making the resulting product much less attractive to buyers.

### The Solution

This scenario creates a unique opportunity for BacTech and bioleaching. The reader may not be aware that bioleaching is an effective solution for processing high-arsenic compounds. Currently, due to the lack of buyers for arsenopyrite concentrates, in which arsenic can run as high as 17 per cent, there are few options for the miner to be paid a decent price for his labours. During the last year, over 150 tonnes per day of high arsenic compounds found their way to Asia for processing, but the prices paid to the miner can be as low as 50 per cent of the value of the concentrate before even more deductions are made for high-arsenic penalties. In addition, the buyer retains any mineral credits such as silver and copper. BacTech would be able to recover more of the gold, as well as most of the other mineral credits, thus allowing higher payments to be made to local AGMs for their concentrate.

The opportunity provided to BacTech is real. Given BacTech's experience in bioleaching, and after studying the local market with the assistance of the company's newly appointed country representative, Bernardo Brito, BacTech is confident that a strategy of building a bioleach circuit in Ponce Enriquez would provide healthy returns, not only for the company, but also for the local inhabitants. With Ponce Enriquez exports of high-arsenic concentrates growing at a 15-to-20-per-cent yearly rate during the last decade, BacTech would be able to capitalize on a booming mining district and contribute to its sustainability with minimal competition.

The benefits to Ecuador and Ponce Enriquez are readily identifiable: from the government's perspective, an increase in employment and subsequent tax receipts; from the locals' perspective, an increase in what they are paid for their ores, as well as an improvement in the environment in which they live due to the elimination of the use of mercury because of the reduced arsenic release into the local environment from processing the concentrate.

Should BacTech be successful in implementing its strategy for Ecuador, there are opportunities to duplicate these plants in other high-arsenic areas of the Andes Mountains, namely northern Peru and Colombia.

### Other

On November 2, 2016, the Company announced that it has engaged the services of Laurentian University, specifically, the Vale Living with Lakes Centre, located in Sudbury, Ontario, to provide

bioleach test work for concentrates collected in Ecuador and elsewhere. For this test work, BacTech will obtain up to 300kg of samples from concentrate producers in the Ponce Enrique area.

The study at Laurentian will be conducted under the guidance of Dr. Paul Miller, PhD (chemical engineering), CEng, MIMM, the company's vice-president of metallurgy and a leading expert in bioleaching. Dr. Nadia Mykytczuk of Laurentian will work in concert with BacTech, as well as oversee the work on behalf of the university.

## Peru

In a joint press release dated November 17, 2015, BacTech announced that it had signed a non-binding memorandum of understanding with Duran Ventures Inc. ("Duran")

The basis of the memorandum of understanding is to determine the financial viability of constructing a bioleach circuit to be built as an add-on to Duran's Aquila Norte mineral processing plant near Trujillo, Peru (see Duran news release dated Oct. 19, 2015). Construction of the Aquila Norte plant, has reached the commercialization stage and should begin processing sulphide ores shortly.

If further investigation shows favourable economics on identifiable mineralized material, a joint venture will be formed with Duran's 80% subsidiary (Minera Aguila de Oro SAC) and BacTech, with each party holding 50% ownership of the bioleach circuit. BacTech will finance the cost of the construction of the bioleach circuit. Duran will have the right to participate in BacTech's financing if a construction decision is considered.

There has been very little progress in this project to date due to delays experienced by Duran in completing their sulphide flotation plant.

## Other Projects

The Company continues to evaluate other projects in Canada, Mexico, South America and Europe.

### C. Selected Annual Information

The following table presents selected financial information in Canadian dollars (\$), for each of the three most recently completed financial years, and have been prepared in accordance with International Financial Reporting Standards ("IFRS").

	2016	2015	2014
	\$	\$	\$
Revenues	Nil	Nil	Nil
Net loss for the year	(1,170,030)	(661,629)	(1,897,330)
Net loss per share	(0.02)	(0.02)	(0.13)
Total assets	101,160	23,555	30,599
Total current liabilities	2,102,913	1,580,486	975,851

The Company does not generate any revenue at this time. The funding of the Company's operations since inception in December 2010 has been from the exercise of warrants and options, private placements, debentures, bridge loans and notes, which have been used for general working capital, advancing the projects in Bolivia and Peru, as well as pursuing other projects of interest

During 2014, the Company completed a share for debt conversion for the combined outstanding debentures and bridge loan of \$1,387,146 which were settled through the issuance of 27,742,934 common shares of the Company at a price of \$0.05 per common share. In addition, a portion of the accounts payable for professional services and management payroll in the total amount of \$115,000 were converted to 2,300,000 common shares as part of this transaction. This accounted for the significant decrease in liabilities and improvement in working capital for the 2014 year end.

The increase in liabilities for 2015 and 2016 is the result of limited funds available to reduce outstanding amounts while the Company still incurs costs as it pursues projects.

#### **D. Results of Operations**

This analysis of the results of the Company's operations should be read in conjunction with the Company's annual financial statements for the year ended December 31, 2016.

##### **Revenues**

The Company has no revenue or sources of recurring revenues at this time.

##### **Operating and Administrative Costs**

Operating and administrative expenses increased to \$967,697 for the year ended December 31, 2016 from \$616,342 in the same period last year. Significant components of this expense include:

1. Salaries, management fees and related costs increased to \$372,017 for the year ended December 31, 2016 from \$299,870 in the same period last year. These costs are for the salaries, wages and management fees incurred directly in managing and operating the business of the Company, which includes the investigation and evaluation of potential projects. The Company has increased these expenditures this period because of the signing of the agreement with COMIBOL. Considering its current financial situation, the majority of these amounts continue to be accrued for and have not been paid;
2. Share based payments, as explained in note 12 to the annual financial statements, were \$85,200 for the year ended December 31, 2016. Yearly fluctuations in stock option expense are dependent on several factors including, but not limited to, number of options issued, valuation of options, vesting period and timing. For the nine months ended December 31, 2016 there were 2,850,000 options issued. No options were issued for the years ended December 31, 2015 and 2014;
3. Professional fees increased to \$303,367 for the year ended December 31, 2016, from \$222,385 in the same period last year. The Company incurs significant professional fee expenditures as result of pursuing the development of the Telamayu Tailings project in Bolivia. The majority of the fees are for legal and consulting fees incurred for the project in Bolivia;
4. Travel costs increased to \$25,015 for the year ended December 31, 2016, from \$20,790 in the same period last year. For the first three quarter in 2016, the level of travel had been low as a result of waiting for the Contract with Bolivia to be signed and ratified. With contract signed in September 2016, travel costs have increased in the forth quarter as a result of the drilling activity and other related project work related to the as the Bolivian Project; and
5. General office expenses decreased to \$23,276 for the year ended December 31, 2016 from \$47,299 in the same period last year. The general office expenses have been significantly reduced to conserve cash and reduce expenditures on non-project related activities.
6. Shareholder information and filing fees expenses significantly increased to \$158,822 for the year ended December 31, 2016 from \$22,758 in the same period last year. Throughout fiscal 2016 the Company reignited the communication process with shareholders (current and new) in order to



raise money for the projects the Company is developing. With the approval of the contract by the Bolivian legislature, the Company is aggressively communicating its plans to the capital markets.

### **Finance Charges**

Debenture and bridge loan interest expense for the year ended December 31, 2016 were \$nil compared to \$4,100 in the same period last year. The debenture interest in the prior period only includes up BacTech's portion of the debenture issued by REBgold Corporation.

The loans payable interest of \$26,900 is the accrued interest on new loans payable. See note 9 to the interim financial statements for further details.

### **E. Liquidity and Capital Resources**

At December 31, 2016, the Company had cash of \$1,103 and a working capital deficit of \$2,001,753. The existing cash reserves, increase in payables, as well as the proceeds from the private placements were used for general working capital and advancing the Bolivian Project for the period ended December 31, 2016.

On December 20, 2016, January 19, 2017 and February 21, the Company completed the three tranches of a private placement for total gross proceeds of \$197,500 and issued 3,950,000 units at \$0.05 per unit. Each unit consisted of one common share and one half of one common share purchase warrant. Each whole warrant entitles the holder to purchase one common share of the Company at an exercise price of \$0.10 for a period of 2 years.

From June 8 to September 28, 2016, the Company completed four tranches of a private placement for total gross proceeds of \$525,599 and issued 13,138,986 units at \$0.04 per unit. Each unit consisted of one common share and one common share purchase warrant. Each warrant entitles the holder to purchase one common share of the Company at an exercise price of \$0.10 for a period of 2 years. The proceeds of the private placement will be used to repay a portion of the note payable, and initiate the drill program at the Telamayu tailings project in Bolivia to provide fresh material for assays of gold, silver, copper, tin and rare earths, as well as metallurgical studies.

On October 8, 2015, the Company arranged for an additional loan from another third party. The purpose of the loan is to provide working capital to complete the agreement with the Bolivian Government. Total available amount of the loan was \$350,000 but only \$102,000 has been advanced. The loan was due February 28, 2016, but since the agreement with the Bolivian Government had not been finalized at that time, the terms were extended until the agreement is signed. The loan earned interest at 15% and due on demand. A portion of the proceeds from the financing completed on August 15, 2016 was used to repay this loan in full.

On January 20, 2015, the Company arranged for a loan of \$150,000 from a third party. The terms of the loan payable are as follows; (i) Total amount available of loan is \$150,000, (ii) bonus shares of 200,000 common shares of the Company for every \$50,000 tranche, up to a total of 600,000 common shares can be issued if the full amount is drawn down, (iii) a 1% Net Profit Interest ("NPI") in a future remediation project, and (iv) earns interest at a rate of 12% per annum. The loan was due 120 days from the date of the first advance which was May 20, 2015. Since the loan was not repaid at maturity, interest has been accruing at 1.5% compounded monthly.

<b>Share Capital</b>				
	<b>December 31, 2016</b>		<b>December 31, 2015</b>	
	<b>Number of shares</b>	<b>\$ Amount</b>	<b>Number of shares</b>	<b>\$ Amount</b>
Balance, beginning of period	42,393,944	4,007,574	41,393,944	3,957,574
Shares issued for conversion accounts payable	-	-	1,000,000	50,000
Shares issued for private placements	15,638,986	650,559	-	-
Less share issue costs				
Fair value of warrants	-	(217,300)	-	-
Share issue costs	-	(10,551)	-	-
<b>Balance, end of period</b>	<b>58,032,930</b>	<b>4,430,282</b>	<b>42,393,944</b>	<b>4,007,574</b>

For a description of the outstanding warrants and stock options that are available to purchase common shares of the Company, please refer to notes 11 and 12 of the annual financial statements.

#### **F. Quarterly Information**

Selected quarterly information for the most recently completed quarter is presented below in Canadian currency (\$), and in accordance with International Financial Reporting Standards.

	<b>2016</b>				<b>2015</b>			
	<b>Q4</b>	<b>Q3</b>	<b>Q2</b>	<b>Q1</b>	<b>Q4</b>	<b>Q3</b>	<b>Q2</b>	<b>Q1</b>
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
Revenues	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-
Operating loss	(570)	(209)	(179)	(212)	(250)	(126)	(126)	(160)
Loss for the period	(570)	(209)	(179)	(212)	(250)	(126)	(126)	(160)
Loss per share	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)

#### **G. Fourth Quarter**

There were no substantive changes in administrative expenses and they continued to be consistent with the previous three quarters in 2015 and all of 2016. With the contract for Bolivian Project being approved by parliament in September 2016, project and overhead spending has increased as result of doing some exploratory work on the Telamayu site in Bolivia. Some investigative work was completed on other future projects, but was limited in nature, due to lack of capital to fund such programs.

#### **H. Off-Balance Sheet Arrangements**

The Company had no off-balance sheet arrangements as of December 31, 2016.

#### **I. Financial Instruments**

The Company has not entered into any specialized financial arrangements to minimize its investment risk, currency risk or commodity risk.

#### **J. Outlook**

The current volatile state of the capital markets and the volatile price for precious and base metals has significantly reduced the ability to access capital for junior companies in the resource sector or in the remediation and reclamation of mine waste and tailings. There can be no assurance that the Company will be successful in attracting either new financing or new opportunities to apply its technology.

## **K. Risks**

The Company's strategy emphasizes developing projects in order to leverage its intellectual property to drive shareholder value. This strategy has required, and continues to require, significant financings, and is subject to risks associated with mineral prices, mineral resources and operations. Due to the nature of the Company's business, the present stage of development of its projects, and the constraints placed upon the Company's ability to move forward by its current liquidity situation, readers should carefully review and consider the financial, environmental and operational risk factors affecting the Company.

### **Need for Additional Financing**

The Company currently has no source of operating cash flow, and there is no assurance that additional funding will be available to the Company as and when needed for further assessment and evaluation, as well as development of its projects, or to fulfill its obligations to its existing creditors. Volatile markets may make it difficult or impossible for the Company to obtain adequate debt or equity financing in the future, or on terms acceptable to the Company. The failure to obtain additional financing could force the Company to liquidate its assets to satisfy creditor claims.

### **Dependence on Management**

The Company's business and operations are dependent on recruiting and retaining the services of a small number of key members of management and qualified personnel. The success of the operations and activities of the Company are dependent, to a significant extent, on the efforts and abilities of the management of the Company. Investors must be willing to rely, to a significant extent, on the discretion and judgment of the management of the Company. Furthermore, while the Company believes that it will be successful in attracting qualified personnel and retaining its current management team, there can be no assurance of such success. The Company does not maintain key employee insurance on any of its employees.

### **Competition**

The Company competes with other engineering companies for the acquisition of mineral rich mine tailings and mine waste that can be developed economically. The Company competes with other engineering companies that have greater financial and technical resources and experience. Such competition may result in the Company being unable to acquire desired properties, to recruit or retain qualified employees, or to acquire the capital necessary to fund its operations and develop its properties. The inability of the Company to compete with other engineering companies for these resources would have a material adverse effect on the Company's results of operations and business.

Currently, the Company's bioleaching technology does not operate in an overly competitive marketplace; however the Company anticipates that it may face increased competition in the future, as advanced technologies become available. While management believes that the Company's technology is more advanced, commercially proven and better situated than its competitors, there can be no assurance that the Company will be able to effectively compete with companies who have or may develop similar technologies and may possess greater financial resources and technical facilities. Competitive pressures, or the inability of the Company to successfully license its technology on terms that are acceptable, may have a material adverse effect on the Company's business, operating results and financial condition.

### **Protection of Intellectual Property Rights**

The Company is dependent not only on its ability to protect its intellectual property rights, but also upon the protection of rights of third parties from which it may license intellectual property rights. The Company currently holds patent rights and has pending patent applications. In addition, the Company relies

upon certain other technologies, ideas; know how, secrets or other information, which it may not be able to protect. Notwithstanding precautions the Company may take to protect its rights, third parties may copy or obtain and use the Company's proprietary and licensed or optioned technologies, ideas, know how, secrets and other proprietary information without authorization or independently develop technologies similar or superior to the Company's proprietary and licensed or optioned technologies. The Company enters into confidentiality and restriction on use agreements with its employees, strategic partners and others; however, these agreements may not provide meaningful protection of the Company's proprietary and licensed or optioned technologies or other intellectual property in the event of unauthorized use or disclosure. Policing unauthorized use of such technologies and intellectual property is extremely difficult, and the cost of enforcing the Company's rights through litigation may be prohibitive. Further, the laws of jurisdictions other than Canada and the United States may not provide meaningful protection of the intellectual property rights of the Company and such third parties.

### **Obtaining and Enforcing Patents**

The patent positions of technology firms, including the Company, are generally uncertain and involve complex legal and factual questions. The Company's success in utilizing and licensing its bioleaching technology will depend, in part, on its ability to obtain, enforce and maintain patent protection for its technology worldwide. The Company cannot be assured that patents will issue from any pending applications or that claims now or in the future allowed under issued patents will be sufficiently broad to protect its technology. In addition, no assurance can be given that any patents issued to or licensed by the Company will not be challenged, invalidated, infringed or circumvented, or that the rights granted there under will provide continuing competitive advantages to the Company. Furthermore, there is no assurance that the patents of others will not impede the ability of the Company to do business or that others will not independently develop similar products or technologies, duplicate any of the Company's products or technologies or, if patents are issued and licensed to the Company, design around the Company's patented product or technology.

Accordingly, the Company may not be able to obtain and enforce effective patents to protect its proprietary rights from use by competitors, and the patents of other parties could require the Company to stop using or pay to use certain intellectual property, and as such, the Company's competitive position and profitability could suffer as a result.

### **Claims of Infringement of Proprietary Rights of Others**

The Company is not currently aware of any claims asserted by third parties that the Company's intellectual property infringes on their intellectual property. However, in the future, third parties may assert a claim that the Company infringes on their intellectual property. As a result, there is a risk that the Company, or one or more of its licensors, may become subject to litigation alleging that the products or technologies of the Company or its licensors infringe on the proprietary rights of third parties. Whether or not the products or technologies infringe on the proprietary rights of third parties, the Company or such licensors could incur significant expenses in defending allegations of infringement of proprietary rights. Further, the Company or such licensors may be required to modify their products or obtain licenses for intellectual property rights as a result of any alleged proprietary infringement which may not be achievable on commercially reasonable terms, in a timely manner, or at all, any of which could adversely affect the Company's business revenue, results from operations and financial condition.

### **Conflicts of Interest**

Certain of the Company's directors and officers may serve as directors or officers of other reporting companies, companies providing services to the Company, or companies in which they may have significant shareholdings. To the extent that such other companies may participate in ventures in which the Company may participate, the directors of the Company may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. In the event that such a conflict of interest

arises at a meeting of the Company's directors, a director who has such a conflict will abstain from voting for or against the approval of such participation or such terms.

From time to time, several companies may participate in the acquisition, assessment and evaluation, and development of mineral reclamation properties, thereby allowing for the participation in larger programs, permitting involvement in a greater number of programs and reducing financial exposure in respect of any one program. It may also occur that a particular company will assign all or a portion of its interest in a particular program to another of these companies due to the financial position of the company making the assignment. In accordance with the laws of Canada, the directors of the Company are required to act honestly, in good faith and in the best interests of the Company. In determining whether or not the Company will participate in a particular program and the interest therein to be acquired by it, the directors will primarily consider the degree of risk to which the Company may be exposed and its financial position at the time.

#### **L. Related Party Transactions**

Please refer to note 8 of the annual financial statements for the year ended December 31, 2016.

#### **M. Other MD&A Requirements**

Additional information related to the Company is filed electronically on the System for Electronic Document Analysis and Retrieval (SEDAR) at [www.sedar.com](http://www.sedar.com).