

EMC METALS CORP.  
Form 10-12G/A  
September 15, 2011

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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**FORM 10**

(Amendment No. 2)

**GENERAL FORM FOR REGISTRATION OF SECURITIES**  
**Pursuant to Section 12(b) or (g) of The Securities Exchange Act of 1934**

**EMC METALS CORP.**

(Exact Name of Registrant as specified in its charter)

**British Columbia, Canada**

(State or other Jurisdiction of Incorporation  
or organization)

**Not Applicable**

(I.R.S. Employer  
Identification No.)

**11th Floor 888 Dunsmuir Street**

**Vancouver, BC, Canada**

(Address of Principal Executive Offices)

**V6C 3K4**

(Zip Code)

Registrant's Telephone Number, including area code: **(604) 648-4653**

Securities registered pursuant to Section 12(b) of the Act: **None**

Securities to be registered pursuant to Section 12(g) of the Act:

**Common Shares without par value**

(Title of class)

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act (Check one):

Large Accelerated Filer [ ]

Accelerated Filer [ ]

Non-Accelerated Filer [ ]

Smaller Reporting Company[X]

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**Note about Forward-Looking Statements**

Certain statements contained in this registration statement constitute "forward-looking statements". Forward-looking statements may include, but are not limited to, statements with respect to the future price of commodities, the estimation of mineral resources, the realization of mineral resource estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, currency fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims, the completion of financings and regulatory approvals. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "scheduled", "estimates", "intends", "anticipates" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward looking statements. Such factors may include, among others, risks related to our joint venture operations; actual results of current exploration activities or production technologies that we are currently testing; actual results of reclamation activities; future metal prices; accidents, labour disputes and other risks of the mining industry; delays in obtaining governmental or regulatory approvals or financing or in the completion of development activities, as well as those factors discussed in the section entitled "Risk Factors" and elsewhere in this registration statement. Although we have attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

**Note on Currency of Financial Information and Exchange Rate Table**

We maintain our books of account in Canadian dollars and references to dollar amounts herein are to the lawful currency of Canada unless otherwise indicated.

The following table sets forth, for the periods indicated, certain exchange rates based on the noon buying rate in New York City for cable transfers in Canadian dollars. Such rates are the number of Canadian dollars per one (1) U.S. dollar. The high and low exchange rates for each month during the previous six months were as follows:

|               | <u>High</u> | <u>Low</u> |
|---------------|-------------|------------|
| June 2011     | 0.9885      | 0.9698     |
| May 2011      | 0.9781      | 0.9445     |
| April 2011    | 0.9705      | 0.9491     |
| March 2011    | 0.9891      | 0.9698     |
| February 2011 | 0.9984      | 0.9710     |
| January 2011  | 1.0060      | 0.9848     |

The following table sets out the exchange rate (price of one U.S. dollar in Canadian dollars) information as at each of the years ended December 31, 2010 and 2009.

|                       | Year Ended December 31<br>(Canadian \$ per U.S. \$) |             |
|-----------------------|---|-------------|
|                       | <u>2010</u>   | <u>2009</u> |
| Rate at end of Period | 0.9946  | 1.0510      |
| Average during Period | 1.0299  | 1.1420      |
| Low                   | 0.9931  | 1.0251      |
| High                  | 1.0848  | 1.3066      |

### Glossary of Terms

|                         |   |
|-------------------------|---|
| <b>Alteration</b>       | Usually referring to chemical reactions in a rock mass resulting from the passage of hydrothermal fluids.   |
| <b>Assay</b>            | An analysis to determine the presence, absence or quantity of one or more components, elements or minerals.   |
| <b>Base metal</b>       | Any non-precious metal (e.g. copper, lead, zinc, nickel, etc.).   |
| <b>Chalcopyrite</b>     | A yellow crystalline mineral consisting of a sulphide of copper and iron. It is the principal ore of copper.  |
| <b>Concession</b>       | A grant of a tract of land made by a government or other controlling authority in return for stipulated services or a promise that the land will be used for a specific purpose.                          |
| <b>Core</b>             | The long cylindrical piece of a rock, up to several inches in diameter, brought to the surface by Diamond drilling.   |
| <b>Diamond drilling</b> | A drilling method in which the cutting is done by abrasion using diamonds embedded in a matrix rather than by percussion. The drill cuts a core of rock, which is recovered in long cylindrical sections. |
| <b>Dip</b>              | The angle at which a vein, structure or rock bed is inclined from the horizontal as measured at right angles to the Strike; may also apply to the angle of inclination for a drill hole.                  |
| <b>Epithermal</b>       | A hydrothermal mineral deposit formed within about one kilometer of the earth's surface and in the temperature range of 50 – 200 degrees Celsius. Also used to denote the environment of deposition.      |
| <b>Fractures</b>        | Breaks in a rock, usually due to intensive folding or faulting.   |
| <b>Grade</b>            | The concentration of a valuable mineral within an Ore.  |
| <b>Hydrothermal</b>     | Hot fluids, usually water, which may, or may not carry metals and other compounds in solution to the site of mineral deposition or wall rock alteration.  |
| <b>Igneous</b>          | A rock formed by the cooling of molten silicate material.   |
| <b>Intrusion</b>        | A general term for a body of Igneous rock formed below the surface of the earth.  |

|                                    |   |
|------------------------------------|---|
| <b>Intrusive</b>                   | A body of Igneous rock formed by the consolidation of magma intruded into other rocks, in contrast to lavas, which are extruded upon the surface.   |
| <b>Kg</b>                          | Kilogram which is equivalent to approximately 2.20 pounds.  |
| <b>Km</b>                          | Kilometer which is equivalent to approximately 0.62 miles.  |
| <b>Kt</b>                          | Thousand tonnes.  |
| <b>Lode</b>                        | A deposit of metallic ore filling a fissure in the surrounding rock.  |
| <b>Mineralization</b>              | A term used to describe the presence of minerals of possible economic value. Also used to describe the process by which concentration of economic minerals occurs.  |
| <b>Mlbs</b>                        | Million pounds.   |
| <b>Net Smelter Returns Royalty</b> | A share of the net revenues generated from the sale of metal produced by a mine.  |
| <b>NI 43-101</b>                   | National Instrument 43-101 <i>Standards for Disclosure of Mineral Projects</i> , being the regulation adopted by Canadian securities regulators that governs the public disclosure of technical and scientific information concerning a mineral property. |
| <b>Ore</b>                         | A naturally occurring solid material from which a metal or valuable mineral can be profitably extracted.  |
| <b>Outcrop</b>                     | An exposure of rock at the earth's surface.   |
| <b>Pegmatite</b>                   | Coarse-grained igneous rocks that often occur as wide veins cutting across other types of rock.   |
| <b>Porphyry</b>                    | Igneous rock of any composition that contains conspicuous crystals in a fine grained groundmass.  |
| <b>ppb and ppm</b>                 | Parts per billion and parts per million, respectively.  |
| <b>Pyrite</b>                      | Iron Sulphide mineral. The most common and abundant Sulphide mineral and often found in association with copper and gold.   |
| <b>Qualified Person</b>            | Means a Qualified Person as defined in National Instrument 43-101, including an engineer or geoscientist in good standing with their professional association, with at least five years of relevant experience.   |
| <b>Quartz</b>                      | The second most common rock forming mineral in the earth's crust. SiO <sub>2</sub> .  |
| <b>Resource</b>                    | Means any of a measured, indicated or inferred resource as used in NI 43-101, and having the following meanings:  |

**measured resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

**indicated resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

**inferred resource** is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

For the purposes of the above a **mineral resource** means a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

(Please refer to **Item 3. Property - Cautionary Note To U.S. Investors Regarding Resource Estimates** in regards to the use of the above terms in this registration statement.)

|                    |   |
|--------------------|---|
| <b>Rhyolite</b>    | The fine grained equivalent of a granite.   |
| <b>Sulphide</b>    | A class of minerals characterized by the linkage of sulphur with a metal (such as Pyrite (FeS <sub>2</sub> )).                    |
| <b>tpd</b>         | Tonnes per day.   |
| <b>Tonnes</b>      | A metric ton which is equivalent to approximately 2,204 pounds.   |
| <b>Tuff</b>        | A Volcanic rock formed through the compaction of volcanic crystals and/or rock fragments generally smaller than 4 mm in diameter. |
| <b>Sedimentary</b> | A rock formed from cemented or compacted Sediments.   |

- Sediments** The debris resulting from the weathering and breakup of other rocks that have been deposited by or carried by runoff, streams and rivers, or left over from glacial erosion or sometimes from wind action.
- Strike** The direction or bearing from true north of a vein, rock formation or structure measured on a horizontal surface.
- Vein** A geological feature comprised of minerals (usually dominated by quartz) that are found filling openings in rocks created by faults or replacing rocks on either side of faults or Fractures.
- Volcanic rock** A finely crystalline or glassy Igneous rock resulting from volcanic actions at or near the earth's surface.

**ITEM 1. BUSINESS**

**General**

We were incorporated on July 17, 2006 under the laws of British Columbia, Canada under the name Golden Predator Mines Inc. We were incorporated as a wholly owned subsidiary of Energy Metals Corp. for the purpose of holding the precious metals and certain specialty metals assets. Energy Metals was formerly a company listed on the Toronto Stock Exchange and NYSE Arca, focused on uranium development projects, and was acquired by Uranium One Inc. in August of 2007. Effective March 12, 2009, we changed our name to EMC Metals Corp.

We are a reporting issuer in the Canadian Provinces of British Columbia, Alberta and Ontario and our common shares are listed for trading on the Toronto Stock Exchange under the trading symbol EMC .

Our head office is located at 11<sup>th</sup> Floor - 888 Dunsmuir Street, Vancouver, British Columbia, Canada, V6C 3K4, which is also the address of our registered and records office.

**Loss of Foreign Private Issuer Status under U.S. Securities Laws**

Based on our analysis of the number of our shares held by persons resident in the U.S. as of June 30, 2010, as well as the majority of our assets and directors being in the U.S., we do not meet the definition of a foreign private issuer under U.S. securities laws. As a result, effective January 1, 2011, we are subject to U.S. securities laws as applicable to a U.S. domestic company. The loss of foreign private issuer status has several implications to us, including that additional restrictions generally apply to the resale of securities issued by us after January 1, 2011 unless we file an effective registration statement with the U.S. Securities and Exchange Commission in respect of those securities.

**Intercorporate Relationships**

The chart below illustrates our corporate structure, including our subsidiaries, the jurisdictions of incorporation, and the percentage of voting securities held.



## Recent History

### Exploration Joint Venture with Jervois Mining Limited

On February 5, 2010, we entered into an Exploration Joint Venture Agreement with Jervois Mining Limited to develop the Nyngan scandium property in New South Wales, Australia, which is commonly referred to as the Nyngan Project. The Exploration Joint Venture Agreement gives us the right to earn a 50% interest in a joint venture with Jervois Mining Limited, for the purpose of holding and developing the Nyngan Project.

Pursuant to the terms of the Exploration Joint Venture Agreement, our right to proceed to form a joint venture with Jervois Mining was conditional on preliminary conditions being met including the following:

1. confirming to our satisfaction that Jervois, subject to prior royalty interests, was the sole and beneficial owner of the Nyngan Project free of encumbrances or claims by third parties and that the Nyngan Project is in good standing under the relevant legislation;
2. paying \$300,000 to Jervois;
3. obtaining the approval of the Toronto Stock Exchange of the Exploration Joint Venture Agreement;
4. obtaining the consent of the New South Wales state government to the transactions contemplated in the Exploration Joint Venture Agreement; and
5. obtaining the approval of the Australian Government Foreign Investment Review Board for the Exploration Joint Venture Agreement.

All of the above preliminary conditions were satisfied by March 30, 2010. As a result of the satisfaction of these conditions, we now have the right to earn a 50% interest in a joint venture with Jervois Mining Limited. The Exploration Joint Venture Agreement provides that we may earn our 50% by doing the following:

1. conducting a minimum of AUD\$500,000 in exploration and metallurgical test-work on the Nyngan Project within 180 business days of the above conditions precedent being satisfied, or paying cash in lieu thereof. In September of 2010, the deadline was extended to June 15, 2011. The required exploration and metallurgical test-work was completed by us before the deadline and accordingly this condition has been met;
2. delivering a feasibility study within 480 business days of the above conditions precedent being satisfied; and
3. paying to Jervois an additional AUD\$1,300,000 plus taxes, within 5 business days of the delivery of the feasibility study.

Once we have acquired a 50% interest in the joint venture, the Exploration Joint Venture Agreement provides for straight-line dilution, with interests diluted below 10% being converted into a 2% Net Smelter Returns Royalty.

Acquisition of The Technology Store, Inc.

We entered into a stock purchase agreement dated November 19, 2009, with Willem P. Duyvesteyn and Irene G. Duyvesteyn, pursuant to which we acquired all of the issued and outstanding common shares of The Technology Store, Inc. ( TTS ), a Nevada corporation. In exchange, we issued to the shareholders of TTS, 19,037,386 of our common shares, paid USD\$802,358 in cash, issued a promissory note in the amount of USD\$500,000 with a maturity date of 2 years, and agreed to pay certain U.S. federal income taxes payable in connection with the transaction. The acquisition of TTS completed with an effective date of December 16, 2009.

TTS conducts research and development of commercial extractive metallurgical processes. TTS specializes in the development of specialty metals extractive technologies, with emphasis on improving recoveries in the extraction of scandium, tungsten, boron, lithium, titanium, and nickel and a host of other emerging and unusual metals. As a condition of the stock purchase agreement, Willem D. Duyvesteyn, the principal of TTS, was appointed to our board of directors on December 16, 2009.

Spin-out of Golden Predator Corp.

Pursuant to a reorganization agreement dated February 5, 2009 between us and our then wholly-owned subsidiary Golden Predator Corp., we transferred most of our precious metals assets to Golden Predator in order to focus on our specialty metals assets and pursue additional specialty assets opportunities.

Concurrently with the reorganization, we completed a spin-out of Golden Predator to our shareholders. The spin out was completed on March 6, 2009, at which time we changed our name to EMC Metals Corp. As a result of the spin-out, Golden Predator became a reporting issuer in Canada and subsequently listed on the TSX Venture Exchange and then the Toronto Stock Exchange.

In connection with the reorganization and spin-out, we granted Golden Predator certain participation and acquisition rights to gold projects that were held by our subsidiary Great American Minerals, Inc. We subsequently sold Great American Minerals to Golden Predator in November of 2010 in consideration for a reduction in inter-corporate amounts owing due to adjustments from the spin-out and other adjustments. We however retained our interest in the non-gold properties including the Carlin Vanadium property.

Pursuant to a Mine Facility Agreement dated October 25, 2010, we granted Golden Predator access and use rights to a parcel of property on a corner of the Springer Mill property, a refurbished and permitted mill located in Nevada. The access rights provide Golden Predator with a suitable site to develop an independent gold milling facility.

Fury Explorations Ltd.

In 2008 we acquired Fury Explorations Ltd. in exchange for the issuance of 10,595,814 of our common shares and 18,310,237 common share purchase warrants and options to the shareholders of Fury Explorations. The acquisition of Fury Explorations was completed on August 15, 2008. Fury Explorations held two mineral resource projects in Nevada, including a silver mine and mill, and three mineral resource properties in Mexico. In February of 2009 Fury Explorations was transferred to Golden Predator as part of our reorganization and spin-out transaction.

Gold Standard Royalty Corporation

In 2008 we acquired Gold Standard Royalty Corporation in exchange for 2,050,000 of our common shares and options to acquire a further 168,334 of our common shares. Gold Standard holds a portfolio of gold exploration properties and leases formerly owned by the Lyle Campbell Trust. In February of 2009, Gold Standard was transferred to Golden Predator as part of our reorganization and spin-out transaction.

Great American Minerals, Inc.

In 2008 we acquired Great American Minerals, Inc., a Nevada company with gold, silver, vanadium and molybdenum assets in Nevada and California. Pursuant to the business combination agreement with Great American Minerals, we acquired a 74% equity interest in Great American Minerals for consideration of \$7,480,626 in cash by way of private placement. We subsequently acquired the remaining 26% by issuing 1,045,775 of our common shares, issuing 258,383 share purchase warrants, and issuing 320,125 options to securityholders of Great American Minerals.

In 2009 we retired certain convertible debentures issued by Great American Minerals by issuing to the holders of the convertible debentures 7,336,874 of our common shares and 1,787,374 share purchase warrants, exercisable to acquire our common shares at USD\$0.30 per share for a period of two years. The holders of the convertible debentures also received share purchase warrants of Golden Predator. We issued 500,040 share purchase warrants as an agent's fee in connection with the proposal to holders of convertible debentures.

In November of 2010 we sold Great American Minerals to Golden Predator in consideration for a reduction in intercorporate amounts owing. We retained certain non-gold properties held by Great American Minerals, namely including the Carlin Vanadium Property.

Tordal and Evje Properties, Norway

In April of 2011, we entered into an option agreement with REE Mining AS of Norway, pursuant to which we acquired the option to earn 100% of the outstanding common shares in the capital of a Norwegian limited liability company which holds the exploration rights to two pegmatite properties, known as the Tordal property and the Evje property. The properties are both prospective for a grouping of specialty metals, and rare earth elements, including scandium, yttrium, tantalum, beryllium, niobium, zirconium, titanium, lithium, nickel and tin.

Under the terms of the REE Option Agreement, we may earn 60% of the Norwegian limited liability company by:

- (a) paying to REE Mining an aggregate USD\$430,000 as follows:
  - (i) USD\$130,000 on March 31, 2011 (paid); and
  - (ii) an additional USD\$300,000 on or before October 31, 2012; and

If we acquire the initial 60% interest, we can earn the remaining 40% of the Norwegian limited liability company by:

(a) paying to REE Mining USD\$200,000 on or before March 31, 2013; and

(b) issuing to REE Mining 1,000,000 of our common shares on or before March 31, 2013.

We are currently conducting the second stage of a surface sampling program on the Tordal property. It is anticipated that similar programs will be initiated at Evje property in 2011.

## **Business Operations**

### Company Summary

We are a mineral exploration and development company that is focused on the development of scandium, tungsten, vanadium, rare earth minerals, and other specialty metals, including nickel, cobalt, boron, manganese, tantalum, titanium and zirconium.

Our principal properties and projects include 100% ownership of the Springer Mine and mill complex in Nevada, a right to acquire a joint venture interest on the Nyngan Project in Australia, and 100% ownership of the Carlin Vanadium project in Nevada.

### Corporate Objective and Strategy

Our primary corporate focus is to produce and sell scandium and scandium-based products, such as master alloy. None of our current properties has advanced to the development or production stage and we are currently an exploration stage company. In addition we do not currently have reserves on any of our properties. We are however conducting technical and assessment work on the Nyngan scandium property located in Australia, for the purpose of preparing a feasibility study on the development of the scandium resource. Subject to a successful feasibility study, we intend to develop the Nyngan resource for production, with a view to supplying the anticipated future demand for scandium oxide and scandium-content materials. Conceptual development plans of the Nyngan Project include construction of a commercial plant on the property that will process mineralized material extracted from the property. The time-frame for development of the project by us is subject to numerous risks and factors, including a successful feasibility study, however we are targeting 2012 for the commencement of construction of a plant. The commencement of construction is subject to various risks including our ability to earn and maintain a 50% joint venture interest in the Nyngan Project as well as the requirement to obtain project financing. For further information on the Nyngan Project, please refer to *Item 3. Properties -*

*Description of Properties Nyngan Scandium Project and Item 1A. Risk Factors .*

Concurrently with our analysis of the Nyngan Project, we are developing and testing unique mineral recovery techniques as well as techniques to produce high quality finished scandium metals. If effective at a commercial level, these recovery and finishing techniques will provide increased economic margins and returns on capital on any future scandium production. Presently our recovery and finishing technology is in the testing phase, and there is no guarantee that we will be able to benefit from the commercial application of such techniques or that we will have scandium production in the future.

### Global Scandium Production and Market

Scandium is the 31<sup>st</sup> most abundant element in the earth's crust (average 33 ppm), which makes it more common than lead, mercury and precious metals, but less common than copper. Scandium has characteristics that are similar to rare earth elements, and it is often classified as a member of that group, although it is technically a light transition metal. Scandium rarely occurs in concentrated quantities because it does not selectively combine with the common ore-forming anions, and it is very difficult to reduce to a pure metal state. Scandium is typically produced and sold as

scandium oxide ( $\text{Sc}_2\text{O}_3$ ).

Global annual production estimates of scandium range from 2 tonnes to 10 tonnes, but accurate statistics are not available due to the lack of public information from countries in which scandium is currently being produced. There are three known production sources globally today: stockpiles from the former Zhovti Voty uranium mine in Ukraine, the rare earth mine at Bayan Obo in China, and the apatite mines on the Kola Peninsula in Russia.

There is no reliable pricing data on scandium oxide trading. The U.S. Geological Survey in its latest report (January 2011) documents the price of scandium oxide at USD\$1,400/kg for the four previous years, however small quantities of scandium oxide are currently offered on the internet by traders for multiples of this figure. Scandium oxide prices vary based on purity and quantity. The weight-to-price ratio of scandium metals and compounds is generally much higher for gram quantities than for kilogram purchases. Kilogram prices for scandium metal ingot are typically double the cost of the starting scandium compound, while higher purity distilled or sublimed metal ranges from four to six times the cost of the starting material.

Principal uses for scandium are in high-strength aluminum alloys, high-intensity metal halide lamps, electronics, and laser research. Recently developed applications include welding wire and fuel cells which are expected to be in future demand. Approximately 15 different commercial scandium-aluminum alloys have been developed in Russia, and some of them are used for aerospace applications. In Europe and the U.S., scandium containing alloys have been evaluated for use in structural parts in airplanes. The combination of high strength and lightweight makes scandium-aluminum alloys suitable for a number of applications.

#### Competitive Conditions

We compete with numerous other companies and individuals in the search for and the acquisition or control of attractive rare earth and specialty metals mineral properties. Our ability to acquire further properties will depend not only on our ability to operate and develop our properties but also on our ability to select and acquire suitable properties or prospects for development or mineral exploration.

In regards to our plan to produce scandium, there are a limited number of scandium producers presently. If we are successful at becoming a producer of scandium, our ability to be competitive with those producers will require that we establish a reliable supply of scandium to the market. In addition, our competitive advantage in delivering a finished metal would only exist if our proprietary scandium recovery and finishing techniques are effective at a commercial level, which currently is unproven.

#### Employees

As at May 15, 2011, we have 9 full and part time employees and 5 individuals working on a consulting basis. Our operations are managed by our officers with input from our directors. We engage geological, metallurgical, and engineering consultants from time to time as required to assist in evaluating our property interests and recommending and conducting work programs.

### **ITEM 1A. RISK FACTORS**

In addition to the factors discussed elsewhere in this registration statement, the following are certain material risks and uncertainties that are specific to our industry and properties that could materially adversely affect our business, financial condition and results of operations.

### **Risks Associated with the Springer Project**

***We may not be able to utilize the Springer Property.*** The Springer property, which includes an existing mine and refurbished mill facility, constitutes our largest asset. In September of 2008, we suspended work on the Springer property and placed the facility on care and maintenance pending improvement in the global financial markets and strengthening tungsten prices. While tungsten prices have improved, significant additional capital and additional management resources would be required to resume operations. If we make a decision to resume operations on the Springer property such operations will require the location of additional management and additional capital. Our inability to obtain such management and capital will result in the Springer property continuing to be on care and maintenance.

***The price of tungsten is subject to significant volatility.*** If we elect to operate the Springer mine and mill, there is no certainty that economic conditions or tungsten prices will not again deteriorate, and that production at the Springer Mine will need to be again suspended. To the extent tungsten prices may deteriorate after we commence operations, such operations may not be profitable resulting in the closure of the mine and mill, and resulting loss in value of our company to investors.

***We may incur a loss if we sell the Springer Property.*** The Springer property has a significant book value on our financial statements. We are currently considering selling the Springer property among other strategic alternatives. There is no assurance that a suitable buyer can be found for the property, or that the terms of such a sale will not result in a financial loss to us. To the extent we cannot find a suitable buyer or other strategic party, we may have to sell the property at a significant loss, resulting in a reduced asset value of the company as a whole, and a reduction in available funds for other corporate purposes. These factors may result in a reduction in the market price of our shares.

### **Risks Associated with the Nyngan Project**

***If we are not able to acquire an interest in the Nyngan Project our share price may decline.*** We are subject to various commitments pursuant to the terms of the Nyngan Exploration Joint Venture Agreement. There is no assurance that we will meet our payment obligations, timing deadlines or otherwise fulfill our commitments under the agreement in order to earn a 50% interest in the Nyngan Joint Venture. If we are unable to meet the requirements to earn a 50% interest, then the project will no longer be available to us. The loss of this project would likely significantly reduce the market price of our shares.

***There are technical challenges to scandium production that may render the project not economic.***

There is no assurance that we will demonstrate economic viability on the Nyngan resource. The economics of scandium recovery are known to be challenging. There are very few facilities producing scandium and the existing scandium producers are secretive in their techniques for recovery. In addition, the recovery of scandium product from laterite resources, such as at the Nyngan deposit, has not been demonstrated at an operating facility. The Nyngan processing facility design, if constructed, will be the first of its kind for scandium production. These factors increase the possibility that we will encounter unknown or unanticipated production and processing risks. Should any of these risks become actual, they could increase the cost of production thereby reducing margins on the project or rendering the project uneconomic.

***There is no guarantee that we will be able to finance the Nyngan Project for production.*** Any decision to proceed with production on the Nyngan Project will require significant production financing. Scandium projects are very rare, and economic and production uncertainty may limit our ability to attract the required amount of capital to put the project into production. If we are unable to source production financing on commercially viable terms, we may not be able to proceed with the project and may have to write-off our investment in the project.





***If we are successful at achieving production, we may have difficulty selling Scandium.*** Scandium is characterized by unreliable supply, resulting in limited development of markets for scandium oxide. Markets may take longer to develop than anticipated, and Nyngan and other potential scandium producers may have to wait for products and applications to create adequate demand. Certain applications may require lengthy certification processes that could delay usage or acceptance. In addition certain scandium applications require very high purity scandium product, which is much more difficult to produce than lower Grade product. If we commence production, our inability to supply scandium in sufficient quantities, in a reliable and timely manner, and in the correct quality, could reduce the demand for any scandium produced from our projects and possibly render the project uneconomic.

#### **Risks Associated with the Carlin Vanadium Property**

***There are technical challenges to production of Vanadium from the property that may reduce the value of the property.*** The Carlin property hosts vanadium contained in a black shale. This vanadium host is known to present challenging processing issues in the separation of vanadium. Techniques to separate vanadium in this environment are complex. As a result, shareholders may never see the property developed due to technical risks, and similarly the value of the property may be greatly reduced if such technical risks present an obstacle to further exploration or development of the property.

***Industry requirements may limit market opportunities for vanadium production.*** New battery technologies are emerging that rely on vanadium, these markets may take longer than expected to develop and increase vanadium demand. These battery technologies require high purity vanadium product, which is difficult and costly to produce. The purity of any vanadium that may in the future be extracted from the Carlin property is unknown and uncertain. The inability to produce vanadium with sufficient purity for market purposes will likely reduce the economic prospects of any proposed development of the property.

#### **General Risks Associated with our Mining Activities and Company**

***We may not receive permits necessary to proceed with the development of a mining project.*** The development of any of our properties, including the Nyngan Project, will require numerous local and national government approvals, include environmental permits. Our ability to secure all necessary permits required to develop any of our projects is unknown until we make application for such permits. If we cannot obtain all necessary permits, the project cannot be developed, and our investment in the project will likely be lost. Our future market value will likely be significantly reduced to the extent one or more of our projects cannot proceed to the development or production stage due to an inability to secure all required permits.

***Mineral Resource Estimates on our properties are subject to uncertainty and may not reflect what may be economically extracted.*** Resource estimates included for scandium, tungsten and other minerals on our Nyngan, Springer and Carlin properties are estimates only and no assurances can be given that the estimated levels of tungsten and other minerals will actually be produced or that we will receive the tungsten and other metal prices assumed in determining our resources. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling and exploration results and industry practices. Estimates made at any given time may significantly change when new information becomes available or when parameters that were used for such estimates change. By their nature resource estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. Furthermore, market price fluctuations in scandium, tungsten and other metals, as well as increased capital or production costs or reduced recovery rates, may limit our ability to establish reserves on any of our properties. The extent to which resources may ultimately be reclassified as proven or probable reserves is dependent upon the demonstration of their profitable recovery. The evaluation of reserves or resources is always influenced by economic and technological factors, which may change over time. Accordingly, current resource estimates on our material properties may never be converted into reserves, or be economically extracted, and we may have to write-off such properties or incur a loss on sale of our interest on such properties, which will likely reduce the value of our shares.



***Our potential for a competitive advantage in specialty and rare metals production depends entirely on the availability of our Chief Technology Officer.*** We are dependent upon the personal efforts and commitment of Willem Duyvesteyn, our CTO, a director and significant shareholder of our company, for the continued development of new extractive technologies related to scandium and other rare and specialty metals production. The loss of the services of Mr. Duyvesteyn will likely limit our ability to use or continue the development of such technologies, which would remove the potential competitive and economic benefit of such technologies, which conceivably could render our planned projects uneconomic if prevailing commodity prices are not sufficiently strong or reliable.

***Our operations are subject to losses due to exchange rate fluctuation.*** We maintain accounts in Canadian and U.S. currency. Our equity financings have to date been priced in Canadian dollars, however all of our material projects and non-cash assets are located outside of Canada and require regular currency conversions to local currencies where such projects and assets are located. Our operations are accordingly subject to foreign currency fluctuations and such fluctuations may materially affect our financial position and results. We do not engage in currency hedging activities.

***Without additional funding, we will not be able to carry out our business plan, and if we raise additional funding existing securityholders may experience dilution.*** As an exploration stage mining company, we do not currently earn any revenue from mining operations on our principal properties. In order to continue our exploration activities and to meet our obligations under our joint venture agreement on the Nyngan Scandium Project, we will need to raise additional funds. Recently, we have relied entirely on the sale of our securities to raise funding for operations. Our ability to continue to raise funds from the sale of our securities is subject to significant uncertainty due to volatility in the mineral exploration marketplace. We may also seek to raise funds from the sale of our Springer Property assets, however our ability to sell these assets and the price at which we may sell these assets is subject to similar market volatility, as well as the number and nature of potential buyers. If we are unable to raise funds from the sale of our securities or our Springer assets, then we likely will not be able to carry out our business plan of achieving Scandium production, or continue exploration activities on our current or future exploration properties. If we are able to raise funds from the sale of our securities, existing securityholders may experience significant dilution of their ownership interests and possibly to the value of their existing securities.

## **ITEM 2. FINANCIAL INFORMATION**

### **Management's Discussion and Analysis of Financial Conditions and Results of Operations**

#### Overview

We are an exploration stage specialty metals and alloys company focusing on scandium, tungsten, molybdenum, vanadium, and other specialty metals.

Our most advanced asset is the Springer Mine Property, a fully constructed tungsten mine and mill asset in Nevada, USA. The Springer Mine Property is currently not operating, and we are considering options for the property, including a sale.

We hold the right to earn-in to a 50% interest in a joint venture with Jervois Mining Limited for the development of the Nyngan Scandium Project in New South Wales, Australia. We are currently advancing the Nyngan Project as the manager under the joint venture agreement.

We also own the Carlin Vanadium Property, in Nevada, and have recently acquired an option to earn a 100% interest in the Tordal and Evje properties in Norway.

We acquired various metallurgical patents and know-how as part of the acquisition of The Technology Store, Inc. during the prior year. These patents and know-how generally relate to mineral extraction and finishing technologies that may provide us with a competitive advantage in reducing extraction and finishing costs, or improving recoveries and finished product qualities, should we be successful at commencing production of rare earth minerals or specialty metals. We are actively developing and testing scandium production and finishing technology using this know-how, that we intend to apply should we be successful at establishing production at the Nyngan Project.

Our focus during the year was maintaining the Springer Mine Property on standby mode, supported by the efforts of a financial advisor firm seeking interest in the markets for the asset sale. We advanced the Nyngan Project through metallurgical testing, process definition, and optimization work. We also investigated other specialty metals opportunities.

During the year we raised \$4,956,421 in gross proceeds from private placements in which a total of 30,252,442 shares were issued.

## **RESULTS FOR THE YEAR ENDED DECEMBER 31, 2010**

### Liquidity and Capital Resources

At December 31, 2010, we had a working capital of \$3,330,415 including cash of \$4,126,424 as compared to a working capital deficiency of \$105,183 including cash of \$584,436 at December 31, 2009. Also included in working capital, at December 31, 2010, were marketable securities with a market value of \$2,250 (December 31, 2009 - \$204,582).

During the year ended December 31, 2010, we received cash of \$6,068,472 (2009 - \$2,210,200) for stock issuances. At December 31, 2010, we had an aggregate 23,792,485 share purchase warrants exercisable, between \$0.18 and \$2.68 per share which have the potential upon exercise to convert to approximately \$44,365,064 in cash over the next two years. Further, a total of 11,473,750 stock options exercisable between \$0.10 and \$2.15 have the potential upon exercise to generate a total of \$2,076,063 in cash over the next five years. There is no assurance that these securities will be exercised.

Our continued development is contingent upon our ability to raise sufficient financing both in the short and long term. There are no guarantees that additional sources of funding will be available to us; however, management is committed to pursuing all possible sources of financing in order to execute our business plan.

Our major capital requirements in the next 12 months relate mainly to the earning our 50% joint venture interest in the Nyngan Project by delivering a feasibility study that will cost an estimated AU\$583,000 to produce, and paying an additional \$1,300,000 to Jervois within 5 days of delivering the feasibility study.

We are also obligated to repay a \$500,000 promissory note issued in to the vendors of TTS in connection with the acquisition of TTS. These commitments total approximately \$2,383,000 and it is expected that these commitments will be funded from available cash.

The Company will need additional funding to meet the commitments shown above, and will seek to raise additional equity financing in the short term.

### Results of Operations

#### *Quarter ended December 31, 2010*

The net loss for the quarter decreased by \$13,392,110 to \$850,504 from \$14,242,614 in the prior year, mainly as a result of us having a lower mineral impairment charge in the current year. Individual items contributing to this decrease are as follows:

| <b>Q4 2010 vs. Q4 2009 - Variance Analysis</b> |   |  |
|--|---|--|
| <b>Item</b>                                    | <b>Variance<br/>Favourable /<br/>(Unfavourable)</b> | <b>Explanation</b>   |
| Write-off of mineral properties                | \$16,715,100  | We had a lower mineral impairment charge in the current year compared to the prior year. The write down in the current year amounted to a recovery of \$5,096 compared to a write off of \$16,710,004 in the prior year.   |
| Unrealized income on marketable securities     | (\$1,300,808)                                       | In prior year, we incurred a gain on the unrealized income from marketable securities from adjusting the value of the marketable securities to market. We incurred a loss on disposal of marketable securities in the current year.  |
| Other income                                   | (\$1,247,928)                                       | We primarily earned sundry revenue in prior year from a gain on transfer of marketable securities occurring from the spin-out of \$206,974 and a gain on the settlement of convertible debentures of \$1,449,948 partially offset by a recovery of expenses from Golden Predator Corp. in the amount of \$357,583, that did not recur. |
| Future income tax recovery                     | (\$1,006,132)                                       | The prior year tax recovery of \$1,006,132 resulting from our application of a valuation allowance against future income tax assets not expected to be realized that did not recur in the current year.  |

|                            |             |  |
|----------------------------|-------------|--|
| General and administrative | \$360,391   | The favourable variance results from a reduced level of operations in the current year.  |
| Stock-based compensation   | \$347,592   | Recognition of the option expense over the period to the next vesting date. The current expense is lower than in the prior year as a result of fewer options vesting.  |
| Amortization               | (\$288,195) | Amortization of technology patents acquired in the last quarter of 2009 as part of the TTS acquisition. There was no equivalent charge in the same quarter of the prior year, hence the unfavourable variance. |

## Q4 2010 vs. Q4 2009 - Variance Analysis

| Item                                  | Variance<br>Favourable /<br>(Unfavourable) | Explanation   |
|---------------------------------------|--|---|
| Interest expense                      | (\$117,185)                                | Interest expense in the current quarter is attributable to the promissory notes in respect of the TTS and Cosgrave acquisitions. The Cosgrave property interest expense was offset by interest revenue in the same quarter of prior year. |
| Loss on sale of marketable securities | (\$70,583)                                 | We incurred a loss on the sale of marketable securities in the current year.  |
| Salaries and benefits                 | \$43,206                                   | The positive variance results from a lower headcount in the current period due to lower levels of activity than in the prior year.  |
| Foreign exchange gain                 | (\$30,150)                                 | The gain or loss results mainly from the conversion of US monetary item balances to CAD for reporting purposes.   |
| Disposition of assets                 | \$28,792                                   | We sold a vehicle for a gain.   |
| Consulting                            | \$25,692                                   | The savings compared to the prior year results from our efforts to reduce operations and preserve capital.  |
| Insurance                             | \$10,005                                   | We commissioned a risk survey, the results of which enabled a reduction in the insured amount of the Springer Mill resulting in lower premiums in the current year.   |
| Other variances under \$5,000         | (\$1,242)                                  | Includes favourable variances on professional fees, offset by unfavourable variances on travel.   |

***Cash flow discussion for the Quarter ended December 31, 2010 compared to December 31, 2009***

The cash outflows from operating activities decreased by \$1,621,630 to \$1,035,906 (2009 \$2,657,536) due to a reduction in activity.

Cash outflows from investing activities increased by \$720,933 to \$793,771 (2009 \$72,838) due mainly to cash paid for a subsidiary.

Cash inflows from financing activities increased by \$4,460,993 to \$5,973,627 (2009 - \$1,512,634) due mainly to the completion of two private placements and the exercise of stock options and warrants.



**Results of Operations for the Year ended December 31, 2010**

The net loss for the year decreased by \$16,922,826 to \$4,722,755 from \$21,645,581 in the prior year, mainly as a result of us having a lower mineral impairment charge than in prior year. Individual items contributing to this decrease are as follows:

| <b>2010 vs. 2009 - Variance Analysis</b> |   |   |
|--|---|---|
| <b>Item</b>                              | <b>Variance<br/>Favourable /<br/>(Unfavourable)</b> | <b>Explanation</b>  |
| Write-off of mineral properties          | \$15,639,897  | We wrote down our gold and silver properties to fair market value in the prior year.  |
| Stock-based compensation                 | \$1,020,583   | Recognition of the option expense over the period to the next vesting date. The current expense is lower than in the prior year as a result of fewer options vesting.   |
| Foreign exchange gain                    | (\$604,773)   | Results mainly from the conversion of US monetary item balances to CAD for reporting purposes. The current year gain amounts to \$205,218 compared to a gain of \$809,991 in the prior year.                                |
| Salaries and benefits                    | \$413,718   | The positive variance results from a lower headcount in the current period due to lower levels of activity than in the prior year.  |
| Interest expense                         | (\$366,921)   | Interest expense in the current year is attributable to the promissory notes in respect of the TTS and Cosgrave acquisitions. The Cosgrave property interest expense was offset by interest revenue in the same prior year. |
| General and administrative               | \$329,622   | The favourable variance results from a reduced level of operations in the current year.   |
| Exploration costs                        | (\$119,712)   | Increased work done on Nyngan Project.  |
| Amortization                             | \$173,468   | Amortization of our assets.   |
| Professional fees                        | \$159,188   | Prior year's costs related to the spin-out of Golden Predator Corp. that did not recur in the current year.   |

Consulting

\$156,604

The savings compared to the prior year results from our efforts to reduce operations and preserve capital.

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| 2010 vs. 2009 - Variance Analysis     |  |   |
|---------------------------------------|--|---|
| Item                                  | Variance<br>Favourable /<br>(Unfavourable) | Explanation   |
| Insurance                             | \$153,684                                  | We commissioned a risk survey, the results of which enabled a reduction in the insured amount of the Springer Mill resulting in lower premiums in the current year. |
| Loss on sale of marketable securities | (\$70,583)                                 | We incurred a loss on the sale of marketable securities in the current year.  |
| Other income                          | (\$60,457)                                 | We earned sundry revenue from the spin-out from Golden Predator Corp. in the prior year that did not recur.   |
| Disposition of assets                 | \$39,792                                   | A gain of \$37,256 from the disposition of assets as compared to a loss of \$2,536 in the prior year.   |
| Travel and entertainment              | \$36,725                                   | The favourable variance results from a reduced level of operations in the current year.   |

***Cash flow discussion for the year ended December 31, 2010 compared to December 31, 2009***

The cash outflow from operating activities decreased by \$1,426,201 to \$1,688,506 (2009 - \$3,114,707) due to a reduction in activity.

Cash outflows from investing activities increased by \$603,964 to \$837,978 (2009 - \$234,014) due mainly funds paid for the acquisition of TTS and an increase in expenditures on mineral interests.

Cash inflows from financing activities increased by \$3,858,272 to \$6,068,472 (2009 - \$2,210,200) as a result of us raising funds from private placements during the year and cash received from the exercise of stock options and warrants.

***Summary of quarterly results***

|   | 2010        |             |             |           | 2009         |           |           |             |
|---|-------------|-------------|-------------|-----------|--------------|-----------|-----------|-------------|
|   | Q4          | Q3          | Q2          | Q1        | Q4           | Q3        | Q2        | Q1          |
| Net Sales   | -           | -           | -           | -         | -            | -         | -         | -           |
| Net Income<br>(Loss)                                      | (1,341,524) | (1,514,237) | (1,148,938) | (718,056) | (11,311,117) | (548,203) | (725,249) | (9,061,012) |
| Basic and<br>diluted<br>Net Income<br>(Loss) per<br>share | (0.01)      | (0.01)      | (0.01)      | (0.01)    | (0.14)       | (0.01)    | (0.01)    | (0.01)      |



The net loss in the third quarter of 2010 and the fourth quarter of 2009 relates mainly to the write-down of mineral interests. There was a foreign exchange loss in the first quarter of 2009 of \$7,918,977 that reversed itself to a gain of \$809,991 by the end of the fourth quarter.

### ***Financial Position***

#### *Cash*

The increase in cash of \$3,541,988 to \$4,126,424 (2009 - \$584,436) results from proceeds from private placements and warrant and option exercises.

#### *Marketable securities*

Marketable securities decreased by \$202,332 to \$2,250 (2009 - \$204,582) due to us transferring our shares in GPD to GPD as part of a loan repayment.

#### *Subscription receivable*

Subscription receivable of \$210,249 (2009 - \$Nil) is from subscriptions received for the most recent private placement.

#### *Property, plant and equipment*

Property plant and equipment consists of land and water rights in Nevada, the Springer plant and equipment, and various other items of property plant and equipment. The decrease of \$540,650 to \$34,289,873 at December 31, 2010 (2009 - \$34,830,523) is due to amortization and the sale of a software asset and vehicle in the year.

#### *Mineral interests*

Mineral interests have decreased by \$1,043,173 to \$503,020 at December 31, 2010 (2009 - \$1,546,193) and consist mainly of the Springer Mine Property, and also gold, silver, and vanadium properties.

#### *Current liabilities*

Current liabilities have decreased by \$28,371 to \$1,141,590 at December 31, 2010 (2009 - \$1,169,961) due to the payment of amounts accrued for the TTS acquisition and a general reduction in activity which has been partially offset by advances from a related party.

#### *Promissory note payable (current and long-term)*

The promissory note payable decreased by \$221,240 to \$4,250,000 (2009 - \$4,471,240) which is attributable to a change in foreign exchange on conversion of the United States dollars designated promissory notes to Canadian dollars for reporting purposes.

#### *Capital Stock*

Capital stock increased by \$6,248,914 to \$88,138,487 (2009 - \$81,889,573) as a result of the completion of private placements for aggregate proceeds of \$4,746,172 and the exercise of warrants and stock options for total proceeds of \$1,322,300.



Additional paid-in capital increased by \$1,023,734 to \$2,003,345 (2009 - \$979,611) as a result of stock options issued and adjustments due to the exercise of stock options.

### **Liquidity and Capital Resources**

At December 31, 2010, we had working capital of \$3,330,415 including cash of \$4,126,424 as compared to a working capital deficiency of \$105,183 including cash of \$584,436 at December 31, 2009. Also included in working capital, at December 31, 2010, were marketable securities with a market value of \$2,250 (December 31, 2009 - \$204,582).

During the year ended December 31, 2010, we received cash of \$6,068,472 (2009 - \$2,210,200) for stock issuances. At December 31, 2010, we had an aggregate 23,792,485 share purchase warrants exercisable, between \$0.18 and \$2.68 per share which have the potential upon exercise to convert to approximately \$44,365,064 in cash over the next two years. Further, a total of 11,473,750 stock options exercisable between \$0.10 and \$2.15 have the potential upon exercise to generate a total of \$2,076,063 in cash over the next five years. There is no assurance that these securities will be exercised.

Our continued development is contingent upon our ability to raise sufficient financing both in the short and long term. There are no guarantees that additional sources of funding will be available to us; however, management is committed to pursuing all possible sources of financing in order to execute our business plan.

### **Off-balance sheet arrangements**

At December 31, 2010, we had no material off-balance sheet arrangements such as guarantee contracts, contingent interest in assets transferred to an entity, derivative instruments obligations or any obligations that trigger financing, liquidity, market or credit risk to us.

### **Subsequent events**

Subsequent to December 31, 2010, we:

- a) issued 300,000 stock options with an exercise price of \$0.39 exercisable until January 18, 2013 to our employees;
- b) issued 1,075,000 Common Shares on the exercise of share purchase warrants for gross proceeds of \$267,625;
- c) issued 250,000 Common shares on the exercise of stock options for gross proceeds of \$40,000; and
- d) entered into an option agreement with REE Mining AS of Norway, providing an option to earn 100% of the outstanding common shares in the capital of a Norwegian limited liability company which holds the exploration rights to two pegmatite properties, known as the Tordal property and the Evje property. The option may be exercised to earn a 60% of the Norwegian limited liability company by paying USD\$430,000 by October 31, 2012, and funding USD\$250,000 in exploration expenditures on the properties by September 30, 2012. Thereafter we may earn the remaining 40% by paying USD\$200,000 by March 31, 2013; and issuing 1,000,000 of our common shares by March 31, 2013.

**RESULTS FOR THE THREE MONTH PERIOD ENDED MARCH 31, 2011****Operating results-Revenues and Expenses**

We continued tight cost management at the Springer facility. We continued to fulfill our commitments in respect of the Nyngan Joint Venture with Jervois Mining Limited, focusing development expenditure in the quarter on this project.

**Results of Operations for the quarter ended March 31, 2011**

The net loss for the quarter decreased by \$370,606 to \$347,450 from \$718,056 in the prior year, mainly as a result of reduced general and administrative and foreign exchange costs. Individual items contributing to this increase are as follows:

**Q1 2011 vs. Q1 2010 - Variance Analysis**

| <b>Item</b>                                  | <b>Variance<br/>Favourable /<br/>(Unfavourable)</b> | <b>Explanation</b>  |
|--|---|---|
| Change in fair value of derivative liability | \$251,615   | As the warrants the derivative liability related to expired, the change in value to \$Nil was put through the statement of operations.  |
| Foreign exchange gain                        | (\$115,959)   | The gain or loss results mainly from the conversion of US monetary item balances to CAD for reporting purposes.   |
| Stock-based compensation                     | \$94,232  | Relates to the fair value of stock options granted in the quarter.  |
| General and administrative                   | \$66,733  | The favourable variance results from a reduced level of operations in the current year.   |
| Interest expense                             | \$45,583  | Interest expense in the current quarter is attributable to the promissory notes in respect of the TTS and Cosgrave acquisitions. The Cosgrave property interest expense was offset by interest revenue in the same quarter of prior year. |
| Exploration                                  | (\$42,240)  | Increased exploration work done on mineral properties as compared to prior year.  |
| Salaries                                     | (\$38,131)  | Increased activity in the quarter as compared to prior year.  |



Amortization

\$38,067

Some assets fully depreciated in prior year resulting in reduced amortization in the current year.

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**Q1 2011 vs. Q1 2010 - Variance Analysis**

| <b>Item</b>       | <b>Variance<br/>Favourable /<br/>(Unfavourable)</b> | <b>Explanation</b>  |
|-------------------|---|---|
| Professional fees | \$34,222  | Professional fees have decreased and salaries have increased as we have more in-house staff working for us than in the prior year.                                  |
| Consulting        | (\$31,499)  | Primarily relates to consulting fees from our current CEO.  |
| Insurance         | \$22,495  | We commissioned a risk survey, the results of which enabled a reduction in the insured amount of the Springer Mill resulting in lower premiums in the current year. |
| Travel            | (\$22,031)  | Increased travel in relation to investor relations.   |

**Cash flow discussion for the Quarter ended March 31, 2011 compared to March 31, 2010**

The cash outflow from operating activities decreased by \$647,931 to \$431,143 (2010 \$1,079,074) due to an increase in payables as compared to a material reduction in prior year.

Cash outflows from investing activities increased by \$20,548 to \$20,548 (2010 - \$Nil) due mainly to a large deposit made in prior year that was not repeated this year.

Cash inflows from financing activities decreased by \$544,050 to \$310,625 (2010 - \$854,675) as in the prior year we raised funds from a private placement during the quarter.

**Summary of quarterly results**

|   | <b>2011</b> |             | <b>2010</b> |             | <b>2009</b> |              |           |           |
|---|-------------|-------------|-------------|-------------|-------------|--------------|-----------|-----------|
|   | <b>Q1</b>   | <b>Q4</b>   | <b>Q3</b>   | <b>Q2</b>   | <b>Q1</b>   | <b>Q4</b>    | <b>Q3</b> | <b>Q2</b> |
| Net Sales   | -           | -           | -           | -           | -           | -            | -         | -         |
| Net Income<br>(Loss)                                      | (347,450)   | (1,341,524) | (1,514,237) | (1,148,938) | (718,056)   | (11,311,117) | (548,203) | (725,249) |
| Basic and<br>diluted<br>Net Income<br>(Loss) per<br>share | 0.00        | (0.01)      | (0.01)      | (0.01)      | (0.01)      | (0.14)       | (0.01)    | (0.01)    |

The net loss in the third quarter of 2010 and the fourth quarter of 2009 relates mainly to the write-down of mineral interests.

## Financial Position

### *Cash*

The decrease in cash of \$141,066 to \$3,985,358 (December 31, 2010 - \$4,126,424) results from proceeds from warrant and option exercises offset by operating cash outflows in the period, as per the Cash flow discussions above.

### *Marketable securities*

Marketable securities is unchanged at \$2,250 (December 2010 - \$2,250).

### *Property, plant and equipment*

Property plant and equipment consists of land and water rights in Nevada, the Springer plant and equipment, and various other items of property plant and equipment. The decrease of \$68,090 to \$34,221,783 (December 2010 - \$34,289,873) is due to amortization.

### *Mineral interests*

Mineral interests of \$503,020 (December 31, 2010 - \$503,020) consist mainly of the Springer property, and also scandium and vanadium properties.

### *Accounts Payable*

Accounts Payable has increased by \$38,766 to \$451,615 (December 2010 - \$412,849) due to a general increase in activity.

### *Derivative liability*

Derivative liability of \$Nil (December 2010 - \$228,741) was reduced to \$Nil as the warrants they related to expired.

### *Promissory note payable - current portion*

The current promissory note payable decreased by \$13,885 to \$486,115 (December 31, 2010 - \$500,000) which is attributable to a change in foreign exchange on conversion of the USD designated promissory notes to CAD for reporting purposes.

### *Promissory note payable - long-term portion*

The long-term promissory note payable decreased by \$104,137 to \$3,645,863 (December 31, 2010 - \$3,750,000) which is attributable to a change in foreign exchange on conversion of the USD designated promissory notes to CAD for reporting purposes.

### *Capital Stock*

Capital stock increased by \$319,833 to \$88,458,320 (December 31, 2010 - \$88,138,487) as a result of the exercise of warrants and stock options for total proceeds of \$310,625.

Additional paid-in capital increased by \$58,524 to \$2,061,869 (December 31, 2010 - \$2,003,345) as a result of stock options issued and adjustments due to the exercise of stock options.

### **Liquidity and Capital Resources**

At March 31, 2011, we had working capital of \$3,325,275 including cash of \$3,985,358 as compared to a working capital of \$3,330,415 including cash of \$4,126,424 at December 31, 2010. Also included in working capital, at March 31, 2011, were marketable securities with a market value of \$2,250 (December 31, 2010 - \$2,250).

During the three month period ended March 31, 2011, we received cash of \$310,625 (2010 - \$854,675) for stock issuances. At March 31, 2011, we had an aggregate 20,392,572 share purchase warrants exercisable, between \$0.18 and \$2.68 per share which have the potential upon exercise to convert to approximately \$43,404,965 in cash over the next two years. Further, a total of 11,508,750 stock options exercisable between \$0.10 and \$2.15 have the potential upon exercise to generate a total of \$2,146,313 in cash over the next five years. There is no assurance that these securities will be exercised.

Our continued development is contingent upon our ability to raise sufficient financing both in the short and long term. There are no guarantees that additional sources of funding will be available to us; however, management is committed to pursuing all possible sources of financing in order to execute our business plan. We continue our cost cutting measures to conserve cash to meet our operational obligations.

Our major capital requirements in the next 12 months relate mainly to the earning our 50% joint venture interest in the Nyngan Project by delivering a feasibility study that will cost an estimated AU\$583,000 to produce, and paying an additional \$1,300,000 to Jervois within 5 days of delivering the feasibility study.

We are also obligated to repay a \$500,000 promissory note issued in to the vendors of TTS in connection with the acquisition of TTS. These commitments total approximately \$2,383,000 and it is expected that these commitments will be funded from available cash.

The Company will need additional funding to meet the commitments shown above, and will seek to raise additional equity financing in the short term.

### **Off-balance sheet arrangements**

At March 31, 2011, we had no material off-balance sheet arrangements such as guarantee contracts, contingent interest in assets transferred to an entity, derivative instruments obligations or any obligations that trigger financing, liquidity, market or credit risk to us.

## **ADDITIONAL INFORMATION AND ACCOUNTING PRONOUNCEMENTS**

### **Outstanding share data**

At May 20, 2011 we had 150,384,412 issued and outstanding common shares, 12,378,750 outstanding stock options at a weighted average exercise price of \$0.19, and 20,392,572 outstanding warrants at a weighted average exercise price of \$2.13.

### **Critical Accounting Estimates**

The preparation of financial statements in conformity with generally accepted accounting policies requires our management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These

estimates are based on past experience, industry trends and known commitments and events. By their nature, these estimates are subject to measurement uncertainty and the effects on the financial statements of changes in such estimates in future periods could be significant. Actual results will likely differ from those estimates.

*Stock-based compensation*

We use the Black-Scholes option pricing model to calculate the fair value of stock options and compensatory warrants granted. This model is subject to various assumptions. The assumptions we make will likely change from time to time. At the time the fair value is determined, the methodology that we use is based on historical information, as well as anticipated future events. The assumptions with the greatest impact on fair value are those for estimated stock volatility and for the expected life of the instrument.

### *Deferred income taxes*

We account for tax consequences of the differences in the carrying amounts of assets and liabilities and our tax bases using tax rates expected to apply when these temporary differences are expected to be settled. When the deferred realization of income tax assets does not meet the test of being more likely than not to occur, a valuation allowance in the amount of the potential future benefit is taken and no future income tax asset is recognized. We have taken a valuation allowance against all such potential tax assets.

### *Mineral properties and exploration and development costs*

We capitalise the costs of acquiring mineral rights at the date of acquisition. After acquisition, various factors can affect the recoverability of the capitalized costs. Our recoverability evaluation of our mineral properties and equipment is based on market conditions for minerals, underlying mineral resources associated with the assets and future costs that may be required for ultimate realization through mining operations or by sale. We are in an industry that is exposed to a number of risks and uncertainties, including exploration risk, development risk, commodity price risk, operating risk, ownership and political risk, funding and currency risk, as well as environmental risk. Bearing these risks in mind, we have assumed recent world commodity prices will be achievable. We have considered the mineral resource reports by independent engineers on the Springer and Nyngan projects in considering the recoverability of the carrying costs of the mineral properties. All of these assumptions are potentially subject to change, out of our control, however such changes are not determinable. Accordingly, there is always the potential for a material adjustment to the value assigned to mineral properties and equipment.

### **Recent Accounting Pronouncements**

In April 2010, the Financial Accounting Standards Board ( **FASB** ) issued ASU 2010-13, Compensation – Stock Compensation (Topic 718), amending ASC 718. ASU 2010-13 clarifies that a stock-based payment award with an exercise price denominated in the currency of a market in which the entity's equity securities trade should not be classified as a liability if it otherwise qualifies as equity. ASU 2010-13 also improves US GAAP by improving consistency in financial reporting by eliminating diversity in practice. ASU 2010-13 is effective for interim and annual reporting periods beginning after December 15, 2010 (January 1, 2011 for us). We are currently evaluating the impact of ASU 2010-09, but do not expect its adoption to have a material impact on our financial reporting disclosures.

In December 2010, the FASB issued ASU 2010-29, which contains updated accounting guidance to clarify the acquisition date that should be used for reporting pro forma financial information when comparative financial statements are issued. This update requires that we should disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. This update also requires disclosure of the nature and amount of material, nonrecurring pro forma adjustments. The provisions of this update, which are to be applied prospectively, are effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010, with early adoption permitted. The impact of this update on our consolidated financial statements will depend on the size and nature of future business combinations.

### **Financial instruments and other risks**

Our financial instruments consist of cash, investments in trading securities, subscriptions receivable, receivables, accounts payable and accrued liabilities, due to related parties, and promissory notes payable. It is management's opinion that we are not exposed to significant interest, currency or credit risks arising from our financial instruments. The fair values of these financial instruments approximate their carrying values unless otherwise noted. We have our cash primarily in one commercial bank in Vancouver, British Columbia, Canada.



### **ITEM 3. PROPERTIES**

#### **Cautionary Note To U.S. Investors Regarding Resource Estimates**

Certain terms used in this section are those used in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of U.S. securities laws. Canadian requirements, including NI 43-101, differ significantly from the requirements of the SEC, and resource information contained herein may not be comparable to similar information disclosed by U.S. companies.

In particular, and without limiting the generality of the foregoing, the term *resource* does not equate to the term *reserves*. The requirements of NI 43-101 for identification of *reserves* are not the same as those of the SEC, and *reserves* reported in compliance with NI 43-101 may not qualify as *reserves* under SEC standards. Under U.S. standards, mineralization may not be classified as a *reserve* unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made.

The SEC's disclosure standards normally do not recognize information concerning *measured mineral resources*, *indicated mineral resources* or *inferred mineral resources* or other descriptions of the amount of mineralization in mineral deposits that do not constitute *reserves* by U.S. standards, in documents filed with the SEC. In addition, resources that are classified as *inferred mineral resources* have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an *inferred mineral resource* will ever be upgraded to a higher category. Under Canadian rules, estimated *inferred mineral resources* may not generally form the basis of feasibility or pre-feasibility studies. Investors are cautioned not to assume that all or any part of an *inferred mineral resource* exists or is economically or legally mineable.

Disclosure of *contained ounces* in a resource is permitted disclosure under Canadian regulations, however, the SEC normally only permits issuers to report mineralization that does not constitute *reserves* by SEC standards as in-place tonnage and grade without reference to unit measures.

Accordingly, information concerning mineral deposits set forth herein may not be comparable with information presented by companies using only U.S. standards in their public disclosure.

#### **Description of Mineral Projects**

##### **SPRINGER MINE PROPERTY**

Our principal asset is the Springer mine property, a former tungsten producing operation located in Imlay, Nevada, wholly owned by us through a subsidiary, Springer Mining Company, a Nevada corporation. The Springer Mine Property represents a completed mine, mill, and production complex which was operated briefly by Utah International Inc. for the General Electric Company from 1980 to 1981. The Springer Mine was closed in 1982 due to low tungsten prices. The facilities have been held on care and maintenance since that time, however significant investments by us have been made to the facilities in recent years and operations at the mine and mill facility could be restarted relatively quickly.

At the time that we placed the facility on care and maintenance, work was nearly complete to make the primary milling and flotation circuits in the Springer mill fully operational. Work remaining to make the tungsten processing facility fully operational includes the addition of a gravity circuit, addition and installation of a molybdenum flotation/recovery circuit, certain modifications to the existing flotation circuits, and completion of the installation of new automatic controls throughout the mill. Metallurgical testing by EMC Metals has shown that the process design is capable of producing a saleable scheelite concentrate product containing in excess of 65% tungsten oxide (WO<sub>3</sub>). The test work utilizes a combination of gravity separation and flotation. Additional work has been conducted to expand the mill capacity from the original design of 1,000tpd up to 1,200tpd. This work is approximately 85% complete.





We are currently evaluating alternatives for the sale of the Springer Mine assets in light of the recent improvement in the market for tungsten.

***Property Description and Location***

The Springer Mine Property is located approximately 25 miles southwest of the city of Winnemucca, in Pershing County, Nevada, and approximately 125 miles northeast of Reno, Nevada (see Figure 1). The mine has year around access by a gravel road in fair condition. The mine site is located at geographic coordinate s 40°46 56 N. latitude and 118°07 58 W longitude, (UTM coordinates are 4,515,212N and 404,438W, Zone 11, WGS84).

Figure 1: Location of Springer Property, Copper King Property, and Carlin Vanadium Property

***Ownership***

The Springer Facility is 100% owned by our wholly owned subsidiary, Springer Mining Company. It is comprised of 340 Lode mineral claims totalling approximately 7,024 acres, 25 placer claims totalling approximately 500 acres and fee lands totalling approximately 3,756 acres. The total area of the Springer Facility is approximately 11,280 acres, including all mineral claims and fee lands. The mineral resources described in this report are located entirely on private fee lands.

### ***Geology and Mineralization***

The Springer Facility is located on the eastern flank of the Eugene Mountains, a block-faulted horst of the Basin and Range tectonic province. The area is underlain by Mesozoic, metasedimentary rocks intruded by Cretaceous granitic rocks, which were later overlain by Tertiary Volcanic rocks. The meta-sedimentary rocks are composed of pelitic Sediments with thin beds of micritic limestone. These limestone beds host scheelite-bearing, contact metasomatic skarn deposits. These are arranged in two general horizons each with several individual beds. The horizons Strike north-northeast and Dip steeply to the northwest and to the southeast. Scheelite is the only tungsten mineral identified in the skarns. It occurs in early veins and as finely disseminated grains along localized marble fronts. It is also associated with later alteration of garnet and pyroxene, where it occurs as coarse-grained aggregates and fine to medium-grained, euhedral dipyramidal crystals.

### ***Historical Work***

There were three main phases of exploration work conducted on the Springer Facility by three different owner/operators. These exploration periods include:

- I. Exploration drilling and underground sampling by Nevada-Massachusetts Corporation (NMC) between 1925 and 1958;
- II. Exploration drilling and underground channel sampling completed by General Electric (GE) and Utah International Inc (UII between during 1973 and 1982); and
- III. Diamond drilling and reverse circulation drilling completed by EMC Metals in 2007 and 2008.

The NMC exploration work focused mainly within the mineralized beds located at the Stank and Springer-Humboldt Mines. No specific NMC sample or Assay data of from any of the drifting, mining or drilling is available for any of these areas.

The exploration drilling and sampling completed by GE and UII focused primarily on the Sutton I and Sutton II areas of the property. The vast majority of the modern exploration data was collected during this phase of work. GE and UII compiled most of the older NMC data, rehabilitated the historic underground workings, drilled 119 diamond Core holes from surface and underground, extended the underground workings and analyzed approximately 3,200 samples.

We completed the most recent exploration work in 2007 and 2008. During this time, seven diamond Core and 251 reverse circulation (RC) drill holes were completed in three main areas. We drilled 81 holes in the George beds, 79 holes in the Mill Beds and 51 holes in the Sutton I Beds. All of this drilling focused on near surface Mineralization in order to evaluate the open pit potential. A few diamond Core holes were located in the Sutton II areas for confirmation and expansion of the historical resources.

Prior to the decline of tungsten prices in 2008, the Springer mill had been the focus of an aggressive rehabilitation and expansion program by us over two years. Work is nearly complete to make the primary milling and flotation circuits fully operational. The necessary equipment and supplies to complete these circuits are on site. Work remaining to make the tungsten processing facility fully operational includes the addition of a gravity circuit, addition and installation of a molybdenum flotation/recovery circuit, certain modifications to the existing flotation circuits, and completion of the installation of new automatic controls throughout the mill.

Metallurgical testing by EMC Metals has shown that the process design is capable of producing a saleable scheelite concentrate product containing in excess of 65% tungsten oxide (WO<sub>3</sub>). The test work utilizes a combination of gravity separation and flotation.

Additional work has been conducted to expand the mill capacity from the original design of 1,000tpd up to 1,200tpd. This work is approximately 85% complete.

### **Mineral Resources**

A resource estimate on the property was prepared in 2009 and contained in a report titled, *NI 43-101 Technical Report on Resources EMC Metals Corp., Springer Facility Sutton Beds, Nevada, USA*. The report was completed by Bart Stryhas (Ph.D., C.P.G.) of SRK Consulting Engineers and Scientists. Results of the resource estimate are shown in Table 1 below.

**Table 1**

| <b>Springer Project NI 43-101 Resource Estimation</b> |                                 |                          |                               |  |
|---|---------------------------------|--------------------------|-------------------------------|--|
| <b>Resource Category</b>                              | <b>Cut-off WO<sub>3</sub> %</b> | <b>Total Tonnes (kt)</b> | <b>Grade WO<sub>3</sub> %</b> | <b>Contained WO<sub>3</sub> (Mlbs)</b> |
| Indicated   | 0.30                            | 274                      | 0.619                         | 3.392                                  |
| Inferred  | 0.30                            | 1,097                    | 0.562                         | 12.330                                 |

*The resource calculation is based on drill hole database consisting of 377 drill holes for a total of 144,171 meters of drilling. The maximum depth of 255 meters and an average depth of 124 meters and approximately 50% of the drill holes were used in the resource estimation. The grade estimate was completed using the inverse distance squared weighting algorithm. A specific gravity of 3.02g/cm<sup>3</sup> was used for all mineralized material for this resource estimation.*

The resource estimation is based on a generalized geologic model consisting of just one mineralized rock type, namely the tungsten skarn, which occurs in four distinct beds. These have a sheet-like geometry, which ranges from 1.0 to 10.0 feet thick with an approximate average of about 3.0 feet. They Strike north to northeast and Dip nearly vertical.

The grade estimate was completed using the inverse distance squared weighting algorithm, conducted in two passes. The first required a minimum of three and maximum of 12 samples, which were less than 50 feet from the block centroids. The second pass only considered unestimated blocks and required a minimum of one and maximum of 12 composites, which were less than 350 feet away from the block centroids. The raw drill hole Assay data was composited into lengths equal to the original sample and capped at 4% WO<sub>3</sub>. During the estimation process, the composites were length-weighted to accommodate for differing sample lengths.

Three techniques were used to evaluate the validity of the block model. First, the interpolated block Grades were visually checked on sections for comparison to the composite assay grades. Second, statistical comparisons were made between the interpolated block grades and composite data within each bed. Third, swath plots were generated to compare model blocks and composite grades at regular section spacing through the deposit.

The resource classification was based on solid shapes constructed around the parts of the beds where most drill holes are spaced approximately 100 feet or less apart and where abundant channel samples were taken. All blocks located within these solids were classified as indicated resource. All blocks located outside of these areas, about the periphery of the drilling were classified as inferred resource.



The mineral resource statement of the Springer Project- Sutton I and II areas is presented in Table 1. The mineral resource estimates prepared in accordance with NI 43-101, which incorporate the Canadian Institute of Mining, Metallurgy and Petroleum Best Practices and Reporting Guidelines classified indicated mineral resource of 274kt of material grading 0.62% WO<sub>3</sub> and an additional inferred mineral resource of 1.1 Metric tons of material grading 0.56% WO<sub>3</sub> both using a 0.30% WO<sub>3</sub> cut-off. The quality of the exploration data is very good and the mineral resource was classified mainly according to the general sample spacing. The 0.30% WO<sub>3</sub> cut-off Grade was chosen for resource reporting based on an approximated mining cost of \$40/t, processing cost of \$17/ton, administration cost of \$13/ton, mill recovery of 82% and a WO<sub>3</sub> price of \$11.50 per pound. The results reported in the resource statement have been rounded to reflect the approximation of Grade and quantity, which can be achieved at this level of resource estimation.

### **NYNGAN SCANDIUM PROJECT**

The primary focus of our business operations is conducting additional exploration and technical work and analyses on the Nyngan scandium resource as required to complete a feasibility study in accordance with the terms of our earn-in agreement with Jervois Mining Limited (see above under Item 1. BUSINESS Recent History - Exploration Joint Venture with Jervois Mining Limited, for additional information). Following is a technical summary of the Nyngan Project.

#### ***Property Description and Location***

The Nyngan scandium resource, which is sometimes also referred to as the Nyngan Gilgai scandium deposit, in reference to the Gilgai geologic formation in the region, lies 20 kilometers almost due west of the town of Nyngan, approximately 450 kilometers northwest of Sydney, New South Wales, Australia. The deposit occurs 5 kilometers south of Miandetta, off the Barrier Highway that connects the town of Nyngan to the town of Cobar. The location of the property is provided in Figure 2 below. The location of the exploration licenses that we may earn an interest in are provided in Figure 3 below.

Figure 2: Location of Nyngan Project

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Figure 3: Location of the Exploration Licenses

***Ownership***

The Nyngan scandium mineral resource is 100% under license by Jervois Mining Limited. The land on which the resource is located was purchased by Jervois Mining Limited for the development of this resource. The mineral resource described in this report is entirely on land owned by Jervois Mining Limited and under a current exploration license held by Jervois Mining Limited. Access to the mine area through private land is under negotiation with relevant land owners.

***Geology and Mineralization***

The area is dominated by Cainozoic alluvial plains derived from the Darling River Basin with minor colluvium and Outcrop. The region is situated on the shallow southern margin of the Surat Basin, known as the Coonamble Embayment. There is evidence of varying degrees of lateritisation in the area. The Nyngan complex is covered by 8 to 50 meters of alluvial material.

The Nyngan Intrusive complex, which is believed to be the source of the scandium, nickel, cobalt and PGMs in the regolith, is an Alaskan-type ultramafic complex made up of a range of rock types including hornblende monzonite, hornblendite, pyroxenite, olivine pyroxenite to dunite-peridotites, and is believed to be of Ordovician age. The Intrusives are included within the Fifield Platinum Province .





**Historical Work**

In the late 1980's Lachlan Resources N.L., as manager for Platinum Search NL, explored for platinum group elements ( PGE ) Mineralization in the area using rotary air blast ( RAB ) and Diamond drilling. Airborne and ground magnetic surveys were used to locate and delineate an Intrusive ultramafic complex considered prospective for PGE Mineralization. In 2001 two further traverses of reverse circulation ( RC ) drilling were undertaken. Jervois Mining Limited continued drilling in the area in January and February of 2006, completing an aircore drilling program of 2,638 meters and 69 holes on the property (EL 6009). The drilling targeted a laterite that had previously been explored by Platsearch. Since the 2006 program a further 9 holes, for an additional 316 meters of drilling, were completed. Total drilling by Jervois Mining Limited was 78 holes for 2,954 meters.

**Mineral Resource**

In 2010 a NI 43-101 technical report which outlined a resources estimate on the Nyngan Scandium Project was completed. The report, titled, *NI 43-101 Technical Report on the Nyngan Gilgai Scandium Project, Jervois Mining Limited, Nyngan, New South Wales, Australia*, was prepared by Sanja Van Huet (PhD, Msc), Duncan C. Pursell (BSc) and Max Rangott (BSc). The resource estimate is shown in Table 2 below.

**Table 2**

| <b>Nyngan Gilgai Scandium Project Resource Estimation</b> |                         |                          |                       |                         |
|---|-------------------------|--------------------------|-----------------------|-------------------------|
| <b>Resource Category</b>                                  | <b>Cut off Sc (ppm)</b> | <b>Total Tonnes (kt)</b> | <b>Grade Sc (ppm)</b> | <b>Overburden Ratio</b> |
| Measured  | 100                     | 2,718                    | 274                   | 0.81:1                  |
| Indicated   | 100                     | 9,294                    | 258                   | 1.40:1                  |
| Total   | 100                     | 12,012                   | 261                   | 1.10:1                  |

Jervois drilling program in 2006 involved 50 meter spaced RC percussion and aircore drill holes (25 meter sphere of influence for each hole) chosen over shallow overburden and visual quality of the limonite horizon. The resources have been calculated by plan polygonal methods for each of the four resource lithological categories hematite, limonite, saprolite and bedrock. The volume of each block is the polygonal area times drill thickness. A minimum of 2 meters thickness has been used. An arbitrary lower cut-off Grade of 100ppm Sc has been employed. The density calculations are based on the weight of the samples produced from the drill holes. The drillhole diameter in this program was 3½ inches (or 0.0889 meters). Thus the volume of 1 meter drilled is 0.006207167 cubic meters. This factor has been applied to each intersection within the resource calculations to obtain an in situ density for each lithology.

To obtain the rock densities an adjustment has been made by making a moisture content correction. The parent rocks are slightly different in density; the pyroxenite approximately 3.2 t/m<sup>3</sup> and the serpentinite approximately 2.2t/m<sup>3</sup>. The parent density figures may be ambiguous because the lateritisation weathering process is not the same for the two rock types. The density figures quoted are on the conservative side. Using the above parameters, the resource figures below have been calculated from the results of the recent drilling:

**2006 Drill Program**

Jervois drilling program in 2006 involved 50-meter spaced RC percussion and aircore drill holes (a 25-meter sphere of influence for each hole) chosen over shallow overburden and visual quality of the limonite horizon. The resources were calculated by plan polygonal methods for each of the four resource lithological categories hematite, limonite, saprolite and bedrock. The volume of each block is the polygonal area times drill thickness. A minimum of 2 meters

thickness was used. An arbitrary lower cutoff Grade of 100ppm Sc was employed. The density calculations are based on the weight of the samples produced from the drill holes. The drillhole diameter in this program was 3½ inches (or 0.0889 meters). Thus the volume of 1 meter drilled is 0.006207167 cubic meters. This factor was applied to each intersection within the resource calculations to obtain an in situ density for each lithology.

To obtain the rock densities an adjustment has been made by making a moisture content correction. The parent rocks are slightly different in density; the pyroxenite approximately 3.2 t/m<sup>3</sup> and the serpentinite approximately 2.2t/m<sup>3</sup>. The parent density figures may be ambiguous because the lateritisation weathering process is not the same for the two rock types. The density figures quoted are conservative. Using the above parameters, the resource figures below are calculated from the results of the drill programs:

### ***Current Program***

Together with Jervois, we have set the following targets for the Nyngan Scandium Project:

1. Completion of an independently prepared engineering feasibility study on or before the deadline date of February 2012, as specified in the Exploration Joint Venture Agreement. We have engaged SNC-Lavalin in Australia to prepare the feasibility study. .
2. Subject to financing and completion of the feasibility study, the design, engineering and construction of a 250 tonne per day commercial plant producing from 28 tonnes of scandium oxide per year at 99.9% purity, with a start-up in 2013.

Exploration activities on the Nyngan Project are essentially completed, and we are now focussing on developing a detailed mine and processing facility plan, including preparing an Environmental Impact Statement required for the granting of a mining permit. In addition we will focus on pre-feasibility study work on the project, in support of the feasibility study, as well as independent metallurgical test work to be conducted by research laboratories in the U.S. using mineralized material shipped from the Nyngan project.

### **CARLIN VANADIUM PROPERTY**

We have a 100% interest in 72 unpatented mineral claims comprising the Carlin Vanadium Property, in Elko County, Nevada. The property was explored by Union Carbide in the 1960 s. We have not performed any exploration on this property, however in 2010 we commissioned SRK Consulting of Lakewood, Colorado to prepare a technical report in the form required under NI 43-101.

### ***Property Description and Location***

The Carlin Vanadium Property consists of 72 unpatented mining claims covering 1,140 acres. The property was explored and drilled by Union Carbide Corporation in the late 1960 s resulting in a defined vanadium resource. The claim group is located in North-Central Nevada in Elko County, 7 air miles south of Carlin. The vanadium resource is centered about UTM Zone 11N geographical coordinates 574,328E, 4,495,637N (Lat 40°36' 29" N, Long 116°07' 17" W). Carlin, with a population of 2,500 is the largest town in the area. See figure 1 above for a location map of the property.

### ***Geology and Mineralization***

The Carlin Vanadium Property is located on the western flank of the Piñon Range, a block faulted horst of the basin and range tectonic province. The local lithologies are predominantly Paleozoic age, western assemblage, siliceous rocks transported above the Roberts Mountain Thrust. These are overlain by Tertiary age Rhyolite flows and Pliocene lake Sediments. The mineralized zones are certain stratigraphic sections of the Woodruff Formation hosting elevated concentrations of vanadium. There do not appear to be any physical markers in the lithology which indicate areas of Mineralization. All the mineralized zones are defined by chemical analysis. The Mineralization is stratigraphically controlled and appears to follow the Strike and Dip of the host lithology. Drilling to date has defined a zone of Mineralization striking north-south over 6,100 feet of length and dipping 5°- 30° west averaging 2,500 feet of down Dip extent.



### ***Historical Work***

All of the exploration and development on the property was completed by previous owners. The Carlin Vanadium Deposit was discovered in the 1960s by Union Carbide Corporation when significantly anomalous vanadium was found in samples collected by Union Carbide geologists. During 1967 and 1968 Union Carbide conducted exploration work including geological mapping, approximately 15,000 feet of trenching and 30,500 feet of drilling in 112 holes, outlining a significant 300 by 1000 meter zone of vanadium Mineralization within the current claim boundary. In 1968 Union Carbide used this work to complete a historical resource estimation of 19.69M tons @ 0.83% V<sub>2</sub>O<sub>5</sub>. Historical exploration was restricted to within 150m from surface with an average drill hole depth of 75 meters. This historical resource has not been verified by us or by a Qualified Person, and accordingly we cannot confirm its reliability for the purpose of current resource classification methods referred to in NI 43-101. As a result, while we consider this historical information to be relevant, the information should not be relied upon and we are not treating this information as a current mineral resource.

Union Carbide conducted extensive metallurgical testing in the 1960 s and at the time could not produce an economical process for extracting the vanadium. Developments in heap leaching technologies in the 1970 s have shown economic recoveries of vanadium from geologically similar projects such as Gibellini Vanadium Project (Rocky Mountain Resources). We are currently investigating a number of new processes to economically extract the vanadium from the Carlin deposit.

The Carlin Vanadium Property also covers an interesting gold occurrence and in 1998, Cambior Inc. and Sante Fe Pacific Mining Inc. used rock chip sampling to outline an approximate 550 feet northeast trending (>100 ppb) gold anomaly within the Devonian Woodruff Formation and drilled 20 holes totalling 2700 feet in length to test the anomalous zone. The best results were obtained in drill hole CBK-2 which intersected 0.01 oz. per ton gold from 5 to 70 feet within the Woodruff Formation immediately below the unconformity. This gold occurrence warrants further investigation to determine whether there is a possibility of a Carlin-type gold system on the property. We have not verified these historical results, and while we believe them to be relevant, we caution that this historical drilling information should not be relied upon.

### ***Resource Estimation***

In 2010, we commissioned SRK Consulting to prepare an NI 43-101 technical report and to produce a current resource estimation for the Carlin Vanadium Project. The report, titled, *NI 43-101 Technical Report on Resources EMC Metals Corp. Carlin Vanadium Project, Carlin Nevada* , was prepared by Bart Stryha, PhD of SRK Consulting, a Qualified Person as defined by NI 43-101.

The resource estimation is supported by information from the 152 rotary drill-holes totalling 36,525 feet. The drillhole database was compiled by us and verified by SRK Consulting. The resource estimation is based on a generalized geologic model and confined within a V<sub>2</sub>O<sub>5</sub> Grade shell. Each model block was assigned an average density based on the lithologies present. Mineralization is interpreted to follow along the plane of bedding with a general orientation striking N-S dipping 5° to 25° west. Drill-hole samples were composited into 25 foot bench lengths without breaks at geologic contacts. The raw V<sub>2</sub>O<sub>5</sub> assays were capped at 2.2% prior to compositing. The model blocks are 50ft x 50ft x 25ft in the x,y,z directions, respectively. V<sub>2</sub>O<sub>5</sub> Grades were estimated using an Inverse Weighting to the second power. A minimum of 3 and maximum of 12 composites were required for the block Grade estimations. The results of the resource estimation provided a CIM classified Inferred Mineral Resource as shown in Table 3 below. The quality of the historical data is good and the mineral resource was classified as inferred mainly due to the fact that the rotary drilling has not been verified by modern program.

Table 3

| <b>Carlin Vanadium Project Resource Estimation</b> |                            |                          |                          |                              |
|--|----------------------------|--------------------------|--------------------------|------------------------------|
| <b>Resource Category</b>                           | <b>Cut off V2O5% (ppm)</b> | <b>Total Tonnes (kt)</b> | <b>Grade V2O5% (ppm)</b> | <b>Contained V2O5 (Mlbs)</b> |
| Inferred   | 0.3                        | 25,400                   | 0.515                    | 289                          |

The 0.3% V2O5 cut-off-grade was chosen for resource reporting based on the reasonable potential for economic extraction under a conceptual open pit mining and milling scenario. The cut-off-grade was calculated using \$2.30/ton mining cost, \$35/ton milling cost, \$0.50/ton admin cost, 65% recovery, 95% selling pay-for, 1% freight charge, 0% royalty and a \$10.46/lb V2O5 value. The V2O5 price is based on a five year trailing average value. This analysis resulted in a break-even cut-off-grade of 0.30% . The results reported in the resource statement are rounded to reflect the approximation of Grade and quantity, which can be achieved at this level of resource estimation.

### **COPPERKINGTUNGSTENPROPERTY**

#### ***Property Description and Location***

We have a 100% interest in the Copper King Property which is located in Pershing County, Nevada. The Copper King Project consists of 7 unpatented claims and 9 patented claims covering 250ha is located on the west flank of the Trinity Range in Pershing Co., Nevada (see Figure 1 above).

#### ***Geology and Mineralization***

The Copper King tungsten Mineralization is hosted within 5 separate, parallel Triassic-Jurassic Sedimentary horizons including argillite, quartzite, and marble, in contact with a Cretaceous granodiorite Intrusion. Limestone beds within the sedimentary package have been silicified forming steeply dipping, epidote-garnet skarns.

#### ***Historical Work***

The Copper King Property was originally staked in the early 1900s as a copper prospect and very little is known about the early historical work until scheelite was discovered on the property in 1949. The property was mined in 1952 by Cordero Mining Company who removed 750 tons of ore and again in 1956 by Wallace and Durkin, who removed 193 tons of Ore from one of two vertical shafts.

In 1969, the property was optioned to Nevada Tungsten and Copper Inc. who completed 2,184 feet of Diamond drilling in 4 holes which ranged in depth from 279 feet to 935 feet.

In 1976, General Electric Co. acquired the property and carried out extensive mapping, sampling, and drilling.

#### ***Exploration***

The Copper King project is an early stage exploration project and we are currently evaluating the property for future exploration potential.

**FOSTUNG TUNGSTEN PROPERTY**

Pursuant to the terms of a purchase and sale agreement dated June 26, 2009, as amended on July 22, 2009 and September 14, 2009, between us and Breakwater Resources Ltd., in October of 2009, we issued 500,000 of our common shares to Breakwater as consideration for a 100% interest in the Fostung property located in Ontario, subject to a 1% Net Smelter Returns Royalty. The property was placed on care and maintenance in 2008.

In May of 2011, we completed the sale of all of our interest in the Fostung property to a wholly owned subsidiary of Janus Resources, Inc., a Nevada company, for CAD\$500,000.

**ITEM 4. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The table below presents, as of September 1, 2011, information regarding the beneficial ownership of our common shares with respect to each of our executive officers, each of our directors, each person known by us to own beneficially more than 5% of the common shares, and all of our directors and executive officers as a group. Beneficial ownership is determined under the rules of the Securities and Exchange Commission and generally includes voting or investment power over securities. Each individual or entity named has sole investment and voting power with respect to the common shares indicated as beneficially owned by them, subject to community property laws, where applicable, except where otherwise noted.

Common Shares subject to options or warrants that are currently exercisable or exercisable within 60 days from September 1, 2011 are considered outstanding and beneficially owned by the person holding the options or warrants for the purpose of computing the percentage ownership of that person but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

| <b>Title of Class</b> | <b>Name and Address of Beneficial Owner</b>                               | <b>Amount and Nature of Beneficial Ownership</b> | <b>Percent of Class</b> |
|-----------------------|---|--|-------------------------|
| Common Shares         | George Putnam<br>#502 - 1430 Greg Street<br>Sparks, NV 89431              | 2,550,000 <sup>(1)</sup>                         | 1.68                    |
| Common Shares         | William Harris<br>651 Boardman Street<br>Sheffield, MA 01257              | 1,230,000 <sup>(2)</sup>                         | 0.81                    |
| Common Shares         | Daniel Wolfus<br>#1604 – 10350 Wilshire Blvd<br>Los Angeles, CA 90024     | 1,300,000 <sup>(3)</sup>                         | 0.86                    |
| Common Shares         | Willem Duyvesteyn <sup>(4)</sup><br>2200 Del Monte Lane<br>Reno, NV 89511 | 19,837,386 <sup>(5)</sup>                        | 13.12                   |
| Common Shares         | Barry Davies<br>#502 - 1430 Greg Street<br>Sparks, NV 89431               | 1,745,000 <sup>(6)</sup>                         | 1.15                    |
| Common Shares         | John Thompson<br>30 Kincardine Drive<br>Benowa QLD, 4217                  | 790,000 <sup>(7)</sup>                           | 0.52                    |
|                       |   | Nil  | 0                       |



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|               |   |                            |       |
|---------------|---|----------------------------|-------|
| Common Shares | Edward Dickinson<br>#2523 - 7000 Mae<br>Anne Avenue<br>Reno, NV 89523                       |                            |       |
|               | <b>All Officers and<br/>Directors as a<br/>Group</b>  | 27,452,386                 | 18.14 |
| Common Shares | William Lupien <sup>(8)</sup> <sup>(9)</sup><br>#502 - 1430 Greg Street<br>Sparks, NV 89431 | 25,077,833 <sup>(10)</sup> | 16.48 |
| Common Shares | EMC Metals Corp.<br>888 Dunsmuir Street, 11th<br>Floor<br>Vancouver, BC V6C 3K4             | 2,583,333 <sup>(11)</sup>  | 1.70  |

- (1) Includes options to purchase 1,500,000 common shares, and warrants to purchase 350,000 common shares.
- (2) Includes options purchase 1,200,000 common shares.
- (3) Includes options to purchase 900,000 common shares.
- (4) The address of such person is Reno, Nevada, USA.
- (5) Includes options to purchase 800,000 common shares.
- (6) Includes options to purchase 500,000 common shares, and warrants to purchase 375,000 common shares.
- (7) Includes options to purchase 500,000 common shares, and warrants to purchase 230,000 common shares.
- (8) The address of such person is Coeur d Alene, Idaho, USA.
- (9) A total of 23,252,833 common shares are held in the name of Kudu Partners, L.P.
- (10) Includes options to purchase 325,000 common shares, and warrants to purchase 1,500,000 common shares.
- (11) Includes warrants to purchase 1,550,000 common shares.

**ITEM 5. DIRECTORS AND EXECUTIVE OFFICERS**

The following table provides certain information regarding our directors, executive officers and key personnel.

The term of each of our current directors will expire at the next annual general meeting unless his office is earlier vacated in accordance with our Articles or he becomes disqualified to act as a director.

| <b>Name, Age and Position</b>  | <b>Principal Occupation for the Past Five Years</b>  | <b>Director/Officer Since</b> |
|--|--|-------------------------------|
| George Putnam<br>age: 57<br><i>President, Chief Executive Officer and Director</i> | Our President and CEO since May 2010; President of G.F. Putnam Consulting, a financial and marketing advisory company, from November 2009 until April 2010; CFO of QGX Ltd. from August 2006 to October 2009; Senior Finance Director of Kaiser Permanente from May 2004 to July 2006.   | May 3, 2010                   |
| Willem P.C. Duyvesteyn<br>age: 66<br><i>Chief Technology Officer and Director</i>  | Our Chief Technology Officer since December 2009; President and founder, The Technology Store, Inc., from August 2000 to December 2009; President, Technology and Resource Development Inc. since December 2009.   | December 16, 2009             |
| William B. Harris<br>age: 64<br><i>Director</i>                                    | Partner of Solo Management Group, LLC, an investment management and financial consulting company since 1998.   | June 15, 2007                 |
| Daniel Wolfus<br>age: 65<br><i>Director</i>  | Chairman and CEO, Midway Gold Corp. since December 2009; Financial consultant to Midway Gold Corp. from August 2009 to December 2009; Director, MD Cowan and Co., a manufacturer of oil drilling equipment, Director of Midway Gold Corp., Evolving Gold Corp., and Melkior Resources Inc. from May 2008 to August 2009; President, Mandalay Publications Inc. from 1997 until May 2008, a magazine publisher. | August 21, 2009               |
| Barry Davies<br>age: 61<br><i>Director</i>   | President, Rudgear Holdings Ltd., a private investment company, since March 2006; prior thereto, President of Rudgear Inc., a private investment company.  | January 20, 2010              |



| Name, Age and Position   | Principal Occupation for the Past Five Years   | Director/ Officer Since |
|--|--|-------------------------|
| John Thompson<br>age: 63<br><i>Vice President of Project Development</i> | Our Vice President of project development since March 2011; Consultant with John Thompson & Associates since August 2009; retired from February 2009 to August 2009; Vice President of project development for QGX Ltd. from November 2006 to February 2009.                 | March 8, 2011           |
| Edward Dickinson<br>age: 65<br><i>Chief Financial Officer</i>            | Senior Director of Program & Contract Management of Altair Nanotechnologies Inc. from April 2008 to August 2011, Chief Financial Officer of Altair Nanotechnologies Inc. from March 2000 to April 2008, Secretary Altair Nanotechnologies Inc. from June 2001 to April 2008. | September 1, 2011       |

### Biographical Information: Directors and Officers

The following provides additional biographical information on our directors and officers.

**George Putnam, President, CEO and Director.** Mr. Putnam has 20 years employment experience with BHP (now BHP-Billiton) and GE/Utah International. While at BHP-Billiton, he held division CFO roles in the petroleum refining business, and in BHP-Billiton Manganese, a mining, alloy smelting and refining business located in Australia. His previous experience also includes acquisition and divestiture work for both BHP-Billiton and other clients, associated bank financings, and the negotiation and management of strategic alliances involving long-term product sales contracts. From 2006 to 2008, Mr. Putnam served as CFO for QGX Ltd., a Toronto Stock Exchange listed mineral exploration company.

Mr. Putnam has an Economics degree from Gettysburg College and a Masters in Business Administration from Duke University.

For the following reasons, the Board concluded that Mr. Putnam should serve as a director of EMC Metals Corp. in light of its business and structure, at the time it files this Registration Statement. Mr. Putnam's extensive experience in the mineral exploration industry brings essential management skills to the Board.

**Willem P.C. Duyvesteyn, Chief Technical Officer and Director.** Mr. Duyvesteyn has over 40 years experience in the mining, mineral and energy industries. He is the founder and former CEO of TTS, a company involved in the development and commercialization of various mineral and energy related processes and projects. TTS was acquired by us in 2009. Prior to forming TTS, Mr. Duyvesteyn was Vice President and General Manager Minerals Technology for BHP (now BHP-Billiton) for more than 10 years. Prior to BHP, he was associated with AMAX Inc., previously a NYSE listed corporation, as director of Laterite Nickel projects where he led various multi-million dollar development programs for nickel technology. While employed with Anglo American he was a member of the team that developed the large scale copper solvent extraction technology that is now universally employed by copper miners. Mr. Duyvesteyn is a member of numerous technical organizations in the mining, processing and chemical fields: AIME, CIM, AIChE, ACS. His technical expertise covers a very large spectrum of elements, metals and materials: from aluminum to zinc and from coal to diamonds.

Mr. Duyvesteyn was a former Dean of the Delft (the Netherlands) School of Mines. He has been granted over 40 US patents and is filing applications for a further 35 patents. He is the author of numerous technical papers and in 1999 was awarded the Goldfields Medal of the British Institution for Mining and Metallurgy for best technical paper.

For the following reasons, the Board concluded that Mr. Duyvesteyn should serve as a director of EMC Metals Corp. in light of its business and structure, at the time it files this Registration Statement. Mr. Duyvesteyn's extensive experience allows him to bring technical expertise in regard to mine development and operations, as well as metallurgical expertise, to the Board. In addition Mr. Duyvesteyn owns a significant percentage of our common stock.

**William Harris, Chairman of the Board.** Mr. Harris is a partner in Solo Management Group, LLC, an investment and management consulting partnership. He was previously a board member for Energy Metals Corporation, Chairman and Executive Committee member of the American Fiber Manufacturers Association, and President and CEO of Hoechst Fibers Worldwide, the global acetate and polyester business of Hoechst AG. At Hoechst Fibers Worldwide, Mr. Harris managed the business' \$5 billion operation, comprised of 21,000 employees and production locations in 14 different countries. Other positions within Hoechst and its subsidiaries included Chairman of the Board (Presidente del Consejo) of Celanese Mexicana SA, a publicly-traded company in Mexico; Vice President, Finance and Executive Vice President and director of Celanese Canada Inc., a publicly-traded company in Canada, and Vice President and Treasurer and Chairman of the Audit Committee of Hoechst Celanese Corporation. Mr. Harris is currently a member of the board of directors of Gold One Intl. Ltd., Golden Predator Corp., and Tigris Uranium Corp. Mr. Harris is a graduate of Harvard College, B.A. in English, and Columbia University Graduate School of Business, M.B.A. in finance. He is a Trustee of the Williamstown (MA) Theatre Festival.

For the following reasons, the Board concluded that Mr. Harris should serve as a director of EMC Metals Corp. in light of its business and structure, at the time it files this Registration Statement. Mr. Harris' management experience allows him to bring a unique skill to the Board.

**Daniel Wolfus, Director.** Mr. Wolfus is currently Chairman and CEO of Midway Gold Corporation, a mineral exploration company listed on the TSX Venture Exchange. He has over 28 years of investment banking experience, firstly with E.F. Hutton & Co., where Mr. Wolfus became a partner and Senior Vice President in charge of the West Coast Corporate Finance Department, followed by his tenure as Chairman, CEO and chief organizer of Hancock Savings Bank in Los Angeles. He is also currently a director of MD Cowan and Co., a manufacturer of oil drilling equipment, Mr. Wolfus earned a MBA in Finance and a BA-Economics at the University California, Los Angeles. Mr. Wolfus has served in various charitable and non-profit organizations in the United States since November 21, 2008.

For the following reasons, the Board concluded that Mr. Harris should serve as a director of EMC Metals Corp. in light of its business and structure, at the time it files this Registration Statement. Mr. Wolfus' experience in the finance and banking industry provides important financial management and financing insights to the Board.

**Barry Davies, Director.** Mr. Davies is the President of Rudgear Holdings Ltd., an Asia based private investment company, and also serves as a director of several public and private companies with exploration, mining and investment activities in Canada, Latin America and Southeast Asia. He has been a director of Grande Cache Coal Corporation, a Canadian metallurgical coal mining company, since July 2000. He is a mining engineering graduate from the Camborne School of Mines in Cornwall, United Kingdom, with more than 35 years experience in mineral exploration, mine development, operations and corporate management. During more than 20 years with BHP Group he held senior management positions with responsibility for exploration and mine development projects in Australia, Southeast Asia and South Africa leading to his appointment to the position of Vice President Strategic Planning and Development for BHP Minerals in Australia

For the following reasons, the Board concluded that Mr. Harris should serve as a director of EMC Metals Corp. in light of its business and structure, at the time it files this Registration Statement. Mr. Davies' extensive experience on the board of several other mining companies enable him to provide important operating insights to the Board.

**John Thompson, Vice President of Project Development.** Mr. Thompson's mining career spans 41 years in senior management roles with Utah Development Company, BHP (now BHP Billiton), Newcrest Mining, and QGX, managing and developing mineral projects in Australia, New Zealand, Mongolia and the United States. Mr. Thompson was responsible for the overall development of Newcrest Mining's Cadia Hill mine, in NSW, which included reserve definition, management of engineering teams that designed both the mine and processing plant facilities, the final feasibility study, and the environmental impact statement (EIS) on the project. More recently, as VP Project Development for QGX, Mr. Thompson delivered the Preliminary Assessment Report, Pre-Feasibility Study, and EIS on the Baruun Naran coking/thermal coal project in the South Gobi, Mongolia. He has held numerous other leadership roles in the mining industry, including four Mine/General Manger roles in coking coal, gold, and titanium/iron sands operations and a General Manager position at Newcrest overseeing 5 operating gold businesses in Australia.

Mr. Thompson has a BS degree in Mining and Petroleum Engineering from the University of Queensland, and is a Fellow of the Australian Institute of Mining and Metallurgy.

**Edward Dickinson, Chief Financial Officer.** Mr. Dickinson has over 24 years experience in the energy business. From August 1996 to August 2011, Mr. Dickinson held senior management positions at Altair Nanotechnologies Inc., including Chief Financial Officer, Director of Finance, Secretary, and Senior Director - Program & Contract Management; and from May 2002 to May 2004 Mr. Dickinson was a Director of Altair Nanotechnologies Inc. From 1994 to 1996, Mr. Dickinson was employed by the Southern California Edison Company as a negotiator of non-utility power generation contracts. Mr. Dickinson was Vice President and Director of Geoelectric Power Company during 1993 and 1994; and from 1987 through 1992 was the Director of Finance and Administration for OESI Power Corporation. Prior to 1987, Mr. Dickinson served in various financial and program management positions at the U.S. Department of Energy.

Mr. Dickinson, who is a certified public accountant, obtained a Masters degree in Accounting from California State University, Northridge in 1978.

### **Family Relationships**

There are no family relationships among any of the above directors.

### **Other U.S. Directorships**

None of our directors are also directors of issuers with a class of securities registered under Section 12 of the Exchange Act (or which otherwise are required to file periodic reports under the Exchange Act), other than Daniel Wolfus who is a director and CEO of Midway Gold Corp.

### **Involvement in Certain Legal Proceedings**

During the past ten years, no present or former director, executive officer or person nominated to become a director or an executive officer of ours:

- (1) was a general partner or executive officer of any business against which any bankruptcy petition was filed, either at the time of the bankruptcy or two years prior to that time;
- (2) was convicted in a criminal proceeding or named subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- (3) was subject to any order, judgment or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, permanently or temporarily enjoining, barring, suspending or otherwise limiting his involvement in any type of business, securities or banking activities; or
- (4) was found by a court of competent jurisdiction (in a civil action), the SEC or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended or vacated.

## **ITEM 6. EXECUTIVE COMPENSATION**

### **Summary Compensation Table**

The following table sets forth the cash and other compensation paid by us to our CEO and CFO during the fiscal years ended December 31, 2009 and 2010.





| Name and Principal Position                         | Year | Salary                   | Bonus | Stock Awards | Option Awards <sup>(2)</sup> | All Other Compensation | Total     |
|---|------|--------------------------|-------|--------------|------------------------------|------------------------|-----------|
| George Putnam<br><i>President, CEO and Director</i> | 2010 | \$137,247 <sup>(1)</sup> | \$Nil | \$Nil        | \$187,004                    | \$Nil                  | \$324,251 |
|   | 2009 | \$Nil                    | \$Nil | \$Nil        | \$Nil                        | \$Nil                  | \$Nil     |
| Michael O Brien<br><i>Former CFO</i>                | 2010 | \$40,500                 | \$Nil | \$Nil        | \$46,162                     | \$Nil                  | \$86,662  |
|   | 2009 | \$Nil                    | \$Nil | \$Nil        | \$Nil                        | \$Nil                  | \$Nil     |

(1) Represents consulting fees under a management services contract.

(2) Calculated in accordance with ASC 718.

#### Outstanding Equity Awards at Fiscal Year End

The following table sets forth the unexercised options, shares that have not been vested, and equity incentive plan awards for each of our executive officers outstanding as of December 31, 2010.

| Option Awards   |   |  | Stock Awards   |                            |                        |  |  |   |  |
|-----------------|---|--|--|----------------------------|------------------------|--|--|---|--|
| Name            | Number of Securities Underlying Unexercised options | Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options | Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options | Option Exercise Price (\$) | Option Expiration Date | Number of Shares or Units that have not Vested | Market Value of Shares of Units Have not Vested (\$) | Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that have not Vested | Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or other Rights that have not Vested (\$) |
| George Putnam   | 2,500,000   | Nil  | Nil  | 0.10                       | November 5, 2015       | 1,500,000                                      | 420,000  | Nil   | Nil  |
| Michael O Brien | 250,000   | Nil  | Nil  | 0.25                       | January 4, 2015        | 187,500  | 24,375   | Nil   | Nil  |

#### Compensation of Directors

The following table sets forth the compensation paid by us to our directors during our fiscal year ended December 31,

2010.

| Name                   | Fees Earned or Paid in Cash (\$) | Stock Awards (\$) | Option Awards (\$) | Non-Equity Incentive Plan Compensation (\$) | Nonqualified Deferred Compensation Earnings (\$) | All Other Compensation (\$) | Total (\$) |
|------------------------|----------------------------------|-------------------|--------------------|---|--|-----------------------------|------------|
| William B. Harris      | Nil                              | Nil               | 69,036             | Nil   | Nil  | Nil                         | 69,036     |
| Daniel Wolfus          | Nil                              | Nil               | 69,638             | Nil   | Nil  | Nil                         | 69,638     |
| Barry Davies           | Nil                              | Nil               | 37,389             | Nil   | Nil  | Nil                         | 37,389     |
| Willem P.C. Duyvesteyn | Nil                              | Nil               | 55,817             | Nil   | Nil  | Nil                         | 55,817     |

### Employment Agreements

We entered into a letter agreement with George Putnam on May 1, 2010, pursuant to which Mr. Putnam agreed to act as our President and CEO. According to the terms of the letter agreement Mr. Putnam will receive a base salary of \$200,000 per year and 2,000,000 stock options of which 25% vested on November 5, 2010, and the remainder is subject to vest in three equal instalments every six months. The Compensation Committee has discretion to award an annual bonus and will review Mr. Putnam's base salary on an annual basis. The agreement provides for six months salary as severance pay or 36 months salary as severance pay following of a change of control transaction.

### Compensation Committee

Our Compensation Committee is comprised of three directors, William Harris, Barry Davies and Daniel Wolfus. The function of our Compensation Committee is to review, on an annual basis, the compensation paid to our executive officers and to the directors, and to make recommendations on compensation to the Board. In addition, the Compensation Committee reviews the compensation plans for our non-executive staff.

## **ITEM 7. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

### Transactions with Related Parties

Except for a management services agreement with our President, disclosed under Item 6 of this Form, there have been no transactions with a party who was a related party to our company at the time of the transaction, for either of the fiscal years ended December 31, 2010 or December 31, 2009, or for any period subsequent to such year end.

In 2009, we purchased 100% of the outstanding shares of The Technology Store Inc. (TTS) from Willem P. Duyvesteyn and his spouse. On closing of the acquisition, and in accordance with the terms of the acquisition agreement, Mr. Duyvesteyn was appointed to our board of directors, and subsequently also became our Chief Technical Officer. Mr. Duyvesteyn was not a related party to us at the time the agreement to purchase TTS was entered into or at any time prior to his appointment as a director. See Item 1. Business **Recent History - Acquisition of The Technology Store, Inc.** for more information on the transaction.



**Director Independence**

Our common shares and certain of our warrants are listed on the Toronto Stock Exchange. Under Toronto Stock Exchange rules, the Board is required to affirmatively determine that each independent director has no material relationship with us which would interfere with the exercise of independent judgment. Our Board has determined that the following directors are independent as required by Toronto Stock Exchange listing standards: William B. Harris, Daniel Wolfus, and Barry Davies.

**ITEM 8. LEGAL PROCEEDINGS**

We are not a party to any pending legal proceedings and, to the best of our knowledge, none of our property or assets are the subject of any pending legal proceedings.

**ITEM 9. MARKET PRICE OF AND DIVIDENDS ON THE REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS****Price Range of Common Shares**

The principal market on which our common shares are traded is the Toronto Stock Exchange. Our common shares commenced trading on the Toronto Stock Exchange on April 24, 2008 under the symbol GP. Effective March 11, 2009, the common shares were listed and posted for trading on the Toronto Stock Exchange under the symbol EMC.

The following table shows the high and low trading prices and average trading volume of our common shares on the Toronto Stock Exchange for the periods indicated.

| <b>Year</b>                                | <b>High<br/>(C\$)</b> | <b>Low<br/>(C\$)</b> |
|--|-----------------------|----------------------|
| <b>Fiscal Year ended December 31, 2009</b> |                       |                      |
| First quarter                              | 0.48                  | 0.11                 |
| Second quarter                             | 0.14                  | 0.09                 |
| Third quarter                              | 0.14                  | 0.08                 |
| Fourth quarter                             | 0.28                  | 0.08                 |
| <b>Fiscal Year ended December 31, 2010</b> |                       |                      |
| First quarter                              | 0.25                  | 0.15                 |
| Second quarter                             | 0.20                  | 0.09                 |
| Third quarter                              | 0.11                  | 0.07                 |
| Fourth quarter                             | 0.44                  | 0.07                 |

**Price Range of Warrants**

We have 15,893,721 warrants listed for trading on the Toronto Stock Exchange. The trading warrants commenced trading on the Toronto Stock Exchange on September 3, 2008 under the symbol GP.WT . Effective March 11, 2009, the trading warrants were listed and posted for trading on the Toronto Stock Exchange under the symbol EMC.WT . The following table shows the high, low prices and average trading volume of the trading warrants on the Toronto Stock Exchange for the period indicated.

| <b>Year</b>                                | <b>High<br/>(C\$)</b> | <b>Low<br/>(C\$)</b> |
|--|-----------------------|----------------------|
| <b>Fiscal Year ended December 31, 2009</b> |                       |                      |
| First quarter                              | 0.005                 | 0.005                |
| Second quarter                             | 0.030                 | 0.005                |
| Third quarter                              | 0.020                 | 0.005                |
| Fourth quarter                             | 0.015                 | 0.005                |
| <b>Fiscal Year ended December 31, 2010</b> |                       |                      |
| First quarter                              | 0.035                 | 0.005                |
| Second quarter                             | 0.015                 | 0.005                |
| Third quarter                              | 0.005                 | 0.005                |
| Fourth quarter                             | 0.030                 | 0.005                |

**Transfer Agent for Common Shares and Warrants**

The Registrar and Transfer Agent for our Common Shares and our trading warrants is Olympia Trust Company at its principal offices at Suite 1003, 750 West Pender Street, Vancouver, British Columbia, V6C 2T8.

**Dividends**

We have not paid any cash dividends on our common shares since our inception and do not anticipate paying any cash dividends in the foreseeable future. We plan to retain our earnings, if any, to provide funds for the expansion of our business.

**ITEM 10. RECENT SALES OF UNREGISTERED SECURITIES**

On December 3, 2010 we completed a private placement of 18,929,740 common shares at a price of \$0.19 per share for proceeds of \$3,596,651. The investors were Kudu Partners LLP and twenty-seven other private arm's length investors and investment funds. The securities were offered and sold in reliance on the exemptions from registration available under Regulation S and to accredited investors under Rule 506 of Regulation D.

On November 25, 2010 we completed a private placement of 6,100,000 units at a price of \$0.10 per unit for gross proceeds of \$610,000. Each unit was comprised of one common share and one-half of a warrant. Each full warrant entitles the holder to acquire one common share at a price of \$0.18 per share until November 25, 2011. The investors were Kudu Partners LLP, Barry Davies, George Putnam, William Sheriff, John Thompson and seven other private arm's length investors. The securities were offered and sold in reliance on the exemptions from registration available under Regulation S and to accredited investors under Rule 506 of Regulation D.

On June 30, 2010, we completed a private placement of 2,947,702 units at a price of \$0.10 per unit for gross proceeds of \$294,770. Each unit was comprised of one common share and one-half of a warrant. Each full warrant entitled the holder to acquire one additional common share at a price of \$0.18 per share until June 30, 2011. The investors were Kudu Partners LLP, Barry Davies, George Putnam and four other private arm's length investors and investment funds. The securities were offered and sold in reliance on the exemptions from registration available under Regulation S and to accredited investors under Rule 506 of Regulation D.

On January 27, 2010, we completed a private placement of 2,275,000 units at a price of \$0.20 per unit for gross proceeds of \$455,000. Each unit consisted of one common share and one-half of a warrant. Each full warrant entitled the holder to purchase one common share at a price of \$0.25 per share until January 27, 2011. The investors were William Sheriff, Peter Bosse and five other private arm's length investors and investment funds. The securities were offered and sold in reliance on the exemptions from registration available under Regulation S and to accredited investors under Rule 506 of Regulation D.

On December 16, 2009, we acquired all of the issued and outstanding capital stock of The Technology Store, Inc. in consideration for 19,037,386 common shares at a deemed price of \$0.10 per share issued to Willem Duyvesteyn and Irene Duyvesteyn. The securities were offered and sold in reliance on the exemption from registration available to two accredited investors under Rule 506 of Regulation D.

On November 17, 2009, we completed a private placement of 13,000,000 units at a price of \$0.08 per unit for gross proceeds of \$1,040,000. Each unit consisted of one common share and one-half of a warrant. Each full warrant entitled the holder to purchase one common share at a price of \$0.15 per share until November 17, 2010. The investors were Kudu Partners LLC, Peter Bosse, William Sheriff, and seven other private arm's length investors. The securities were offered and sold in reliance on the exemptions from registration available under Regulation S and to accredited investors under Rule 506 of Regulation D.

On October 13, 2009, we issued 500,000 common shares at a deemed price of \$0.08 per share to Breakwater Resources Ltd. pursuant to a purchase and sale agreement in consideration for a 100% interest in the Fostung property. The securities were offered and sold in reliance on the exemption from registration available under Regulation S.

In August 27, 2009 we completed a private placement of 1,500,000 units at a price of \$0.10 per unit for gross proceeds of \$150,000. Each unit consisted of one common share and one-half of a warrant. Each full warrant entitled the holder to purchase one common share at a price of \$0.15 per share until August 27, 2010. The sole investor was Kudu Partners LLC. The securities were offered and sold in reliance on the exemption from registration available to an accredited investor under Rule 506 of Regulation D.

On May 13, 2009, we issued 89,254 common shares at a price of \$0.11 per share in connection with a settlement with a former consultant to one of our subsidiaries. The securities were offered and sold in reliance on the exemption from registration available to an accredited investor under Rule 506 of Regulation D.

On April 16, 2009, we issued 51,859 common shares at a deemed price of \$0.10 per share to Columbus Gold Corporation in connection with the acquisition of an interest in a mining lease agreement. The securities were offered and sold in reliance on the exemptions from registration available under Regulation S.

On March 6, 2009, we completed a spin-off of our then wholly-owned subsidiary, Golden Predator Royalty & Development Corp., whereby our common shareholders exchanged their existing common shares for new common shares of our company and securities of Golden Predator Royalty & Development Corp. The securities were exchanged in reliance on the exemption from registration available under Section 3(a)(10) of the *Securities Act of 1933*.

On March 5, 2009, we issued a total of 7,336,874 common shares at a price of \$0.50 per share and 2,239,101 warrants to former debentureholders of our subsidiary, Great American Minerals, Inc., in connection with the settlement of certain convertible debentures. Each warrant entitled the holder to purchase one common share at a price of \$0.375 per share until March 5, 2011. The securities were offered and sold in reliance on the exemptions from registration available under Regulation S and to accredited investors under Rule 506 of Regulation D.





On January 20, 2009, we issued 66,667 common shares at a deemed price of \$0.20 per share to a property vendor in connection with the acquisition by our former subsidiary, Fury Explorations Ltd., of a mineral exploration property. The securities were offered and sold in reliance on the exemption from registration available under Regulation S.

On January 5, 2009, we issued 2,147,117 common shares at a deemed price of \$0.14 per share to Canyon Resources Corporation in connection with the acquisition of the Adelaide property. The securities were offered and sold in reliance on the exemption from registration available to accredited investors under Rule 506 of Regulation D.

On October 22, 2008, we issued a total of 4,728,000 units at a deemed price of \$0.50 per unit to Cosgrave Ranch, LLC in consideration of an asset purchase agreement between our subsidiary, Spring Mining Company, and Cosgrave Ranch, LLC. Each unit consisted of one common share and one-half of a warrant. Each full warrant entitled the holder to purchase one common share at a price of \$0.75 per share until October 27, 2010. The securities were offered and sold in reliance on the exemption from registration available to accredited investors under Rule 506 of Regulation D.

On August 15, 2008, we completed a business combination with Fury Explorations Ltd., being then a company listed on the TSX Venture Exchange, pursuant to which we acquired all of the issued and outstanding shares of Fury in exchange for the issuance of 10,595,814 units of our company to the shareholders of Fury. The units comprise 10,595,814 common shares and 15,893,721 common share purchase warrants. Each warrant entitles the holder to purchase one common share at a price of \$3.35 per share until August 15, 2011. In addition, a total of 835,915 stock options and 1,453,100 warrants were issued to former option and warrant holders of Fury in exchange for their Fury options and warrants pursuant to the business combination. Each stock option entitles the holder to purchase one common share at exercise prices and expiry dates matching the exchanged Fury options as adjusted by the exchange ratio. Each warrant entitles the holder to purchase one common share at exercise prices and expiry dates matching the exchanged Fury warrants as adjusted by the exchange ratio. The securities were offered and sold in reliance on the exemption from registration available under Section 3(a)(10) of the Securities Act of 1933.

Between July 2008 and November 2008, we issued a total of 375,462 common shares at a price of \$2.00 per share to nine former security holders of Great American Minerals, Inc. in connection with a share exchange agreement. The securities were offered and sold in reliance on the exemptions from registration available under Regulation S and to accredited investors under Rule 506 of Regulation D.

On June 28, 2008, we completed a private placement consisting of 2,500,000 common shares at a price of \$2.00 per share for proceeds of \$5,000,000. The sole investor was Front Street Capital. The securities were offered and sold in reliance on the exemption from registration available under Regulation S.

During the period commencing June 2, 2008 and ending May 3, 2011, we granted a total of 28,584,100 stock options to our employees, officers, directors and consultants in reliance on the exemptions from registration available under Regulation S, under Rule 506 of Regulation D, and under Rule 701 under the Securities Act of 1933.

#### **ITEM 11. DESCRIPTION OF REGISTRANT S SECURITIES TO BE REGISTERED**

Our authorized capital stock consists of an unlimited number of common shares without par value.

As at May 20, 2011, 150,384,412 Common Shares were issued and outstanding. The holders of the Common Shares are entitled to vote at all meetings of shareholders of Common Shares, to receive dividends if, as and when declared by the directors and to participate rateably in any distribution of property or assets upon our liquidation, winding-up or other dissolution. The Common Shares carry no pre-emptive rights, conversion or exchange rights, redemption, retraction, repurchase, sinking fund or purchase fund provisions. There are no provisions requiring the holder of Common Shares to contribute additional capital and no restrictions on the issuance of additional securities by us. There are no restrictions on the repurchase or redemption of Common Shares by us except to the extent that any such repurchase or redemption would render us insolvent pursuant to the BCBCA.



**ITEM 12. INDEMNIFICATION OF DIRECTORS AND OFFICERS**

The corporate laws of British Columbia and Part 21 of our corporate articles allow us to indemnify our directors, former directors, alternate director and their heirs and personal representatives against liability, provided (i) the director or officer was acting on our behalf in his or her official capacity as a director or officer and (ii) such director or officer conducted himself in good faith and believed his conduct was in, or not opposed to, our best interests (or in the case of any criminal proceeding, that he had no reasonable cause to believe his conduct was unlawful). Indemnification permitted by these provisions is limited to reasonable expenses incurred in connection with the proceeding upon which liability is predicated, which includes the amount of any such liability actually imposed.

**ITEM 13. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

Please see Item 15 for information on financial statements filed with this registration statement.

**ITEM 14. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

For the fiscal years ended December 31, 2009, and 2010, we did not have any disagreement with our accountants on any matter of accounting principles, practices or financial statement disclosure.

**ITEM 15. FINANCIAL STATEMENTS SCHEDULES AND EXHIBITS**

**Financial Statements**

The following Consolidated Financial Statements are filed as part of this report.

| <b>Description</b>   | <b>Page</b> |
|--|-------------|
| <u>Financial statements for the year ended December 31, 2010 and audit report thereon.</u> | <u>F-1</u>  |
|  |             |
| <u>Financial statements for the three month period ended March 31, 2011</u>                | <u>F-19</u> |
|  |             |

**(An Exploration Stage Company)**

**CONSOLIDATED FINANCIAL STATEMENTS**

**December 31, 2010**

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**DAVIDSON & COMPANY LLP**  
Chartered Accountants

A Partnership of Incorporated Professionals

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Shareholders of  
EMC Metals Corp.

We have audited the accompanying consolidated balance sheets of EMC Metals Corp. as of December 31, 2010 and 2009, and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for the years ended December 31, 2010 and 2009 and for the period from incorporation on July 17, 2006 to December 31, 2010. EMC Metals Corp.'s management is responsible for these financial statements. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing 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 over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of EMC Metals Corp. as of December 31, 2010 and 2009, and the results of its operations and its cash flows for each of the years then ended and the period from incorporation on July 17, 2006 to December 31, 2010 in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company generated negative cash flows from operating activities during the past year. The Company has an accumulated deficit of approximately \$53,681,191 for the year ended December 31, 2010. This raises substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

**DAVIDSON & COMPANY LLP**

Vancouver, Canada

Chartered Accountants

May 19, 2011



**EMC Metals Corp.**  
**CONSOLIDATED BALANCE SHEETS**  
(Expressed in Canadian Dollars)  
As at December 31  
(An Exploration Stage Company)

|  | 2010                 | 2009                 |
|--|----------------------|----------------------|
| <b>ASSETS</b>  |                      |                      |
| <b>Current</b>   |                      |                      |
| Cash   | \$ 4,126,424         | \$ 584,436           |
| Investments in trading securities, at fair value (Note 6)  | 2,250                | 204,582              |
| Receivables (net of allowance of \$Nil (2009 - \$Nil))   | 41,212               | 102,615              |
| Subscription receivable (Note 13)  | 210,249              | -                    |
| Prepaid expenses and deposits  | 91,870               | 173,145              |
| <b>Total Current Assets</b>  | <b>4,472,005</b>     | <b>1,064,778</b>     |
| <b>Reclamation bonds</b> (Note 7)  | <b>-</b>             | <b>23,122</b>        |
| <b>Property, plant and equipment</b> (Note 8)  | <b>34,289,873</b>    | <b>34,830,523</b>    |
| <b>Mineral interests</b> (Note 9)  | <b>503,020</b>       | <b>1,546,193</b>     |
| <b>Total Assets</b>  | <b>\$ 39,264,898</b> | <b>\$ 37,464,616</b> |
| <b>LIABILITIES AND STOCKHOLDERS EQUITY</b>   |                      |                      |
| <b>Current</b>   |                      |                      |
| Accounts payable and accrued liabilities   | \$ 412,849           | \$ 775,769           |
| Due to related parties (Note 10)   | -                    | 188,325              |
| Derivative liability (Note 11)   | 228,741              | 205,867              |
| Current portion of promissory notes payable (Note 13)  | 500,000              | -                    |
| <b>Total Current Liabilities</b>   | <b>1,141,590</b>     | <b>1,169,961</b>     |
| <b>Promissory notes payable</b> (Note 13)  | <b>3,750,000</b>     | <b>4,471,240</b>     |
| <b>Total Liabilities</b>   | <b>4,891,590</b>     | <b>5,641,201</b>     |
| <b>Stockholders Equity</b>   |                      |                      |
| Capital stock (Note 14) (Authorized: Unlimited number of shares; Issued and outstanding: 149,059,412 (2009 110,186,970)) | 88,138,487           | 81,889,573           |
| Treasury stock (Note 15)   | (2,087,333)          | (2,087,333)          |
| Additional paid in capital (Note 14)   | 2,003,345            | 979,611              |
| Deficit accumulated during the exploration stage   | (53,681,191)         | (48,958,436)         |



|  |               |               |
|--|---------------|---------------|
| <b>Total Stockholders Equity</b>                     | 34,373,308    | 31,823,415    |
| <b>Total Liabilities and Stockholders Equity</b>     | \$ 39,264,898 | \$ 37,464,616 |
| <b>Nature and continuance of operations</b> (Note 1) |               |               |
| <b>Subsequent events</b> (Note 18)                   |               |               |

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

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**EMC Metals Corp.****CONSOLIDATED STATEMENTS OF OPERATIONS**

(Expressed in Canadian Dollars)

(An Exploration Stage Company)

|  | Cumulative amounts<br>from incorporation<br>on July 17, 2006 to<br>December 31, 2010 | Year ended<br>December 31,<br>2010 | Year ended<br>December 31,<br>2009 |
|--|--|------------------------------------|------------------------------------|
| <b>EXPENSES</b>  |  |                                    |                                    |
| Amortization   | \$ 1,956,265   | \$ 455,227                         | \$ 628,695                         |
| Consulting   | 2,175,626  | 194,490                            | 351,094                            |
| Exploration  | 12,345,708   | 489,397                            | 369,685                            |
| General and administrative                             | 6,647,371  | 437,198                            | 766,820                            |
| Insurance  | 890,777  | 147,351                            | 301,035                            |
| Professional fees                                      | 2,836,802  | 263,917                            | 423,105                            |
| Research and development                               | 3,474,068  | -                                  | 3,474,068                          |
| Salaries and benefits                                  | 5,868,901  | 595,370                            | 1,009,088                          |
| Stock-based compensation (Note 14)                     | 5,120,776  | 795,268                            | 1,815,851                          |
| Travel and entertainment                               | 1,423,774  | 107,601                            | 144,326                            |
| <b>Loss before other items</b>                         | <b>(42,740,068)</b>  | <b>(3,485,819)</b>                 | <b>(9,283,767)</b>                 |
| <b>OTHER ITEMS</b>                                     |  |                                    |                                    |
| Foreign exchange gain                                  | 583,168  | 205,218                            | 809,991                            |
| Gain on transfer of marketable securities              | 206,974  | -                                  | 206,974                            |
| Gain on settlement of convertible debentures           | 1,449,948  | -                                  | 1,449,948                          |
| Gain (loss) on sale of marketable securities           | 1,836,011  | (70,583)                           | -                                  |
| Write-off of mineral interests                         | (18,091,761)   | (1,138,432)                        | (16,778,329)                       |
| Gain on insurance proceeds                             | 972,761  | -                                  | -                                  |
| Interest income (expense)                              | 470,226  | (301,244)                          | 65,677                             |
| Other income   | 502,965  | 53,723                             | 114,180                            |
| Gain (loss) on disposition of assets                   | 476,682  | 37,256                             | (2,536)                            |
| Change in fair value of derivative liability (Note 11) | 256,617  | (22,874)                           | 279,491                            |
| Unrealized gain (loss) on marketable securities        | (3,269,033)  | -                                  | 61,666                             |
|  | (14,605,442)   | (1,236,936)                        | (13,792,938)                       |
| <b>Loss before income taxes</b>                        | <b>(57,345,510)</b>  | <b>(4,722,755)</b>                 | <b>(23,076,705)</b>                |
| <b>Deferred income tax recovery</b> (Note 12)          | <b>6,522,138</b>   | <b>-</b>                           | <b>1,431,124</b>                   |
| <b>Loss and comprehensive loss for the year</b>        | <b>\$ (50,823,372)</b>   | <b>\$ (4,722,755)</b>              | <b>\$ (21,645,581)</b>             |
| <b>Basic and diluted loss per common share</b>         |  | <b>\$ (0.04)</b>                   | <b>\$ (0.28)</b>                   |

**Weighted average number of common shares  
outstanding**

121,344,723

77,757,882

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

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**EMC Metals Corp.**

(An Exploration Stage Company)

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

(Expressed in Canadian Dollars)

YEARS ENDED DECEMBER 31

|  | Cumulative amounts<br>from incorporation<br>on July 17, 2006 to<br>December 31, 2010 | Year ended<br>December 31,<br>2010 | Year ended<br>December 31,<br>2009 |
|--|--|------------------------------------|------------------------------------|
| <b>CASH FLOWS FROM OPERATING ACTIVITIES</b>              |  |                                    |                                    |
| Loss for the year  | \$ (50,823,372)  | \$ (4,722,755)                     | \$ (21,645,581)                    |
| Items not affecting cash:                                |  |                                    |                                    |
| Amortization   | 1,956,265  | 455,227                            | 628,695                            |
| Research and development                                 | 3,474,068  | -                                  | 3,474,068                          |
| Consulting paid with common shares                       | 10,711   | -                                  | 10,711                             |
| Loss (gain) on disposal of assets                        | (476,682)  | (37,256)                           | 2,536                              |
| Convertible debenture costs                              | (1,312,878)  | -                                  | (1,312,878)                        |
| Unrealized foreign exchange                              | 714,862  | (220,672)                          | (840,664)                          |
| Stock-based compensation                                 | 5,120,776  | 795,268                            | 1,815,851                          |
| Unrealized gain on marketable securities                 | 3,269,033  | -                                  | (61,666)                           |
| Realized loss on marketable securities                   | (1,836,011)  | 70,583                             | -                                  |
| Write-off of mineral properties                          | 18,091,761   | 1,138,432                          | 16,778,329                         |
| Realized gain on transfer of marketable securities       | (206,974)  | -                                  | (206,974)                          |
| Change in fair value of derivative liability             | (256,617)  | 22,874                             | (279,491)                          |
| Future income tax recovery                               | (6,522,138)  | -                                  | (1,431,124)                        |
|  | (28,797,196)   | (2,498,299)                        | (3,068,188)                        |
| Changes in non-cash working capital items:               |  |                                    |                                    |
| Decrease in receivables                                  | 5,285  | 61,403                             | 105,735                            |
| (Increase) decrease in prepaid expenses and other assets | (74,626)   | 81,275                             | 8,631                              |
| Proceeds from sale of marketable securities, net         | (4,135,798)  | -                                  | 158,954                            |
| Decrease in accounts payable and accrued liabilities     | (848,393)  | (94,913)                           | (720,839)                          |
| Increase in due to related parties                       | 1,163,028  | 762,028                            | 401,000                            |
| Asset retirement obligations                             | (1,065,891)  | -                                  | -                                  |
|  | (33,753,591)   | (1,688,506)                        | (3,114,707)                        |
| <b>CASH FLOWS FROM INVESTING ACTIVITIES</b>              |  |                                    |                                    |
| Cash acquired from Subsidiary                            | 4,857,012  | -                                  | 206,019                            |
| Cash paid for Subsidiary (Note 5)                        | (11,359,511)   | (557,523)                          | -                                  |
| Spin-out of Golden Predator Corp.                        | (76,388)   | -                                  | (76,388)                           |
| Reclamation bonds  | 795,785  | -                                  | -                                  |

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|   |                     |                     |                    |
|---|---------------------|---------------------|--------------------|
| Proceeds from sale of property, plant and equipment                 | 660,336             | 109,797             | 28,197             |
| Purchase of property, plant and equipment                           | (21,215,113)        | (90,252)            | (170,637)          |
| Additions to unproven mineral interests                             | (2,991,515)         | (300,000)           | (221,210)          |
|   | (29,329,394)        | (837,978)           | (234,014)          |
| <b>CASH FLOWS FROM FINANCING ACTIVITIES</b>                         |                     |                     |                    |
| Common shares issued  | 55,311,172          | 4,746,172           | 1,190,000          |
| Share issuance costs  | (1,277,713)         | -                   | -                  |
| Special warrants  | 13,000,000          | -                   | -                  |
| Options exercised   | 341,900             | 230,300             | 20,200             |
| Warrants exercised  | 10,844,250          | 1,092,000           | -                  |
| Notes payable   | (9,966,000)         | -                   | -                  |
| Payment of promissory note  | (1,260,700)         | -                   | -                  |
| Advances from related party   | 216,500             | -                   | -                  |
| Loans advanced to Midway  | (2,000,000)         | -                   | -                  |
| Loan repayment from Midway  | 2,000,000           | -                   | 1,000,000          |
|   | 67,209,409          | 6,068,472           | 2,210,200          |
| <b>Change in cash during the year</b>                               | <b>4,126,424</b>    | <b>3,541,988</b>    | <b>(1,138,526)</b> |
| <b>Cash, beginning of year</b>                                      | <b>-</b>            | <b>584,436</b>      | <b>1,722,962</b>   |
| <b>Cash, end of year</b>  | <b>\$ 4,126,424</b> | <b>\$ 4,126,424</b> | <b>\$ 584,436</b>  |
| <b>Supplemental disclosure with respect to cash flows (Note 17)</b> |                     |                     |                    |

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

**EMC Metals Corp.**

(An Exploration Stage Company)

**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY**

(Expressed in Canadian Dollars)

|   | Capital Stock       |             | Additional<br>Paid in<br>Capital | Treasury<br>Stock | Deficit<br>Accumulated<br>During the<br>Exploration<br>Stage | Total       |
|---|---------------------|-------------|----------------------------------|-------------------|--|-------------|
|   | Number of<br>Shares | Amount      |                                  |                   |  |             |
|   | \$                  | \$          | \$                               | \$                | \$   | \$          |
| <b>Balance, July 17, 2006</b>   | -                   | -           | -                                | -                 | -  | -           |
| Private placements  | 5,000,000           | 3,500,000   | -                                | -                 | -  | 3,500,000   |
| Excess of exchange amount over carrying amount of Springer Mining Company | -                   | -           | -                                | -                 | (2,857,819)  | (2,857,819) |
| Loss for the year   | -                   | -           | -                                | -                 | (357,670)  | (357,670)   |
| <b>Balance, December 31, 2006</b>   | 5,000,000           | 3,500,000   | -                                | -                 | (3,215,489)  | 284,511     |
| Private placements  | 17,577,500          | 35,155,000  | -                                | -                 | -  | 35,155,000  |
| Conversion of special warrants  | 5,390,000           | 5,390,000   | -                                | -                 | -  | 5,390,000   |
| Exercise of warrants  | 50,000              | 75,000      | -                                | -                 | -  | 75,000      |
| Share issuance costs broker's fees  | -                   | (1,215,074) | 99,000                           | -                 | -  | (1,116,074) |
| Share issuance costs shares issued  | 100,000             | 100,000     | -                                | -                 | -  | 100,000     |
| Shares issued for mineral properties                                      | 100,000             | 100,000     | -                                | -                 | -  | 100,000     |
| Stock-based compensation  | 40,000              | 40,000      | 489,562                          | -                 | -  | 529,562     |
| Loss for the year   | -                   | -           | -                                | -                 | (6,128,912)  | (6,128,912) |

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|  |            |            |            |             |              |              |
|--|------------|------------|------------|-------------|--------------|--------------|
| <b>Balance,<br/>December 31,<br/>2007</b>      | 28,257,500 | 43,144,926 | 588,562    | -           | (9,344,401)  | 34,389,087   |
| Private placements                             | 5,322,500  | 10,645,000 | -          | -           | -            | 10,645,000   |
| Conversion of special warrants                 | 7,610,000  | 7,610,000  | -          | -           | -            | 7,610,000    |
| Share issuance costs                           | -          | (261,638)  | -          | -           | -            | (261,638)    |
| broker's fees                                  | -          | (261,638)  | -          | -           | -            | (261,638)    |
| Shares issued for mineral properties           | 110,000    | 210,000    | -          | -           | -            | 210,000      |
| Acquisition of Gold Standard Royalty Corp.     | 2,050,000  | 4,100,000  | 143,017    | -           | -            | 4,243,017    |
| Acquisition of Great American Minerals Inc.    | 1,045,775  | 2,091,550  | 426,672    | -           | -            | 2,518,222    |
| Acquisition of Fury Explorations Ltd.          | 10,595,814 | 13,774,558 | 7,787,783  | (2,087,333) | -            | 19,475,008   |
| Exercise of stock options                      | 6,637,224  | 10,027,915 | (184,265)  | -           | -            | 9,843,650    |
| Shares issued for repayment of promissory note | 4,728,000  | 2,364,000  | -          | -           | -            | 2,364,000    |
| Stock-based compensation                       | -          | -          | 2,324,458  | -           | -            | 2,324,458    |
| Loss for the year                              | -          | -          | -          | -           | (17,968,454) | (17,968,454) |
| <b>Balance,<br/>December 31,<br/>2008</b>      | 66,356,813 | 93,706,311 | 11,086,227 | (2,087,333) | (27,312,855) | 75,392,350   |
| Private placements                             | 14,500,000 | 1,190,000  | -          | -           | -            | 1,190,000    |
| Exercise of stock options                      | 101,000    | 126,186    | (105,986)  | -           | -            | 20,200       |
| Shares issued for mineral properties           | 2,765,643  | 367,695    | -          | -           | -            | 367,695      |
| Settlement of convertible debentures           | 7,336,874  | 2,934,752  | 62,903     | -           | -            | 2,997,655    |
|  | 87,254     | 10,711     | -          | -           | -            | 10,711       |

|  |             |              |              |             |              |              |
|--|-------------|--------------|--------------|-------------|--------------|--------------|
| Shares issued for consulting             |             |              |              |             |              |              |
| Shares issued for acquisition of TTS     | 19,037,386  | 2,094,112    | -            | -           | -            | 2,094,112    |
| Stock-based compensation before spin-out | -           | -            | 836,240      | -           | -            | 836,240      |
| Spin-out of GPD                          | -           | (18,540,194) | (11,879,384) | -           | -            | (30,419,578) |
| Stock-based compensation after spin-out  | -           | -            | 979,611      | -           | -            | 979,611      |
| Loss for the year                        | -           | -            | -            | -           | (21,645,581) | (21,645,581) |
| <b>Balance, December 31, 2009</b>        | 110,186,970 | 81,889,573   | 979,611      | (2,087,333) | (48,958,436) | 31,823,415   |
| Private placements                       | 30,252,442  | 4,700,312    | 454,768      | -           | -            | 5,155,080    |
| Exercise of stock options                | 1,320,000   | 456,602      | (226,302)    | -           | -            | 230,300      |
| Exercise of warrants                     | 7,300,000   | 1,092,000    | -            | -           | -            | 1,092,000    |
| Stock-based compensation                 | -           | -            | 795,268      | -           | -            | 795,268      |
| Loss for the year                        | -           | -            | -            | -           | (4,722,755)  | (4,722,755)  |
| <b>Balance, December 31, 2010</b>        | 149,059,412 | 88,138,487   | 2,003,345    | (2,087,333) | (53,681,191) | 34,373,308   |

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**EMC Metals Corp.**

(An Exploration Stage Company)

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

December 31, 2010

(Expressed in Canadian Dollars)

**1. NATURE AND CONTINUANCE OF OPERATIONS**

EMC Metals Corp. (the Company) is incorporated under the laws of the Province of British Columbia. The Company is focused on specialty metals exploration and production and has recently acquired various metallurgical technologies and licenses that it is utilizing to gain access to a number of specialty metals opportunities.

The Company's principal properties are located in the state of Nevada, with additional properties located in the province of Ontario and in Australia. The Company's principal asset, the Springer Tungsten mill, is currently on care and maintenance pending a sustained improvement in tungsten prices. To December 31, 2010, the Company has not commenced production and has generated no revenue. The Company's remaining properties are in the exploration or pre-exploration stage. As such, the Company is in the exploration stage and anticipates incurring significant expenditures prior to commencement of contract milling operations.

These consolidated financial statements have been prepared on a going concern basis that contemplates the realization of assets and discharge of liabilities at their carrying values in the normal course of business for the foreseeable future. These financial statements do not reflect any adjustments that may be necessary if the Company is unable to continue as a going concern.

The Company currently earns no operating revenues and will require additional capital in order to refit its Springer tungsten mill and earn its 50% interest in the Nyngan property. The Company's ability to continue as a going concern is uncertain and is dependent upon the generation of profits from mineral properties, obtaining additional financing or maintaining continued support from its shareholders and creditors. The Company is currently working on securing additional financing to meet its needs; however there is no guarantee that these efforts will be successful. In the event that additional financial support is not received or operating profits are not generated, the carrying values of the Company's assets may be adversely affected. The inability to raise additional financing may affect the future assessment of the Company as a going concern.

**2. SPIN OUT TRANSACTION**

On March 6, 2009, the Company completed a transfer of its gold and silver focused, precious metals portfolio to Golden Predator Corp. ( GPD ). To complete the transaction, the Company issued one unit of GPD for each four shares of the Company held by the shareholder on record at the effective date. Each unit consisted of one GPD common share and one GPD common share purchase right. Each GPD right could be exercised until April 15, 2009 at a price of \$0.50 to acquire a further GPD common share and a half GPD share purchase warrant with each whole GPD share purchase warrant exercisable at a price of \$0.60 until July 31, 2009, \$0.65 until October 31, 2009, \$0.70 until January 31, 2010, and \$0.90 until April 30, 2010.

Pursuant to the spin-out transaction, all gold and silver-focused mineral properties and related exploration operations were transferred from the Company to GPD. The transfer included the wholly owned subsidiaries; Golden Predator Mines (U.S.) Ltd., Cedar Mountain Gold Inc, Gold Standard Royalty Corporation and its subsidiary and Fury Explorations Ltd. and its subsidiaries, along with certain marketable securities.

The spin-out agreement also outlined the treatment of pre-spin-out intercompany accounts and various other items such as marketable securities, deposits, loans, etc. which have been reflected in these financial statements. The assets spun out of the Company to GPD were as follows:

|                               |                      |
|-------------------------------|----------------------|
| Cash                          | \$ 76,388            |
| Marketable Securities         | 1,022,214            |
| Receivables                   | 13,678               |
| Prepaid Expenses              | 68,084               |
| Reclamation Bonds             | 374,404              |
| Property, Plant and Equipment | 2,534,228            |
| Mineral Properties            | 31,246,782           |
| Accounts Payable              | (38,371)             |
| Future Income Taxes           | (4,877,829)          |
| <b>Total Contribution</b>     | <b>\$ 30,419,578</b> |

### 3. SIGNIFICANT ACCOUNTING POLICIES

#### a. Basis of presentation

These consolidated financial statements have been prepared in conformity with generally accepted accounting principles of the United States of America ( US GAAP ).

These consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated on consolidation.

**EMC Metals Corp.**

(An Exploration Stage Company)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2010

(Expressed in Canadian Dollars)

**3. SIGNIFICANT ACCOUNTING POLICIES***(Cont d )***b. Use of estimates**

The preparation of consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**c. Investment in trading securities**

The Company's trading securities are reported at fair value, with unrealized gains and losses included in earnings.

**d. Property, plant and equipment**

Property, plant and equipment are recorded at cost less accumulated amortization, calculated as follows:

|                           |                        |
|---------------------------|------------------------|
| Plant and equipment       | 5% straight line       |
| Building                  | 5% straight line       |
| Computer equipment        | 30% straight line      |
| Small tools and equipment | 20% straight line      |
| Office equipment          | 20% straight line      |
| Automobile                | 30% straight line      |
| Leasehold improvements    | Over life of the lease |

**e. Mineral properties and exploration and development costs**

The costs of acquiring mineral rights are capitalized at the date of acquisition. After acquisition, various factors can affect the recoverability of the capitalized costs. If, after review, management concludes that the carrying amount of a mineral property is impaired, it will be written down to estimated fair value. Exploration costs incurred on mineral properties are expensed as incurred. Development costs incurred on proven and probable reserves will be capitalized. Upon commencement of production, capitalized costs will be amortized using the unit-of-production method over the estimated life of the ore body based on proven and probable reserves (which exclude non-recoverable reserves and anticipated processing losses).

**f. Asset retirement obligations**

The Company records the fair value of an asset retirement obligation as a liability in the period in which it incurs a legal obligation associated with the retirement of tangible long-lived assets that result from the acquisition, construction, development, and/or normal use of the long-lived assets. The Company also records a corresponding asset which is amortized over the life of the asset. Subsequent to the initial measurement of the asset retirement obligation, the obligation is adjusted at the end of each period to reflect the passage of time (accretion expense) and changes in the estimated future cash flows underlying the obligation (asset retirement cost).

**g. Long-lived assets**

Long-lived assets held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. For purposes of evaluating the

recoverability of long-lived assets, the recoverability test is performed using undiscounted net cash flows related to the long-lived assets. If such assets are considered to be impaired, the impairment recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

**h. Income taxes**

The Company accounts for income taxes under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under the asset and liability method the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recognized if it is more likely than not that some part or all of the deferred tax asset will not be recognized.

**EMC Metals Corp.**

(An Exploration Stage Company)

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

December 31, 2010

(Expressed in Canadian Dollars)

**3. SIGNIFICANT ACCOUNTING POLICIES** (*Cont d* )

**i. Loss per share**

Basic loss per common share is computed using the weighted average number of common shares outstanding during the year. To calculate diluted loss per share, the Company uses the treasury stock method and the if converted method. As of December 31, 2010, there were 23,792,485 warrants (2009 27,795,135) and 11,473,750 options (2009 9,534,725) outstanding which have not been included in the weighted average number of common shares outstanding as these were anti-dilutive.

**j. Foreign exchange**

The Company's functional currency is the Canadian dollar. The Company does not have any significant non-monetary assets and liabilities that are in a currency other than the Canadian dollar. Any monetary assets and liabilities that are in a currency other than the Canadian dollar are translated at the rate prevailing at year end. Revenue and expenses in a foreign currency are translated at rates that approximate those in effect at the time of translation. Gains and losses from translation of foreign currency transactions into Canadian dollars are included in current results of operations.

**k. Stock-based compensation**

The Company accounts for stock-based compensation under the provisions of ASC 718, Compensation-Stock Compensation . Under the fair value recognition provisions, stock-based compensation expense is measured at the grant date for all stock-based awards to employees and directors and is recognized as an expense over the requisite service period, which is generally the vesting period. The Black-Scholes option valuation model is used to calculate fair value.

**l. Financial instruments**

The Company's financial instruments consist of cash, investments in trading securities, subscriptions receivable, receivables, accounts payable and accrued liabilities, due to related parties, and promissory notes payable. It is management's opinion that the Company is not exposed to significant interest, currency or credit risks arising from its financial instruments. The fair values of these financial instruments approximate their carrying values unless otherwise noted. The Company has its cash primarily in one commercial bank in Vancouver, British Columbia, Canada.

**m. Fair value of financial assets and liabilities**

The Company measures the fair value of financial assets and liabilities based on US GAAP guidance which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. Effective January 1, 2008, the Company adopted the provisions for financial assets and liabilities, as well as for any other assets and liabilities that are carried at fair value on a recurring basis. Effective January 1, 2009, the Company adopted the provisions for non-financial assets and liabilities that are required to be measured at fair value.

The Company classifies financial assets and liabilities as held-for-trading, available-for-sale, held-to-maturity, loans and receivables or other financial liabilities depending on their nature. Financial assets and financial liabilities are recognized at fair value on their initial recognition, except for those arising from certain related party transactions which are accounted for at the transferor's carrying amount or exchange amount.

Financial assets and liabilities classified as held-for-trading are measured at fair value, with gains and losses recognized in net income. Financial assets classified as held-to-maturity, loans and receivables, and financial liabilities other than those classified as held-for-trading are measured at amortized cost, using the effective interest method of amortization. Financial assets classified as available-for-sale are measured at fair value, with unrealized gains and losses being recognized as other comprehensive income until realized, or if an unrealized loss is considered other than temporary, the unrealized loss is recorded in income.

Financial instruments, including receivables, subscriptions receivable, accounts payable and accrued liabilities, due to related parties, and promissory notes payable are carried at cost, which management believes approximates fair value due to the short term nature of these instruments. Investments in trading securities are classified as held for trading, with unrealized gains and losses being recognized in income.

The following table presents information about the assets that are measured at fair value on a recurring basis as of December 31, 2010, and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value. In general, fair values determined by Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets. Fair values determined by Level 2 inputs utilize data points that are observable such as quoted prices, interest rates and yield curves. Fair values determined by Level 3 inputs are unobservable data points for the asset or liability, and included situations where there is little, if any, market activity for the asset:

|                                   | <b>December 31,<br/>2010</b> | <b>Quoted Prices<br/>in Active<br/>Markets<br/>(Level 1)</b> | <b>Significant<br/>Other<br/>Observable<br/>Inputs<br/>(Level 2)</b> | <b>Significant<br/>Unobservable<br/>Inputs<br/>(Level 3)</b> |
|-----------------------------------|------------------------------|--|--|--|
| <b>Assets:</b>                    |                              |  |  |  |
| Cash                              | \$ 4,126,424                 | \$ 4,126,424   | \$   | \$   |
| Investments in trading securities | \$ 2,250                     | \$ 2,250   | \$   | \$   |
| Total                             | \$ 4,128,674                 | \$ 4,128,674   | \$   | \$   |

The fair values of cash and investments in trading securities are determined through market, observable and corroborated sources.

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(An Exploration Stage Company)

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

December 31, 2010

(Expressed in Canadian Dollars)

**3. SIGNIFICANT ACCOUNTING POLICIES** (*Cont d* )

**n. Concentration of credit risk**

The financial instrument which potentially subjects the Company to concentration of credit risk is cash. The Company maintains cash in bank accounts that, at times, may exceed federally insured limits. As of December 31, 2010 and 2009, the Company has exceeded the federally insured limit. The Company has not experienced any losses in such amounts and believes it is not exposed to any significant risks on its cash in bank accounts.

**o. Comparative figures**

Certain comparative figures have been reclassified to conform with the current year's presentation.

**4. RECENT ACCOUNTING PRONOUNCEMENTS**

In April 2010, the Financial Accounting Standards Board ( FASB ) issued ASU 2010-13, Compensation - Stock Compensation (Topic 718), amending ASC 718. ASU 2010-13 clarifies that a stock-based payment award with an exercise price denominated in the currency of a market in which the entity's equity securities trade should not be classified as a liability if it otherwise qualifies as equity. ASU 2010-13 is effective for interim and annual reporting periods beginning after December 15, 2010 (January 1, 2011 for the Company). The Company is currently evaluating the impact of ASU 2010-09, but does not expect its adoption to have a material impact on the Company's financial reporting disclosures.

In December 2010, the FASB issued ASU 2010-29, which contains updated accounting guidance to clarify the acquisition date that should be used for reporting pro forma financial information when comparative financial statements are issued. This update requires that a company should disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. This update also requires disclosure of the nature and amount of material, nonrecurring pro forma adjustments. The provisions of this update, which are to be applied prospectively, are effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010, with early adoption permitted. The impact of this update on the Company's consolidated financial statements will depend on the size and nature of future business combinations.

**5. ACQUISITION OF SUBSIDIARY**

**The Technology Store**

On December 16, 2009, the Company acquired all of the issued and outstanding common shares of The Technology Store ( TTS ) a privately held company, incorporated in Nevada, USA in consideration for 19,037,386 common shares of the Company valued at \$2,094,112, cash of \$852,334 (US\$802,358) of which \$557,523 (US\$526,179) was paid in the current year, and a promissory note in the amount of \$529,990 (US\$500,000) (Note 13) for total consideration of \$3,476,436. TTS's operating results were recognized in the consolidated statement of operations beginning on December 16, 2009, the effective date of the acquisition.

The allocation of the purchase cost to TTS's assets and liabilities is as follows:

|                                     |                     |
|-------------------------------------|---------------------|
| Cash                                | \$ 500,830          |
| Receivables                         | 26,743              |
| Other assets                        | 2,368               |
| In-process research and development | 3,474,068           |
| Accounts payable                    | (527,573)           |
| <b>Total Consideration</b>          | <b>\$ 3,476,436</b> |

**6. INVESTMENTS IN TRADING SECURITIES**

At December 31, 2010, the Company held investments classified as trading securities, which consisted of various equity securities. All trading securities are carried at fair value. As of December 31, 2010, the fair value of trading securities was \$2,250 (2009 \$204,582).

**7. RECLAMATION BONDS**

Reclamation bonds of \$Nil (2009 US\$22,000) were held as security for any potential reclamation of the Company's land and unproven mineral interests.

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**EMC Metals Corp.**

(An Exploration Stage Company)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2010

(Expressed in Canadian Dollars)

**8. PROPERTY, PLANT AND EQUIPMENT**

|                              | 2010          |                          |                | 2009          |                          |                |
|------------------------------|---------------|--------------------------|----------------|---------------|--------------------------|----------------|
|                              | Cost          | Accumulated Amortization | Net Book Value | Cost          | Accumulated Amortization | Net Book Value |
| Land and water rights        | \$ 7,972,291  | \$ -                     | \$ 7,972,291   | \$ 7,972,291  | \$ -                     | \$ 7,972,291   |
| Plant and equipment          | 25,618,528    | -                        | 25,618,528     | 25,602,178    | -                        | 25,602,178     |
| Cosgrave plant and equipment | 375,763       | 228,155                  | 147,608        | 375,763       | 155,562                  | 220,201        |
| Building                     | 222,685       | 35,304                   | 187,381        | 222,685       | 24,071                   | 198,614        |
| Automobiles                  | 172,542       | 172,542                  | -              | 244,996       | 187,240                  | 57,756         |
| Computer equipment           | 364,697       | 357,985                  | 6,712          | 643,166       | 465,101                  | 178,065        |
| Small tools and equipment    | 963,537       | 680,482                  | 283,055        | 960,713       | 495,427                  | 465,286        |
| Office equipment             | 278,561       | 204,263                  | 74,298         | 278,561       | 146,308                  | 132,253        |
| Leasehold improvements       | 13,083        | 13,083                   | -              | 13,083        | 9,204                    | 3,879          |
|                              | \$ 35,981,687 | \$ 1,691,814             | \$ 34,289,873  | \$ 36,313,436 | \$ 1,482,913             | \$ 34,830,523  |

Land and water rights are in respect of the Cosgrave property in Pershing County, Nevada. The plant and equipment is comprised of the Springer Plant and Mill in Nevada which is currently under care and maintenance.

**9. MINERAL INTERESTS**

December 31, 2010

|  | Other | Gold | Tungsten | Total |
|--|-------|------|----------|-------|
|--|-------|------|----------|-------|

**Acquisition costs**

|                            |         |              |            |              |
|----------------------------|---------|--------------|------------|--------------|
| Balance, December 31, 2009 | \$ -    | \$ 1,343,173 | \$ 203,020 | \$ 1,546,193 |
| Additions                  | 300,000 | -            | -          | 300,000      |
| Written-off                | -       | (1,138,432)  | -          | (1,138,432)  |
| Sold                       | -       | (204,741)    | -          | (204,741)    |



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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

December 31, 2010

(Expressed in Canadian Dollars)

**9. MINERAL INTERESTS** (*Cont d* )

**Impairment of mineral properties**

During the year ended December 31, 2010, the Company has reviewed the carrying value of its mineral properties for impairment and compared the carrying value to the future cash flows in the case of its tungsten properties, and fair market value in respect of its remaining properties, and has written down its gold properties by \$1,138,432. The Company sold these properties during the year.

During the year ended December 31, 2009 the Company determined that the capitalized value of its remaining gold and silver properties exceeded their fair market value and wrote these properties down by \$16,778,329.

**GOLD AND SILVER PROPERTIES**

Pursuant to the spin-out with GPD (Note 2) by memorandum of agreement dated February 5, 2009 between the Company's subsidiary, Great American Minerals Inc. ( GAM ) and GPD, all non-core gold mineral properties were leased or assigned to GPD under customary commercial terms as described in definitive agreements dated June 2, 2009 (the Agreements ). During the year ended December 31, 2010, the Company agreed to sell its subsidiary, GAM to GPD for \$225,000 to be applied against the intercompany loan amount owing. The Company retained its interest in the non-gold properties, Black Kettle and Spruce Mountain.

Properties held by GAM that had been assigned to GPD where a commercial interest had been retained prior to the sale of GAM were as follows:

*Phoenix Joint Venture*

On December 27, 2007, the parties to Phoenix JV exercised their option to purchase the Lewis mineral property in Lander County, Nevada by making a cash payment of US\$2,000,000 together with the first payment of the advance royalty in the cash amount of US\$60,000.

*Modoc*

GAM has a lease and option to purchase a 2/3 interest in 12 mineral claims included with the Modoc gold property, located in Lander County, Nevada.

*Platte River*

GAM had a 49% interest in certain unpatented claims located in Eureka County, Nevada. During fiscal 2009, GAM wrote off the costs associated with Platte River.

*Leased Properties*

Pursuant to the Agreement, GAM has leased to GPD one property located in White Pine County, Nevada, Treasure Hill, (141 claims), one property located in Lander County, Nevada, Modoc (108 claims) and various properties

located in Eureka County, Nevada including: GQ West (24 claims); Highway (20 claims); JAG (44 claims); Kobeh (18 claims); Trail (30 claims) and UNR Keystone (231 claims) and one property in Modoc County, CA High Grade (150 claims).

#### **TUNGSTEN PROPERTY**

##### *Springer Property*

On November 21, 2006, the Company acquired all outstanding and issued shares of Springer Mining Company ( Springer ). Included in the assets of Springer and allocated to property, plant and equipment (Note 8) are the Springer Mine and Mill located in Pershing County, Nevada.

#### **SCANDIUM PROPERTY**

##### *Nyngan, New South Wales Property*

On February 5, 2010, the Company entered in to an agreement with Jervois Mining Limited ( Jervois ) whereby it would acquire a 50% interest in certain properties located in New South Wales, Australia. In order for the Company to earn its interest which is subject to a 2% NSR, the Company paid the sum of \$300,000 into escrow, that was released to Jervois upon satisfaction of certain conditions precedent, including verification of title to the Nyngan property and approval of the Toronto Stock Exchange, and must:

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

December 31, 2010

(Expressed in Canadian Dollars)

**9. MINERAL INTERESTS** *(Cont d )*

**SCANDIUM PROPERTY** *(Cont d )*

*Nyngan, New South Wales Property (Cont d )*

- a) Incur exploration and metallurgical work of A\$500,000 (CAD\$466,000) within 180 business days of the conditions precedent being satisfied, or pay cash in lieu thereof. On September 29, 2010 the Company received a six month extension to complete its exploration commitment. In the event that the Company wishes to continue the joint venture, the Company must deliver a feasibility study within 480 business days of the conditions precedent being satisfied, failing which the Agreement will terminate.
- b) Upon delivering the feasibility study to Jervois, pay to Jervois an additional A\$1,300,000 plus GST at which time it will be granted a 50% interest in the joint venture. The JV Agreement provides for straight-line dilution, with interests diluted below 10% being converted into a 2% NSR.

**10. RELATED PARTY TRANSACTIONS**

Related party transactions not disclosed elsewhere are summarized as follows:

During fiscal 2010, the Company paid or accrued management fees of \$Nil (2009 - \$334,200) to a company controlled by a director of the Company.

During fiscal 2010, the Company paid or accrued consulting fees of \$46,175 (2009 - \$Nil) to the former CEO of the Company and paid or accrued consulting fees of \$137,247 (2009 - \$Nil) to the current CEO and president of the Company.

The above transactions occurred in the normal course of operations and were measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties. Amounts payable to related parties have no specific terms of repayment, are unsecured, and have no interest rate.

During fiscal 2010, the Company sold software with a net book value of \$103,134 to a company with previously common directors.

**11. DERIVATIVE LIABILITY**

The Company evaluated the application of SFAS 133 and EITF 00-19 for the settlement of convertible debentures through the issuance of shares and warrants. Based on the guidance in SFAS 133 and EITF 00-19, the Company concluded that the warrants were required to be accounted for as derivatives. The warrants issued pursuant to the settlement were in a functional currency different than that of the Company and therefore met the attributes of a liability. The Company is required to record the fair value of these warrants on its balance sheet at fair value with changes in the values of these derivatives reflected in the statement of operations.

The Company uses the Black-Scholes valuation model for calculation of the fair value of derivative liabilities. The Company uses volatility rates based upon the closing stock price of its common stock. The Company uses a risk-free interest rate which is the bank of Canada rate with a maturity that approximates the estimated expected life of a derivative. The Company uses the closing market price of the common stock on the date of issuance of a derivative or at the end of a quarter when a derivative is valued at fair value. The volatility was 100%, the risk-free interest rate was 1%, a dividend rate of 0%, and the expected life was 0.17 and 1.17 years respectively, during the years ending December 31, 2010 and 2009.

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**EMC Metals Corp.**

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## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2010

(Expressed in Canadian Dollars)

**12. DEFERRED INCOME TAXES**

A reconciliation of income taxes at statutory rates with the reported taxes is as follows:

|  | 2010           | 2009            |
|--|----------------|-----------------|
| Loss before income taxes                   | \$ (4,722,755) | \$ (21,645,581) |
| Expected income tax recovery               | 1,339,466      | 7,006,859       |
| Stock-based compensation                   | (226,651)      | (544,755)       |
| Write-off of mineral properties            | (324,453)      | (5,003,499)     |
| Other items                                | (254,313)      | 147,067         |
|  | 534,049        | 1,575,672       |
| Unrecognized benefit of non-capital losses | (534,049)      | (144,548)       |
| Income tax recovery                        | \$ -           | \$ 1,431,124    |

The income tax effects of temporary differences that give rise to significant components of deferred income tax assets and liabilities are as follows:

|                                     | 2010         | 2009         |
|-------------------------------------|--------------|--------------|
| Deferred income tax assets          |              |              |
| Losses available for future periods | \$ 8,421,245 | \$ 6,771,624 |
| Share issuance costs                | 82,718       | 151,853      |
| Marketable securities               | -            | 17,396       |
| Mineral interests                   | -            | 381,406      |
| Deferred income tax liabilities:    |              |              |
| Property, plant and equipment       | (253,132)    | (335,226)    |
|                                     | 8,250,831    | 6,987,053    |
| Less: valuation allowance           | (8,250,831)  | (6,987,053)  |
| Net deferred income tax liability   | \$ -         | \$ -         |

At December 31, 2010, the Company has Canadian non-capital loss carry forwards of approximately \$26,380,000 and United States operating losses of approximately \$5,350,000. The Canadian non-capital loss carry forwards and United States operating losses expire at various dates from 2023 to 2030. The potential income tax benefits related to the Canadian loss carry forwards and certain of the United States operating losses have not been reflected in the accounts.

**13. PROMISSORY NOTES PAYABLE**

|   | 2010         | 2009         |
|---|--------------|--------------|
| Promissory note with a principal balance of US\$500,000, bearing interest at prime per annum, maturing December 16, 2011 due to a director of the Company.  | \$ 500,000   | \$ 529,990   |
| Promissory note with a principal balance of US\$ 3,750,000, bearing interest at 6% per annum, maturing July 3, 2013 and secured by land and water rights.   |              |              |
| During fiscal 2008 the Company entered into a promissory note for US\$6,750,000 as consideration for the acquisition of land and water rights. The Company subsequently made principal payments of US\$3,000,000 consisting of a cash payment of US\$1,000,000 and 4,728,000 units of the Company valued at US\$2,000,000. Each unit consisted of one common share and one-half share purchase warrant exercisable at CDN\$0.75 each and exercisable for a period of two years. | 3,750,000    | 3,941,250    |
|   | 4,250,000    | 4,471,240    |
| Less: current portion   | (500,000)    | -            |
|   | \$ 3,750,000 | \$ 4,471,240 |

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**EMC Metals Corp.**

(An Exploration Stage Company)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2010

(Expressed in Canadian Dollars)

**14. CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL**

On December 3, 2010, the Company issued 18,929,740 common shares at a value of \$0.19 per common share for total proceeds of \$3,596,651 of which \$210,249 was recorded as subscription receivable as it was received subsequent to year-end.

On November 25, 2010, the Company issued 6,100,000 units at a value of \$0.10 per unit for total proceeds of \$610,000. Each unit consisted of one common share and one-half of one share purchase warrant exercisable at \$0.18 expiring on November 25, 2011. The warrants have a calculated total fair value of \$142,358 using the Black-Scholes pricing model with a volatility of 142.52%, risk-free rate of 1.73%, expected life of 1 year, and a dividend rate of 0%.

On June 30, 2010, the Company issued 2,947,702 units at a value of \$0.10 per unit for total proceeds of \$294,770. Each unit consisted of one common share and one-half of one share purchase warrant exercisable at \$0.18 until June 30, 2011. The warrants have a calculated total fair value of \$35,638 using the Black-Scholes pricing model with a volatility of 123.84%, risk-free rate of 1.39%, expected life of 1 year, and a dividend rate of 0%.

On February 17, 2010, the Company issued 2,275,000 units at a value of \$0.20 per unit for total proceeds of \$455,000. Each unit consisted of one common share and one-half of one share purchase warrant exercisable at \$0.25 until February 17, 2011. The warrants have a with a calculated total fair value of \$78,113 using the Black-Scholes pricing model with a volatility of 131.19%, risk-free rate of 1.34%, expected life of 1 year, and a dividend rate of 0%. All of the warrants were exercised subsequent to year-end.

On November 17, 2009, the Company issued 13,000,000 units at a value of \$0.08 per unit for total proceeds of \$1,040,000. Each unit consisted of one common share and one-half of one share purchase warrant. Each full warrant entitles the holder to purchase an additional share at \$0.15 per share until November 17, 2010.

On October 13, 2009, the Company issued 500,000 common shares at a value of \$45,000 for the Fostung Tungsten project.

On August 27, 2009, the Company issued 1,500,000 units at a value of \$0.10 per unit, pursuant to a non-brokered private placement for proceeds of \$150,000. Each unit consisted of one common share and one-half of one share purchase warrant. Each full warrant entitles the holder to purchase an additional share at \$0.15 per share until August 27, 2010.

On May 13, 2009, the Company issued 89,254 common shares at a value of \$0.12 per share to a consultant for settlement of consulting fees for Fury Explorations Ltd. ( Fury ), a subsidiary of GPD, under the plan of Arrangement of spin-out.

On April 21, 2009, the Company issued 51,859 common shares at a value of \$0.10 per share for the Platte River property.

On January 21, 2009, the Company issued 66,784 common shares at a value of \$0.20 per share for the Guijoso property for Fury.

On January 6, 2009, the Company issued 2,147,000 common shares at a value of US\$250,000 for the Adelaide and Tuscarora projects for Golden Predator Mines US Inc., a wholly owned subsidiary of the Company prior to the spin-out.

On November 17, 2008, the Company issued 76,274 common shares in connection with the acquisition of the subsidiary, Great American Minerals Inc.

On October 18, 2008, the Company issued 4,728,000 units to Cosgrave for repayment of a promissory note at a value of US\$2,000,000. Each unit consists of one common share of the Company and one-half of one common share purchase warrant with a two year life and exercisable at \$0.75.

In July 2008, the Company completed a private placement consisting of 2,500,000 common shares at \$2.00 per share for proceeds of \$5,000,000. In connection with this private placement the Company paid a finder's fee of \$250,000.

In January 2008, the Company completed a private placement consisting of 2,822,500 units at \$2.00 per unit for gross proceeds of \$5,645,000. Included in the proceeds was \$3,620,000 received in advance as of December 31, 2007. Each unit consisted of one common share and one half of one share purchase warrant. Each whole warrant entitles the holder to acquire one additional common share at \$3.00 for a period of 12 months.

In November 2007, the Company completed private placements consisting of 17,577,500 units at \$2.00 per unit for proceeds of \$35,155,000. Each unit consisted of one common share and one half of one common share purchase warrant. Each whole warrant entitles the holder to acquire one additional common share at \$3.00 for a period of 12 months following the closing of the placement.

In December 2007, the Company issued 5,390,000 common shares pursuant to the conversion of special warrants. The Company paid \$1,016,074 and issued 100,000 common share valued at \$100,000 as issuance costs and finder's fees. The Company also granted warrants to acquire 300,000 common shares exercisable at \$1.50 expiring September 22, 2008. The warrants were valued at \$99,000 with the Black-Scholes option pricing model using an expected volatility of 115%, life of one year, a risk free interest rate of 4% and a dividend yield of 0%.

In December 2006, the company issued 5,000,000 common shares at \$0.70 per common share for gross proceeds of \$3,500,000.

**EMC Metals Corp.**

(An Exploration Stage Company)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2010

(Expressed in Canadian Dollars)

**14. CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL (Cont d )****Stock Options and Warrants**

The Company established a stock option plan (the Plan ) under which it is authorized to grant options to executive officers and directors, employees and consultants and the number of options granted under the Plan shall not exceed 15% of the shares outstanding. Under the Plan, the exercise period of the options may not exceed five years from the date of grant and vesting is determined by the Board of Directors.

Stock option and share purchase warrant transactions are summarized as follows:

|                                      | Warrants    |                                 | Stock Options |                                 |
|--------------------------------------|-------------|---------------------------------|---------------|---------------------------------|
|                                      | Number      | Weighted average exercise price | Number        | Weighted average exercise price |
| Outstanding, December 31, 2008       | 19,927,354  | \$ 3.00                         | 8,060,684     | \$ 1.01                         |
| Granted                              | 7,250,000   | 0.15                            | 6,748,100     | 0.20                            |
| Retirement of convertible debentures | 2,287,414   | US\$0.30                        | -             | -                               |
| Cancelled                            | (1,669,633) | 2.86                            | (5,173,059)   | 1.28                            |
| Exercised                            | -           | -                               | (101,000)     | 0.20                            |
| Outstanding, December 31, 2009       | 27,795,135  | 1.66                            | 9,534,725     | 0.24                            |
| Granted                              | 5,661,350   | 0.19                            | 6,300,000     | 0.14                            |
| Cancelled                            | (2,364,000) | 0.60                            | (3,040,975)   | 0.27                            |
| Exercised                            | (7,300,000) | 0.15                            | (1,320,000)   | 0.17                            |
| Outstanding, December 31, 2010       | 23,792,485  | 1.82                            | 11,473,750    | 0.18                            |
| Number currently exercisable         | 23,792,485  | \$ 1.82                         | 9,261,875     | \$ 0.19                         |

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Pursuant to the spin-out, the exercise prices of the warrants were adjusted downward by 20%. The exercise prices of the warrants shown in the above table are the adjusted prices. As at December 31, 2010, incentive stock options were outstanding as follows:

|                | Number of<br>options | Exercise<br>Price | Expiry Date       |
|----------------|----------------------|-------------------|-------------------|
| <b>Options</b> | 432,500              | \$ 0.200          | July 26, 2012     |
|                | 5,000                | 1.000             | July 26, 2012     |
|                | 155,000              | 0.200             | October 4, 2012   |
|                | 15,000               | 1.000             | October 4, 2012   |
|                | 202,500              | 0.200             | February 25, 2013 |
|                | 100,000              | 2.000             | February 25, 2013 |
|                | 100,000              | 0.200             | March 4, 2013     |
|                | 165,000              | 0.200             | May 13, 2013      |
|                | 5,000                | 2.150             | May 13, 2013      |
|                | 50,000               | 0.200             | June 2, 2013      |
|                | 30,000               | 0.200             | August 20, 2013   |
|                | 775,000              | 0.200             | October 31, 2013  |
|                | 1,052,500            | 0.300             | January 23, 2014  |
|                | 50,000               | 0.300             | February 26, 2014 |
|                | 1,875,000            | 0.160             | June 16, 2014     |
|                | 225,000              | 0.120             | August 27, 2014   |
|                | 50,000               | 0.160             | December 14, 2014 |
|                | 200,000              | 0.105             | December 16, 2014 |
|                | 1,186,250            | 0.250             | January 4, 2015   |
|                | 4,800,000            | 0.100             | November 5, 2015  |
|                | 11,473,750           |                   |                   |
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**EMC Metals Corp.**

(An Exploration Stage Company)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2010

(Expressed in Canadian Dollars)

**14. CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL (Cont d )****Stock Options and Warrants (Cont d )**

As at December 31, 2010, share purchase warrants were outstanding as follows:

|                 | Number of<br>warrants | Exercise<br>Price | Expiry Date       |
|-----------------|-----------------------|-------------------|-------------------|
| <b>Warrants</b> | 1,737,374             | US\$0.30          | March 4, 2011*    |
|                 | 500,039               | US\$0.30          | March 4, 2011*    |
|                 | 15,893,721            | 2.68              | August 15, 2011   |
|                 | 1,137,500             | 0.25              | February 17, 2011 |
|                 | 1,473,851             | 0.18              | June 30, 2011     |
|                 | 3,050,000             | 0.18              | November 25, 2011 |
|                 | 23,792,485            |                   |                   |

\* Expired subsequent to year-end.

**Stock-based compensation**

During fiscal 2010, the Company recognized stock-based compensation of \$795,268 (2009 - \$1,815,851) in the statement of operations as a result of shares for services and incentive stock options granted and vested. The weighted average fair value of the options granted was \$0.12 (2009 - \$0.20) per share.

The fair value of all compensatory options and warrants granted is estimated on grant date using the Black-Scholes option pricing model. The weighted average assumptions used in calculating the fair values are as follows:

|                         | 2010    | 2009    |
|-------------------------|---------|---------|
| Risk-free interest rate | 2.75%   | 1.82%   |
| Expected life           | 3 years | 3 years |
| Volatility              | 123.93% | 87.01%  |
| Forfeiture rate         | 0.00%   | 0.00%   |
| Dividend rate           | 0.00%   | 0.00%   |

**15. TREASURY STOCK AND WARRANTS**

|                   | Number    | Amount       |
|-------------------|-----------|--------------|
| Treasury shares   | 1,033,333 | \$ 1,343,333 |
| Treasury warrants | 1,550,000 | 744,000      |
|                   | 2,583,333 | \$ 2,087,333 |

Treasury shares and warrants comprise shares and warrants of the Company which cannot be sold without the prior approval of the TSX. The warrants expire August 15, 2011.

**16. SEGMENTED INFORMATION**

The Company's mineral properties are located in Canada, Australia, and the United States and its capital assets geographic information is as follows:

| <b>December 31, 2010</b>      | Australia  | Canada    | United States | Total         |
|-------------------------------|------------|-----------|---------------|---------------|
| Property, plant and equipment | -          | \$ 61,935 | \$ 34,227,938 | \$ 34,289,873 |
| Mineral properties            | \$ 300,000 | -         | 203,020       | 503,020       |
|                               | \$ 300,000 | \$ 61,935 | \$ 34,430,958 | \$ 34,792,893 |

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**EMC Metals Corp.**

(An Exploration Stage Company)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2010

(Expressed in Canadian Dollars)

**16. SEGMENTED INFORMATION (Cont d )**

| December 31, 2009             | Australia | Canada     | United States | Total         |
|-------------------------------|-----------|------------|---------------|---------------|
| Property, plant and equipment | \$ -      | \$ 123,344 | \$ 34,707,179 | \$ 34,830,523 |
| Mineral properties            | -         | -          | 1,546,193     | 1,546,193     |
|                               | \$ -      | \$ 123,344 | \$ 36,253,372 | \$ 36,376,716 |

**17. SUPPLEMENTAL DISCLOSURE WITH RESPECT TO CASH FLOWS**

|  | 2010       | 2009       |
|--|------------|------------|
| Cash paid during the year for interest     | \$ 301,244 | \$ 125,781 |
| Cash paid during the year for income taxes | \$ -       | \$ -       |

Significant non cash transactions for the year ended December 31, 2010 included:

- a) Transferred a net value of \$103,134 of property, plant, and equipment to GPD for a reduction in accounts payable.
- b) Transferred marketable securities with a value of \$131,749 to GPD for a reduction in due to related parties.
- c) The Company sold its subsidiary, Great American Minerals Inc. for \$225,000 to GPD for an increase in due to related parties.
- d) A revaluation of warrants with a fair value of \$198,659 from GPD for a reduction in due to related parties.

Significant non cash transactions for the year ended December 31, 2009 included:

- a) Issued 2,765,643 common shares for various mineral properties with a value of \$367,695.
- b) Issued 7,336,874 common shares valued at \$2,934,752 and granted 1,787,374 share purchase warrants valued at \$49,153 for the retirement of Convertible Debentures and related agent fees.
- c) Transferred \$212,675 in loans receivable to GPD through due to related party.

**18. SUBSEQUENT EVENTS**

Subsequent to December 31, 2010, the Company:

- a)

Issued 300,000 stock options with an exercise price of \$0.39 exercisable until January 18, 2013 to the employees of the Company.

- b) 1,075,000 warrants were exercised for gross proceeds of \$267,625.
- c) 250,000 stock options were exercised for gross proceeds of \$43,000.
- d) Entered into an earn-in agreement with REE Mining AS ( REE ), whereby the Company has an option to earn up to a 100% interest in the Tardal and Evje properties. To earn its interest, the Company must pay REE \$630,000, including an initial cash payment of US\$130,000 (paid) and issue 1,000,000 common shares.

The Company is also required to incur US\$250,000 of exploration work to be completed over 18 months from the date of closing in order to acquire its interest.

- e) Issued 500,000 stock options with an exercise price of \$0.25 exercisable until May 16, 2016.

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**(An Exploration Stage Company)**

**CONSOLIDATED FINANCIAL STATEMENTS**

**QUARTER ENDED MARCH 31, 2011**

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**EMC Metals Corp.**  
**CONSOLIDATED BALANCE SHEETS**  
(Expressed in Canadian Dollars)  
(An Exploration Stage Company)  
(Unaudited)

March 31, 2011      December 31, 2010

**ASSETS**

**Current**

|   |    |                   |    |                   |
|---|----|-------------------|----|-------------------|
| Cash  | \$ | 3,985,358         | \$ | 4,126,424         |
| Investments in trading securities, at fair value (Note 4) |    | 2,250             |    | 2,250             |
| Receivables (net of allowance of \$Nil (2010 - \$Nil))    |    | 11,118            |    | 41,212            |
| Subscription receivable                                   |    | -                 |    | 210,249           |
| Prepaid expenses and deposits                             |    | 264,279           |    | 91,870            |
| <b>Total Current Assets</b>                               |    | <b>4,263,005</b>  |    | <b>4,472,005</b>  |
| <b>Property, plant and equipment</b> (Note 5)             |    | <b>34,221,783</b> |    | <b>34,289,873</b> |
| <b>Mineral interests</b> (Note 6)                         |    | <b>503,020</b>    |    | <b>503,020</b>    |
| <b>Total Assets</b>                                       | \$ | <b>38,987,808</b> | \$ | <b>39,264,898</b> |

**LIABILITIES AND STOCKHOLDERS EQUITY**

**Current**

|  |    |                  |    |                  |
|--|----|------------------|----|------------------|
| Accounts payable and accrued liabilities             | \$ | 451,615          | \$ | 412,849          |
| Derivative liability (Note 8)                        |    | -                |    | 228,741          |
| Current portion of promissory notes payable (Note 9) |    | 486,115          |    | 500,000          |
| <b>Total Current Liabilities</b>                     |    | <b>937,730</b>   |    | <b>1,141,590</b> |
| <b>Promissory notes payable</b> (Note 9)             |    | <b>3,645,863</b> |    | <b>3,750,000</b> |
| <b>Total Liabilities</b>                             |    | <b>4,583,593</b> |    | <b>4,891,590</b> |

**Stockholders Equity**

|   |  |                   |  |                   |
|---|--|-------------------|--|-------------------|
| Capital stock (Note 10) (Authorized: Unlimited number of shares; Issued and |  |                   |  |                   |
| outstanding: 150,384,412 (2010 149,059,412))                                |  | 88,458,320        |  | 88,138,487        |
| Treasury stock (Note 11)  |  | (2,087,333)       |  | (2,087,333)       |
| Additional paid in capital (Note 10)  |  | 2,061,869         |  | 2,003,345         |
| Deficit accumulated during the exploration stage                            |  | (54,028,641)      |  | (53,681,191)      |
| <b>Total Shareholders Equity</b>  |  | <b>34,404,215</b> |  | <b>34,373,308</b> |

|  |    |            |    |            |
|--|----|------------|----|------------|
| <b>Total Liabilities and Shareholders Equity</b>     | \$ | 38,987,808 | \$ | 39,264,898 |
| <b>Nature and continuance of operations</b> (Note 1) |    |            |    |            |
| <b>Subsequent events</b> (Note 14)                   |    |            |    |            |

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

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**EMC Metals Corp.****CONSOLIDATED STATEMENTS OF OPERATIONS**

(Expressed in Canadian Dollars)

(An Exploration Stage Company)

(Unaudited)

|   | Cumulative amounts<br>from incorporation<br>on July 17, 2006 to<br>March 31, 2011 | Quarter ended<br>March 31, 2011 | Quarter ended<br>March 31, 2010 |
|---|---|---------------------------------|---------------------------------|
| <b>EXPENSES</b>                                       |   |                                 |                                 |
| Amortization  | \$ 2,044,903  | \$ 88,638                       | \$ 126,705                      |
| Consulting  | 2,256,925   | 81,299                          | 49,800                          |
| Exploration   | 12,409,199  | 63,491                          | 21,251                          |
| General and administrative                            | 6,684,571   | 37,200                          | 103,933                         |
| Insurance   | 903,144   | 12,367                          | 34,862                          |
| Professional fees                                     | 2,859,138   | 22,336                          | 56,558                          |
| Research and development                              | 3,474,068   | -                               | -                               |
| Salaries and benefits                                 | 6,019,556   | 150,655                         | 112,524                         |
| Stock-based compensation (Note 10)                    | 5,188,508   | 67,732                          | 161,964                         |
| Travel and entertainment                              | 1,482,653   | 58,879                          | 36,848                          |
| <b>Loss before other items</b>                        | <b>(43,322,665)</b>   | <b>(582,597)</b>                | <b>(704,445)</b>                |
| <b>OTHER ITEMS</b>                                    |   |                                 |                                 |
| Foreign exchange gain                                 | 660,814   | 77,646                          | 193,605                         |
| Gain on transfer of marketable securities             | 206,974   | -                               | -                               |
| Gain on settlement of convertible debentures          | 1,449,948   | -                               | -                               |
| Gain on sale of marketable securities                 | 1,836,011   | -                               | -                               |
| Write-off of mineral interests                        | (18,091,761)  | -                               | -                               |
| Gain on insurance proceeds                            | 972,761   | -                               | -                               |
| Interest income (expense)                             | 398,986   | (71,240)                        | (117,093)                       |
| Other income  | 502,965   | -                               | -                               |
| Gain on disposition of assets                         | 476,682   | -                               | -                               |
| Change in fair value of derivative liability (Note 8) | 485,358   | 228,741                         | (22,874)                        |
| Unrealized loss on marketable securities              | (3,269,033)   | -                               | (67,249)                        |
|   | (14,370,295)  | 235,147                         | (13,611)                        |
| <b>Loss before income taxes</b>                       | <b>(57,692,960)</b>   | <b>(347,450)</b>                | <b>(718,056)</b>                |
| <b>Deferred income tax recovery</b>                   | <b>6,522,138</b>  | <b>-</b>                        | <b>-</b>                        |
| <b>Loss and comprehensive loss for the period</b>     | <b>\$ (51,170,822)</b>  | <b>\$ (347,450)</b>             | <b>\$ (718,056)</b>             |

|  |    |        |    |        |
|--|----|--------|----|--------|
| <b>Basic and diluted loss per common share</b> | \$ | (0.00) | \$ | (0.01) |
|--|----|--------|----|--------|

|   |  |             |             |
|---|--|-------------|-------------|
| <b>Weighted average number of common shares outstanding</b> |  | 149,863,023 | 113,367,664 |
|---|--|-------------|-------------|

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

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**EMC Metals Corp.**

(An Exploration Stage Company)

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

(Expressed in Canadian Dollars)

(Unaudited)

|   | Cumulative amounts<br>from incorporation<br>on July 17, 2006 to<br>March 31, 2011 | Quarter ended<br>March 31, 2011 | Quarter ended<br>March 31, 2010 |
|---|---|---------------------------------|---------------------------------|
| <b>CASH FLOWS FROM OPERATING ACTIVITIES</b>                     |   |                                 |                                 |
| Loss for the period   | \$ (51,170,822)   | \$ (347,450)                    | \$ (695,182)                    |
| Items not affecting cash:                                       |   |                                 |                                 |
| Amortization  | 2,044,903   | 88,638                          | 126,705                         |
| Research and development  | 3,474,068   | -                               | -                               |
| Consulting paid with common shares                              | 10,711  | -                               | -                               |
| Gain on disposal of assets                                      | (476,682)   | -                               | -                               |
| Convertible debenture costs                                     | (1,312,878)   | -                               | -                               |
| Unrealized foreign exchange                                     | 596,840   | (118,022)                       | (23,545)                        |
| Stock-based compensation  | 5,188,508   | 67,732                          | 161,964                         |
| Unrealized loss on marketable securities                        | 3,269,033   | -                               | 67,249                          |
| Realized gain on marketable securities                          | (1,836,011)   | -                               | -                               |
| Write-off of mineral properties                                 | 18,091,761  | -                               | -                               |
| Realized gain on transfer of marketable securities              | (206,974)   | -                               | -                               |
| Change in fair value of derivative liability                    | (485,358)   | (228,741)                       | -                               |
| Future income tax recovery                                      | (6,522,138)   | -                               | -                               |
|   | (29,335,039)  | (537,843)                       | (362,809)                       |
| Changes in non-cash working capital items:                      |   |                                 |                                 |
| Decrease (increase) in receivables                              | 35,379  | 30,094                          | (10,757)                        |
| (Increase) decrease in prepaid expenses                         | (247,035)   | (172,409)                       | 68,917                          |
| Proceeds from sale of marketable securities, net                | (4,135,798)   | -                               | -                               |
| Increase (decrease) in accounts payable and accrued liabilities | (809,627)   | 38,766                          | (812,077)                       |
| Increase in due to related parties                              | 1,163,028   | -                               | 37,652                          |
| Asset retirement obligations                                    | (1,065,891)   | -                               | -                               |
|   | (34,394,983)  | (641,392)                       | (1,079,074)                     |
| <b>CASH FLOWS FROM INVESTING ACTIVITIES</b>                     |   |                                 |                                 |
| Cash acquired from subsidiary                                   | 4,857,012   | -                               | -                               |
| Cash paid for Subsidiary  | (11,359,511)  | -                               | -                               |
| Spin-out of Golden Predator Corp.                               | (76,388)  | -                               | -                               |

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|   |              |          |   |
|---|--------------|----------|---|
| Reclamation bonds                                   | 795,785      | -        | - |
| Proceeds from sale of property, plant and equipment | 660,336      | -        | - |
| Purchase of property, plant and equipment           | (21,235,661) | (20,548) | - |
| Additions to unproven mineral interests             | (2,991,515)  | -        | - |
|   | (29,349,942) | (20,548) | - |

**CASH FLOWS FROM FINANCING ACTIVITIES**

|                             |             |         |         |
|-----------------------------|-------------|---------|---------|
| Common shares issued        | 55,521,421  | 210,249 | 455,000 |
| Share issuance costs        | (1,277,713) | -       | -       |
| Special warrants            | 13,000,000  | -       | -       |
| Options exercised           | 384,900     | 43,000  | 52,800  |
| Warrants exercised          | 11,111,875  | 267,625 | 346,875 |
| Notes payable               | (9,966,000) | -       | -       |
| Payment of promissory note  | (1,260,700) | -       | -       |
| Advances from related party | 216,500     | -       | -       |
| Loans advanced to Midway    | (2,000,000) | -       | -       |
| Loan repayment from Midway  | 2,000,000   | -       | -       |
|                             | 67,730,283  | 520,874 | 854,675 |

**Change in cash during the period** 3,985,358 (141,066) (224,399)

**Cash, beginning of period** - 4,126,424 584,436

**Cash, end of period** \$ 3,985,358 \$ 3,985,358 \$ 360,037

**Supplemental disclosure with respect to cash flows** (Note 12)

**EMC Metals Corp.**

(An Exploration Stage Company)

**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY**

(Expressed in Canadian Dollars)

(Unaudited)

|  | Capital Stock       |             | Additional<br>Paid in<br>Capital | Treasury<br>Stock | Deficit<br>Accumulated<br>During the<br>Exploration<br>Stage | Total       |
|--|---------------------|-------------|----------------------------------|-------------------|--|-------------|
|  | Number of<br>Shares | Amount      |                                  |                   |  |             |
|  | \$                  | \$          | \$                               | \$                | \$   | \$          |
| <b>Balance, July<br/>17, 2006</b>  | -                   | -           | -                                | -                 | -  | -           |
| Private<br>placements  | 5,000,000           | 3,500,000   | -                                | -                 | -  | 3,500,000   |
| Excess of<br>exchange<br>amount over<br>carrying<br>amount of<br>Springer<br>Mining<br>Company | -                   | -           | -                                | -                 | (2,857,819)  | (2,857,819) |
| Loss for the<br>year   | -                   | -           | -                                | -                 | (357,670)  | (357,670)   |
| <b>Balance,<br/>December 31,<br/>2006</b>  | 5,000,000           | 3,500,000   | -                                | -                 | (3,215,489)  | 284,511     |
| Private<br>placements  | 17,577,500          | 35,155,000  | -                                | -                 | -  | 35,155,000  |
| Conversion of<br>special<br>warrants   | 5,390,000           | 5,390,000   | -                                | -                 | -  | 5,390,000   |
| Exercise of<br>warrants  | 50,000              | 75,000      | -                                | -                 | -  | 75,000      |
| Share<br>issuance costs<br>broker's fees   | -                   | (1,215,074) | 99,000                           | -                 | -  | (1,116,074) |
| Share<br>issuance costs<br>shares issued   | 100,000             | 100,000     | -                                | -                 | -  | 100,000     |
| Shares issued<br>for mineral<br>properties   | 100,000             | 100,000     | -                                | -                 | -  | 100,000     |
| Stock-based<br>compensation  | 40,000              | 40,000      | 489,562                          | -                 | -  | 529,562     |
| Loss for the<br>year   | -                   | -           | -                                | -                 | (6,128,912)  | (6,128,912) |



|  |            |            |            |             |              |              |
|--|------------|------------|------------|-------------|--------------|--------------|
| <b>Balance,<br/>December 31,<br/>2007</b>      | 28,257,500 | 43,144,926 | 588,562    | -           | (9,344,401)  | 34,389,087   |
| Private placements                             | 5,322,500  | 10,645,000 | -          | -           | -            | 10,645,000   |
| Conversion of special warrants                 | 7,610,000  | 7,610,000  | -          | -           | -            | 7,610,000    |
| Share issuance costs                           |            |            |            |             |              |              |
| broker's fees                                  | -          | (261,638)  | -          | -           | -            | (261,638)    |
| Shares issued for mineral properties           | 110,000    | 210,000    | -          | -           | -            | 210,000      |
| Acquisition of Gold Standard Royalty Corp.     | 2,050,000  | 4,100,000  | 143,017    | -           | -            | 4,243,017    |
| Acquisition of Great American Minerals Inc.    | 1,045,775  | 2,091,550  | 426,672    | -           | -            | 2,518,222    |
| Acquisition of Fury Explorations Ltd.          | 10,595,814 | 13,774,558 | 7,787,783  | (2,087,333) | -            | 19,475,008   |
| Exercise of stock options                      | 6,637,224  | 10,027,915 | (184,265)  | -           | -            | 9,843,650    |
| Shares issued for repayment of promissory note | 4,728,000  | 2,364,000  | -          | -           | -            | 2,364,000    |
| Stock-based compensation                       | -          | -          | 2,324,458  | -           | -            | 2,324,458    |
| Loss for the year                              | -          | -          | -          | -           | (17,968,454) | (17,968,454) |
| <b>Balance,<br/>December 31,<br/>2008</b>      | 66,356,813 | 93,706,311 | 11,086,227 | (2,087,333) | (27,312,855) | 75,392,350   |
| Private placements                             | 14,500,000 | 1,190,000  | -          | -           | -            | 1,190,000    |
| Exercise of stock options                      | 101,000    | 126,186    | (105,986)  | -           | -            | 20,200       |
| Shares issued for mineral properties           | 2,765,643  | 367,695    | -          | -           | -            | 367,695      |
| Settlement of convertible debentures           | 7,336,874  | 2,934,752  | 62,903     | -           | -            | 2,997,655    |
| Shares issued for consulting                   | 87,254     | 10,711     | -          | -           | -            | 10,711       |
|  | 19,037,386 | 2,094,112  | -          | -           | -            | 2,094,112    |

|  |             |              |              |             |              |              |
|--|-------------|--------------|--------------|-------------|--------------|--------------|
| Shares issued for acquisition of TTS     |             |              |              |             |              |              |
| Stock-based compensation before spin-out | -           | -            | 836,240      | -           | -            | 836,240      |
| Spin-out of GPD                          | -           | (18,540,194) | (11,879,384) | -           | -            | (30,419,578) |
| Stock-based compensation after spin-out  | -           | -            | 979,611      | -           | -            | 979,611      |
| Loss for the year                        | -           | -            | -            | -           | (21,645,581) | (21,645,581) |
| <b>Balance, December 31, 2009</b>        | 110,186,970 | 81,889,573   | 979,611      | (2,087,333) | (48,958,436) | 31,823,415   |
| Private placements                       | 30,252,442  | 4,700,312    | 454,768      | -           | -            | 5,155,080    |
| Exercise of stock options                | 1,320,000   | 456,602      | (226,302)    | -           | -            | 230,300      |
| Exercise of warrants                     | 7,300,000   | 1,092,000    | -            | -           | -            | 1,092,000    |
| Stock-based compensation                 | -           | -            | 795,268      | -           | -            | 795,268      |
| Loss for the year                        | -           | -            | -            | -           | (4,722,755)  | (4,722,755)  |
| <b>Balance, December 31, 2010</b>        | 149,059,412 | 88,138,487   | 2,003,345    | (2,087,333) | (53,681,191) | 34,373,308   |
| Exercise of stock options                | 250,000     | 52,208       | (9,208)      | -           | -            | 43,000       |
| Exercise of warrants                     | 1,075,000   | 267,625      | -            | -           | -            | 267,625      |
| Stock-based compensation                 | -           | -            | 67,732       | -           | -            | 67,732       |
| Loss for the year                        | -           | -            | -            | -           | (347,450)    | (347,450)    |
| <b>Balance, March 31, 2011</b>           | 150,384,412 | 88,458,320   | 2,061,869    | (2,087,333) | (54,028,641) | 34,404,215   |

**EMC Metals Corp.**

(An Exploration Stage Company)

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

March 31, 2011

(Expressed in Canadian Dollars)

(Unaudited)

**1. NATURE AND CONTINUANCE OF OPERATIONS**

EMC Metals Corp. (the Company) is incorporated under the laws of the Province of British Columbia. The Company is focused on specialty metals exploration and production and has recently acquired various metallurgical technologies and licenses that it is utilizing to gain access to a number of specialty metals opportunities.

The Company's principal properties are located in the state of Nevada, with additional properties located in the province of Ontario and in Australia. The Company's principal asset, the Springer Tungsten mill, is currently on care and maintenance pending a sustained improvement in tungsten prices. To March 31, 2011, the Company has not commenced production and has generated no revenue. The Company's remaining properties are in the exploration or pre-exploration stage. As such, the Company is in the exploration stage and anticipates incurring significant expenditures prior to commencement of contract milling operations.

These consolidated financial statements have been prepared on a going concern basis that contemplates the realization of assets and discharge of liabilities at their carrying values in the normal course of business for the foreseeable future. These financial statements do not reflect any adjustments that may be necessary if the Company is unable to continue as a going concern.

The Company currently earns no operating revenues and will require additional capital in order to refit its Springer tungsten mill and earn its 50% interest in the Nyngan property. The Company's ability to continue as a going concern is uncertain and is dependent upon the generation of profits from mineral properties, obtaining additional financing or maintaining continued support from its shareholders and creditors. The Company is currently working on securing additional financing to meet its needs; however there is no guarantee that these efforts will be successful. In the event that additional financial support is not received or operating profits are not generated, the carrying values of the Company's assets may be adversely affected. The inability to raise additional financing may affect the future assessment of the Company as a going concern.

**2. SIGNIFICANT ACCOUNTING POLICIES**

The accompanying unaudited interim financial statements have been prepared by the Company in conformity with accounting principles generally accepted in the United States of America ( US GAAP ) applicable to interim financial information and with the rules and regulations of the United States Securities and Exchange Commission. Accordingly, certain information and note disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed, or omitted, pursuant to such rules and regulations. In the opinion of management the unaudited interim financial statements include all adjustments necessary for the fair presentation of the results of the interim periods presented. All adjustments are of a normal recurring nature, except as otherwise noted below. These financial statements should be read in conjunction with the Company's audited consolidated financial statements and notes thereto for the year ended December 31, 2010. The results of operations for the interim periods are not necessarily indicative of the results of operations for any other interim period or for a full fiscal year.

**Fair value of financial assets and liabilities**

The Company measures the fair value of financial assets and liabilities based on US GAAP guidance which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements.

The Company classifies financial assets and liabilities as held-for-trading, available-for-sale, held-to-maturity, loans and receivables or other financial liabilities depending on their nature. Financial assets and financial liabilities are recognized at fair value on their initial recognition, except for those arising from certain related party transactions which are accounted for at the transferor's carrying amount or exchange amount.

Financial assets and liabilities classified as held-for-trading are measured at fair value, with gains and losses recognized in net income. Financial assets classified as held-to-maturity, loans and receivables, and financial liabilities other than those classified as held-for-trading are measured at amortized cost, using the effective interest method of amortization. Financial assets classified as available-for-sale are measured at fair value, with unrealized gains and losses being recognized as other comprehensive income until realized, or if an unrealized loss is considered other than temporary, the unrealized loss is recorded in income.

Financial instruments, including receivables, subscriptions receivable, accounts payable and accrued liabilities, due to related parties, and promissory notes payable are carried at cost, which management believes approximates fair value due to the short term nature of these instruments. Investments in trading securities are classified as held for trading, with unrealized gains and losses being recognized in income.

The following table presents information about the assets that are measured at fair value on a recurring basis as of March 31, 2011, and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value. In general, fair values determined by Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets. Fair values determined by Level 2 inputs utilize data points that are observable such as quoted prices, interest rates and yield curves. Fair values determined by Level 3 inputs are unobservable data points for the asset or liability, and included situations where there is little, if any, market activity for the asset:

**EMC Metals Corp.**

(An Exploration Stage Company)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

March 31, 2011

(Expressed in Canadian Dollars)

(Unaudited)

**2. SIGNIFICANT ACCOUNTING POLICIES** (Cont d )

|                                   | March 31,<br>2011 | Quoted Prices<br>in Active<br>Markets<br>(Level 1) | Significant<br>Other<br>Observable<br>Inputs<br>(Level 2) | Significant<br>Unobservable<br>Inputs<br>(Level 3) |
|-----------------------------------|-------------------|--|---|--|
| <b>Assets:</b>                    |                   |  |   |  |
| Cash                              | \$ 3,985,358      | \$ 3,985,358                                       | \$  | \$   |
| Investments in trading securities | \$ 2,250          | \$ 2,250   | \$  | \$   |
| Total                             | \$ 3,987,608      | \$ 3,987,608                                       | \$  | \$   |

The fair values of cash and investments in trading securities are determined through market, observable and corroborated sources.

**3. RECENT ACCOUNTING PRONOUNCEMENTS**

In April 2010, the Financial Accounting Standards Board ( FASB ) issued ASU 2010-13, Compensation Stock Compensation (Topic 718), amending ASC 718. ASU 2010-13 clarifies that a stock-based payment award with an exercise price denominated in the currency of a market in which the entity's equity securities trade should not be classified as a liability if it otherwise qualifies as equity. ASU 2010-13 is effective for interim and annual reporting periods beginning after December 15, 2010 (January 1, 2011 for the Company). The Company is currently evaluating the impact of ASU 2010-09, but does not expect its adoption to have a material impact on the Company's financial reporting disclosures.

In December 2010, the FASB issued ASU 2010-29, which contains updated accounting guidance to clarify the acquisition date that should be used for reporting pro forma financial information when comparative financial statements are issued. This update requires that a company should disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. This update also requires disclosure of the nature and amount of material, nonrecurring pro forma adjustments. The provisions of this update, which are to be applied prospectively, are effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010, with early adoption permitted. The impact of this update on the Company's consolidated financial statements will depend on the size and nature of future business combinations.

**4. INVESTMENTS IN TRADING SECURITIES**

At March 31, 2011, the Company held investments classified as trading securities, which consisted of various equity securities. All trading securities are carried at fair value. As of March 31, 2011, the fair value of trading securities was \$2,250 (2010 \$2,250).

**5. PROPERTY, PLANT AND EQUIPMENT**

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|                              | March 31, 2011 |                          |                | December 31, 2010 |                          |                |
|------------------------------|----------------|--------------------------|----------------|-------------------|--------------------------|----------------|
|                              | Cost           | Accumulated Amortization | Net Book Value | Cost              | Accumulated Amortization | Net Book Value |
| Land and water rights        | \$ 7,972,291   | \$ -                     | \$ 7,972,291   | \$ 7,972,291      | \$ -                     | \$ 7,972,291   |
| Plant and equipment          | 25,623,032     | -                        | 25,623,032     | 25,618,528        | -                        | 25,618,528     |
| Cosgrave plant and equipment | 375,763        | 246,943                  | 128,820        | 375,763           | 228,155                  | 147,608        |
| Building                     | 222,685        | 38,087                   | 184,598        | 222,685           | 35,304                   | 187,381        |
| Automobiles                  | 188,586        | 173,081                  | 15,505         | 172,542           | 172,542                  | -              |
| Computer equipment           | 364,697        | 362,408                  | 2,289          | 364,697           | 357,985                  | 6,712          |
| Small tools and equipment    | 963,537        | 728,659                  | 234,878        | 963,537           | 680,482                  | 283,055        |
| Office equipment             | 278,561        | 218,191                  | 60,370         | 278,561           | 204,263                  | 74,298         |
| Leasehold improvements       | 13,083         | 13,083                   | -              | 13,083            | 13,083                   | -              |
|                              | \$ 36,002,235  | 1,780,452                | 34,221,783     | \$ 35,981,687     | \$ 1,691,814             | \$ 34,289,873  |

Land and water rights are in respect of the Cosgrave property in Pershing County, Nevada. The plant and equipment is comprised of the Springer Plant and Mill in Nevada which is currently under care and maintenance.

**EMC Metals Corp.**

(An Exploration Stage Company)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

March 31, 2011

(Expressed in Canadian Dollars)

(Unaudited)

**6. MINERAL INTERESTS**

| March 31, 2011                 | Other             | Tungsten          | Total             |
|--------------------------------|-------------------|-------------------|-------------------|
| <b>Acquisition costs</b>       |                   |                   |                   |
| Balance, December 31, 2010     | \$ -              | \$ 203,020        | \$ 203,020        |
| Additions                      | 300,000           | -                 | 300,000           |
| <b>Balance, March 31, 2011</b> | <b>\$ 300,000</b> | <b>\$ 203,020</b> | <b>\$ 503,020</b> |

| December 31, 2010                 | Other             | Gold         | Tungsten          | Total             |
|-----------------------------------|-------------------|--------------|-------------------|-------------------|
| <b>Acquisition costs</b>          |                   |              |                   |                   |
| Balance, December 31, 2009        | \$ -              | \$ 1,343,173 | \$ 203,020        | \$ 1,546,193      |
| Additions                         | 300,000           | -            | -                 | 300,000           |
| Written-off                       | -                 | (1,138,432)  | -                 | (1,138,432)       |
| Sold                              | -                 | (204,741)    | -                 | (204,741)         |
| <b>Balance, December 31, 2010</b> | <b>\$ 300,000</b> | <b>\$ -</b>  | <b>\$ 203,020</b> | <b>\$ 503,020</b> |

Title to mineral property interests involves certain inherent risks due to the difficulties of determining the validity of certain claims as well as the potential for problems arising from the frequently ambiguous conveyancing history characteristic of many mineral property interests. The Company has investigated title to all of its mineral property interests and, to the best of its knowledge, title to all of its properties is in good standing.

**Impairment of mineral properties**

During the year ended December 31, 2010, the Company has reviewed the carrying value of its mineral properties for impairment and compared the carrying value to the future cash flows in the case of its tungsten properties, and fair market value in respect of its remaining properties, and has written down its gold properties by \$1,138,432. The Company sold these properties during the year.

**TUNGSTEN PROPERTY***Springer Property*

On November 21, 2006, the Company acquired all outstanding and issued shares of Springer Mining Company ( Springer ). Included in the assets of Springer and allocated to property, plant and equipment (Note 5) are the Springer Mine and Mill located in Pershing County, Nevada.

**SCANDIUM PROPERTY**

*Nyngan, New South Wales Property*

On February 5, 2010, the Company entered in to an agreement with Jervois Mining Limited ( Jervois ) whereby it would acquire a 50% interest in certain properties located in New South Wales, Australia. In order for the Company to earn its interest which is subject to a 2% NSR, the Company paid the sum of \$300,000 into escrow, that was released to Jervois upon satisfaction of certain conditions precedent, including verification of title to the Nyngan property and approval of the Toronto Stock Exchange, and must:

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**EMC Metals Corp.**

(An Exploration Stage Company)

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

March 31, 2011

(Expressed in Canadian Dollars)

(Unaudited)

**6. MINERAL INTERESTS** (*Cont d* )

**SCANDIUM PROPERTY** (*Cont d* )

*Nyngan, New South Wales Property* (*Cont d* )

- a) Incur exploration and metallurgical work of A\$500,000 (CAD\$466,000) within 180 business days of the conditions precedent being satisfied, or pay cash in lieu thereof. On September 29, 2010 the Company received a six month extension to complete its exploration commitment. In the event that the Company wishes to continue the joint venture, the Company must deliver a feasibility study within 480 (Extended to February 28, 2012) business days of the conditions precedent being satisfied, failing which the Agreement will terminate.
- b) Upon delivering the feasibility study to Jervois, pay to Jervois an additional A\$1,300,000 plus GST at which time it will be granted a 50% interest in the joint venture. The JV Agreement provides for straight-line dilution, with interests diluted below 10% being converted into a 2% NSR.

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**EMC Metals Corp.**

(An Exploration Stage Company)

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

March 31, 2011

(Expressed in Canadian Dollars)

(Unaudited)

**9. PROMISSORY NOTES PAYABLE**

|   | 2011         | 2010         |
|---|--------------|--------------|
| Promissory note with a principal balance of US\$500,000, bearing interest at prime per annum, maturing December 16, 2011 due to a director of the Company.  | \$ 486,115   | \$ 500,000   |
| Promissory note with a principal balance of US\$ 3,750,000, bearing interest at 6% per annum, maturing July 3, 2013 and secured by land and water rights.   |              |              |
| During fiscal 2008 the Company entered into a promissory note for US\$6,750,000 as consideration for the acquisition of land and water rights. The Company subsequently made principal payments of US\$3,000,000 consisting of a cash payment of US\$1,000,000 and 4,728,000 units of the Company valued at US\$2,000,000. Each unit consisted of one common share and one-half share purchase warrant exercisable at CDN\$0.75 each and exercisable for a period of two years. | 3,645,863    | 3,750,000    |
|   | 4,131,978    | 4,250,000    |
| Less: current portion   | (486,115)    | (500,000)    |
|   | \$ 3,645,863 | \$ 3,750,000 |

**10. CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL**

On December 3, 2010, the Company issued 18,929,740 common shares at a value of \$0.19 per common share for total proceeds of \$3,596,651 of which \$210,249 was recorded as subscription receivable as it was received subsequent to year-end.

On November 25, 2010, the Company issued 6,100,000 units at a value of \$0.10 per unit for total proceeds of \$610,000. Each unit consisted of one common share and one-half of one share purchase warrant exercisable at \$0.18 expiring on November 25, 2011. The warrants have a calculated total fair value of \$142,358 using the Black-Scholes pricing model with a volatility of 142.52%, risk-free rate of 1.73%, expected life of 1 year, and a dividend rate of 0%.

On June 30, 2010, the Company issued 2,947,702 units at a value of \$0.10 per unit for total proceeds of \$294,770. Each unit consisted of one common share and one-half of one share purchase warrant exercisable at \$0.18 until June 30, 2011. The warrants have a calculated total fair value of \$35,638 using the Black-Scholes pricing model with a volatility of 123.84%, risk-free rate of 1.39%, expected life of 1 year, and a dividend rate

of 0%.

On February 17, 2010, the Company issued 2,275,000 units at a value of \$0.20 per unit for total proceeds of \$455,000. Each unit consisted of one common share and one-half of one share purchase warrant exercisable at \$0.25 until February 17, 2011. The warrants have a with a calculated total fair value of \$78,113 using the Black-Scholes pricing model with a volatility of 131.19%, risk-free rate of 1.34%, expected life of 1 year, and a dividend rate of 0%. All of the warrants were exercised subsequent to year-end.

On November 17, 2009, the Company issued 13,000,000 units at a value of \$0.08 per unit for total proceeds of \$1,040,000. Each unit consisted of one common share and one-half of one share purchase warrant. Each full warrant entitles the holder to purchase an additional share at \$0.15 per share until November 17, 2010.

On October 13, 2009, the Company issued 500,000 common shares at a value of \$45,000 for the Fostung Tungsten project.

On August 27, 2009, the Company issued 1,500,000 units at a value of \$0.10 per unit, pursuant to a non-brokered private placement for proceeds of \$150,000. Each unit consisted of one common share and one-half of one share purchase warrant. Each full warrant entitles the holder to purchase an additional share at \$0.15 per share until August 27, 2010.

On May 13, 2009, the Company issued 89,254 common shares at a value of \$0.12 per share to a consultant for settlement of consulting fees for Fury Explorations Ltd. ( Fury ), a subsidiary of GPD, under the plan of Arrangement of spin-out.

On April 21, 2009, the Company issued 51,859 common shares at a value of \$0.10 per share for the Platte River property.

On January 21, 2009, the Company issued 66,784 common shares at a value of \$0.20 per share for the Guijoso property for Fury. On January 6, 2009, the Company issued 2,147,000 common shares at a value of US\$250,000 for the Adelaide and Tuscarora projects for Golden Predator Mines US Inc., a wholly owned subsidiary of the Company prior to the spin-out.

On November 17, 2008, the Company issued 76,274 common shares in connection with the acquisition of the subsidiary, Great American Minerals Inc.

**EMC Metals Corp.**

(An Exploration Stage Company)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

March 31, 2011

(Expressed in Canadian Dollars)

(Unaudited)

**10. CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL** (Cont d )

On October 18, 2008, the Company issued 4,728,000 units to Cosgrave for repayment of a promissory note at a value of US\$2,000,000. Each unit consists of one common share of the Company and one-half of one common share purchase warrant with a two year life and exercisable at \$0.75.

In July 2008, the Company completed a private placement consisting of 2,500,000 common shares at \$2.00 per share for proceeds of \$5,000,000. In connection with this private placement the Company paid a finder's fee of \$250,000.

In January 2008, the Company completed a private placement consisting of 2,822,500 units at \$2.00 per unit for gross proceeds of \$5,645,000. Included in the proceeds was \$3,620,000 received in advance as of December 31, 2007. Each unit consisted of one common share and one half of one share purchase warrant. Each whole warrant entitles the holder to acquire one additional common share at \$3.00 for a period of 12 months.

In November 2007, the Company completed private placements consisting of 17,577,500 units at \$2.00 per unit for proceeds of \$35,155,000. Each unit consisted of one common share and one half of one common share purchase warrant. Each whole warrant entitles the holder to acquire one additional common share at \$3.00 for a period of 12 months following the closing of the placement.

In December 2007, the Company issued 5,390,000 common shares pursuant to the conversion of special warrants. The Company paid \$1,016,074 and issued 100,000 common share valued at \$100,000 as issuance costs and finder's fees. The Company also granted warrants to acquire 300,000 common shares exercisable at \$1.50 expiring September 22, 2008. The warrants were valued at \$99,000 with the Black-Scholes option pricing model using an expected volatility of 115%, life of one year, a risk free interest rate of 4% and a dividend yield of 0%.

In December 2006, the company issued 5,000,000 common shares at \$0.70 per common share for gross proceeds of \$3,500,000.

**Stock Options and Warrants**

The Company established a stock option plan (the Plan) under which it is authorized to grant options to executive officers and directors, employees and consultants and the number of options granted under the Plan shall not exceed 15% of the shares outstanding. Under the Plan, the exercise period of the options may not exceed five years from the date of grant and vesting is determined by the Board of Directors.

Stock option and share purchase warrant transactions are summarized as follows:

| Warrants |                                 | Stock Options |                                 |
|----------|---------------------------------|---------------|---------------------------------|
| Number   | Weighted average exercise price | Number        | Weighted average exercise price |

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|                                      |             |      |             |      |
|--------------------------------------|-------------|------|-------------|------|
| Outstanding,<br>December 31,<br>2009 | 27,795,135  | 1.66 | 9,534,725   | 0.24 |
| Granted                              | 5,661,350   | 0.19 | 6,300,000   | 0.14 |
| Cancelled                            | (2,364,000) | 0.60 | (3,040,975) | 0.27 |
| Exercised                            | (7,300,000) | 0.15 | (1,320,000) | 0.17 |
| Outstanding,<br>December 31,<br>2010 | 23,792,485  | 1.82 | 11,473,750  | 0.18 |
| Granted                              | -           | -    | 300,000     | 0.39 |
| Cancelled                            | (2,324,913) | 0.30 | (15,000)    | 0.25 |
| Exercised                            | (1,075,000) | 0.25 | (250,000)   | 0.17 |
| Outstanding,<br>March 31, 2011       | 20,392,572  | 2.13 | 11,508,750  | 0.19 |
| Number<br>currently<br>exercisable   | 20,392,572  | 2.13 | 9,653,438   | 0.20 |

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**EMC Metals Corp.**

(An Exploration Stage Company)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

March 31, 2011

(Expressed in Canadian Dollars)

(Unaudited)

**10. CAPITAL STOCK AND ADDITIONAL PAID IN CAPITAL (Cont d ) Stock Options and Warrants**  
(Cont d )

As at March 31, 2011, incentive stock options were outstanding as follows:

|                | Number of<br>options | Exercise<br>Price | Expiry Date       |
|----------------|----------------------|-------------------|-------------------|
| <b>Options</b> | 357,500              | \$ 0.200          | July 26, 2012     |
|                | 5,000                | 1.000             | July 26, 2012     |
|                | 155,000              | 0.200             | October 4, 2012   |
|                | 15,000               | 1.000             | October 4, 2012   |
|                | 202,500              | 0.200             | February 25, 2013 |
|                | 100,000              | 2.000             | February 25, 2013 |
|                | 100,000              | 0.200             | March 4, 2013     |
|                | 165,000              | 0.200             | May 13, 2013      |
|                | 5,000                | 2.150             | May 13, 2013      |
|                | 50,000               | 0.200             | June 2, 2013      |
|                | 30,000               | 0.200             | August 20, 2013   |
|                | 775,000              | 0.200             | October 31, 2013  |
|                | 1,052,500            | 0.300             | January 23, 2014  |
|                | 50,000               | 0.300             | February 26, 2014 |
|                | 1,700,000            | 0.160             | June 16, 2014     |
|                | 225,000              | 0.120             | August 27, 2014   |
|                | 50,000               | 0.160             | December 14, 2014 |
|                | 200,000              | 0.105             | December 16, 2014 |
|                | 1,171,250            | 0.250             | January 4, 2015   |
|                | 4,800,000            | 0.100             | November 5, 2015  |
|                | 300,000              | 0.390             | January 18, 2013  |
|                | 11,508,750           |                   |                   |

As at March 31, 2011, share purchase warrants were outstanding as follows:

|  | Number of<br>warrants | Exercise<br>Price | Expiry Date       |
|--|-----------------------|-------------------|-------------------|
|  | 15,893,721            | 2.68              | August 15, 2011   |
|  | 1,473,851             | 0.18              | June 30, 2011     |
|  | 3,025,000             | 0.18              | November 25, 2011 |

20,392,572

**Stock-based compensation**

During the quarter ended March 31, 2011, the Company recognized stock-based compensation of \$67,732 (2010 - \$161,964) in the statement of operations as a result of shares for services and incentive stock options granted and vested. The weighted average fair value of the options granted was \$0.23 (2010 - \$0.11) per share.

The fair value of all compensatory options and warrants granted is estimated on grant date using the Black-Scholes option pricing model. The weighted average assumptions used in calculating the fair values are as follows:

|                         | 2011    | 2010    |
|-------------------------|---------|---------|
| Risk-free interest rate | 2.75%   | 2.75%   |
| Expected life           | 2 years | 5 years |
| Volatility              | 113.47% | 126.32% |
| Forfeiture rate         | 0.00%   | 0.00%   |
| Dividend rate           | 0.00%   | 0.00%   |

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**EMC Metals Corp.**

(An Exploration Stage Company)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

March 31, 2011

(Expressed in Canadian Dollars)

(Unaudited)

**11. TREASURY STOCK AND WARRANTS**

|                   | Number    | Amount       |
|-------------------|-----------|--------------|
| Treasury shares   | 1,033,333 | \$ 1,343,333 |
| Treasury warrants | 1,550,000 | 744,000      |
|                   | 2,583,333 | \$ 2,087,333 |

Treasury shares and warrants comprise shares and warrants of the Company which cannot be sold without the prior approval of the TSX. The warrants expire August 15, 2011.

**12. SEGMENTED INFORMATION**

The Company's mineral properties are located in Canada, Australia, and the United States and its capital assets geographic information is as follows:

| <b>March 31, 2011</b>         | Australia  | Canada    | United States | Total         |
|-------------------------------|------------|-----------|---------------|---------------|
| Property, plant and equipment | \$ -       | \$ 49,532 | \$ 34,172,251 | \$ 34,221,783 |
| Mineral properties            | 300,000    | -         | 203,020       | 503,020       |
|                               | \$ 300,000 | \$ 49,532 | \$ 34,375,271 | \$ 34,724,803 |

| <b>December 31, 2010</b>      | Australia  | Canada    | United States | Total         |
|-------------------------------|------------|-----------|---------------|---------------|
| Property, plant and equipment | \$ -       | \$ 61,935 | \$ 34,227,938 | \$ 34,289,873 |
| Mineral properties            | 300,000    | -         | 203,020       | 503,020       |
|                               | \$ 300,000 | \$ 61,935 | \$ 34,340,958 | \$ 34,792,893 |

**13. SUPPLEMENTAL DISCLOSURE WITH RESPECT TO CASH FLOWS**

|  | 2011      | 2010       |
|--|-----------|------------|
| Cash paid during the year for interest     | \$ 14,990 | \$ 117,093 |
| Cash paid during the year for income taxes | \$ -      | \$ -       |

No significant non cash transactions for the quarter ended March 31, 2011.

Significant non cash transactions for the quarter ended March 31, 2010 included transferring a net value of \$103,134 of property, plant, and equipment to Golden Predator Corp. for a reduction in accounts payable.

**14. SUBSEQUENT EVENTS**

Subsequent to March 31, 2011, the Company:



- a) Entered into an earn-in agreement with REE Mining AS ( REE ), whereby the Company has an option to earn up to a 100% interest in the Tardal and Evje properties. To earn its interest, the Company must pay REE \$630,000, including an initial cash payment of US\$130,000 (paid) and issue 1,000,000 common shares.

The Company is also required to incur US\$250,000 of exploration work to be completed over 18 months from the date of closing in order to acquire its interest.

- b) Issued 120,000 stock options with an exercise price of \$0.31 exercisable until April 27, 2013.
- c) Issued 250,000 stock options with an exercise price of \$0.315 exercisable until May 3, 2016.
- d) Issued 500,000 stock options with an exercise price of \$0.25 exercisable until May 16, 2016.

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**Exhibits**

The following table sets out the exhibits filed herewith or incorporated herein by reference.

| <b>Exhibit</b> | <b>Description</b>   |
|----------------|--|
| 3.1 *          | Certificate of Incorporation, Certificate of Name Change, Notice of Articles   |
| 3.2 *          | Corporate Articles   |
| 10.1 *         | 2008 Stock Option Plan   |
| 10.2 *         | Warrant Indenture dated August 15, 2008 between Golden Predator Mines Inc. and Olympia Trust Company                       |
| 10.3 **        | Stock Purchase Agreement dated November 19, 2009 between EMC Metals Corp., Willem P.C. Duyvesteyn, and Irene G. Duyvesteyn |
| 10.4 *         | Exploration Joint Venture Agreement dated February 5, 2010 between EMC Metals Corp. and Jervois Mining Limited             |
| 10.5 *         | Services Agreement between EMC Metals Corp. and George Putnam dated May 1, 2010  |
| 10.6 *         | Extension Agreement dated September 29, 2010 between EMC Metals Corp. and Jervois Mining Limited                           |
| 10.7 *         | Stock Purchase Agreement dated November 16, 2010 between EMC Metals Corp. and Golden Predator US Holding Corp.             |
| 10.8 *         | Option Agreement dated April, 2011 between REE Mining AS and EMC Metals Corp.  |
| 21.1 *         | List of Subsidiaries   |

\* Previously filed as exhibits to the Form 10 filed May 24, 2011 and incorporated herein by reference.

\*\* Previously filed as an exhibit to the Form 10/A filed July 22, 2011 and incorporated herein by reference.

**SIGNATURES**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: September 14 , 2011

EMC METALS CORP.

By: /s/ Edward Dickinson  
Edward Dickinson ,  
Chief Financial Officer