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

## FORM 10-Q

# [X] QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended **September 30, 2014** 

[ ] TRANSITION REPORT UNDER SECTIO  For the transition period from	
000-54 (Commission F	
EMC META (Exact name of registrant a	
British Columbia, Canada (State or other jurisdiction of incorporation or organization)	98-1009717 (IRS Employer Identification No.)
1430 Greg Street, Suite 501 (Address of principal execu	
(Registrant's telephone num	
N/A (Former name, former address and former	
Indicate by check mark whether the registrant (1) filed all r Securities and Exchange Act of 1934 during the preceding was required to file such reports), and (2) has been subject t No [ ]	12 months (or for such shorter period that the registrant
Indicate by check mark whether the registrant has submitted any, every Interactive Data File required to be submitted (§232.405 of this chapter) during the preceding 12 months (to submit and post such files). Yes [X] No []	d and posted pursuant to Rule 405 of Regulation S-T
Indicate by check mark whether the registrant is a large accornance a smaller reporting company. Large accelerated filer Smaller reporting company [X]	
Indicate by check mark whether the registrant is a shell cover $[\ ]$ No $[X]$	ompany, as defined in Rule 12b-2 of the Exchange Act.
Indicate the number of shares outstanding of each of the practicable date: As of November 7, 2014, the registrant?	

shares.

## PART I. FINANCIAL INFORMATION

**Item 1. Financial Statements** 

#### Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of the operating results, corporate activities and financial condition of EMC Metals Corp. (hereinafter referred to as "we", "us", "EMC", or the "Company") and its subsidiaries provides an analysis of the operating and financial results for the three and nine months ended September 30, 2014 and should be read in conjunction with our unaudited interim consolidated financial statements for the nine month period ended September 30, 2014, and with the Company's audited consolidated financial statements and the notes thereto for the year ended December 31, 2013 (the "Annual Statements").

The interim statements have been prepared in accordance with US Generally Accepted Accounting Principles ("US GAAP") in accordance with the requirements of U.S. federal securities laws as applicable to the Company, and as permitted under applicable Canadian securities laws. The Company is a reporting company under applicable securities laws in Canada, and in July of 2011 also became a reporting issuer under U.S. federal laws. The reporting currency used in our financial statements is the United States Dollar.

The information contained within this report is current as of November 7, 2014 unless otherwise noted. Additional information relevant to the Company's activities can be found on SEDAR at <a href="https://www.sedar.com">www.sedar.com</a>.

Technical information in this MD&A has been reviewed and approved by Willem Duyvesteyn, a Qualified Person as defined by Canadian National Instrument 43-101 ("NI 43-101"). Mr. Duyvesteyn is a director and consultant of EMC Metals.

## **EMC Corporate Overview**

EMC is a specialty metals and alloys company focusing on scandium and other specialty metals. The Company intends to utilize its knowhow and, in certain instances, patented technologies to maximize opportunities in scandium and other specialty metals.

The Company was formed in 2006, under the name Golden Predator Mines Inc. As part of a reorganization and spin-out of the Company's precious metals portfolio in March 2009, the Company changed its name to EMC Metals Corp. The Company currently trades on the Toronto Stock Exchange under the symbol "EMC".

In 2013, the Company sold the Springer Mining Company, a tungsten mine and mill in Imlay, Nevada. The sale of this asset allowed the Company to direct its efforts towards the development of its scandium properties.

Our focus of operations is the exploration and development of our specialty metals assets, including the Nyngan scandium deposit located in New South Wales, Australia and the Tørdal scandium/rare earth minerals deposit in Norway. Prior to January 1, 2014, the Company's principal asset was the Springer Tungsten mine and mill, held by the Springer Mining Company. On September 13, 2013, the Company signed a binding Letter of Intent to sell 100% of the Springer Mining Company entity, its assets and mineral and water rights to America Bullion Royalty Corp., for \$5 million cash. The transaction was closed on December 31, 2013.

On February 5, 2010, the Company entered into a Joint Venture Agreement ("JV Agreement") with Jervois Mining Limited ("Jervois") to develop the Nyngan scandium property in New South Wales, Australia. The JV Agreement, came into dispute in February 2012, and was settled by the parties in February 2013. That settlement provided for EMC to acquire 100% of the project for A\$2.6 million cash, in two installments. EMC has met the total payment obligation and now owns 100% of the project.

During the first half of 2014 EMC focused on financing the final required payments to secure the Nyngan project rights. Those required payments were successfully financed in June, along with additional working capital financings during June and July.

#### **Principal Properties Review**

#### Nyngan Scandium Project (NSW, Australia)

On February 5, 2010, EMC entered into an Exploration Joint Venture Agreement ("JV Agreement") with Jervois Mining Limited ("Jervois") of Melbourne, Australia (ASX: JRV) to co-develop the Nyngan scandium property in New South Wales, Australia which is commonly referred to as the Nyngan Scandium Project ("Nyngan"). The JV

Agreement, gave EMC the right to earn a 50% interest in a joint venture with Jervois, for the purpose of holding and developing Nyngan, provided EMC met certain technical and financial milestones. EMC met all financial requirements and delivered proof of technical milestone achievement to Jervois on February 24, 2012.

On February 27, 2012, Jervois formally rejected EMC's claim to have met the earn-in conditions specified in the JV. The parties discussed and successfully reached an agreed settlement in February 2013 that resolved all issues in dispute. The terms of the binding settlement provided for the transfer of 100% ownership and control of the Nyngan Project, including the relevant exploration tenements and surface (freehold) land holdings, to the Company, in return for AUD\$2.6 million in future cash payments. The settlement agreement also applied a production royalty on the Nyngan project of 1.7% of sales for products produced from the site, payable to Jervois. The royalty has a 12 year term from first production date, and a 10 tpa scandium oxide production minimum..

EMC has now completed all settlement payments required under its agreement with Jervois, and formal transfer of the Nyngan Project Exploration Tenements is currently underway, with completion of the transfers anticipated later in 2014.

Substantial Nyngan Project metallurgical test work has been completed, and additional work in this area is planned for 2014. EMC intends to produce a Feasibility Study demonstrating project economics and development viability on the project, expected to be completed in the second half of 2015.

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

The Nyngan scandium resource is located approximately 500 kilometers northwest of Sydney, Australia. The property consists of two exploration licenses, EL 6009 and EL 6096, which encompass over 9,000 hectares (29.6 sq km). Nyngan is classified as an Australia Property for purposes of financial statement segment information.

The scandium resource is hosted within the lateritic zone of a geologic structure known as the Gilgai Intrusion, one of several Alaskan-type mafic and ultramafic bodies which intrude on the Cambrian-Ordovician metasediments, collectively called the Girilambone Group. This laterite zone, locally up to 60 meters thick, is layered from surface with hematitic clay, followed by limonitic clay, saprolitic clay, weathered bedrock and finally fresh bedrock. The scandium mineralization is concentrated within the hematitic, limonitic, and saprolitic zones with values in excess of 350 ppm scandium.

The location of the property is provided in Figure 2 below. The location of the exploration licenses are provided below.

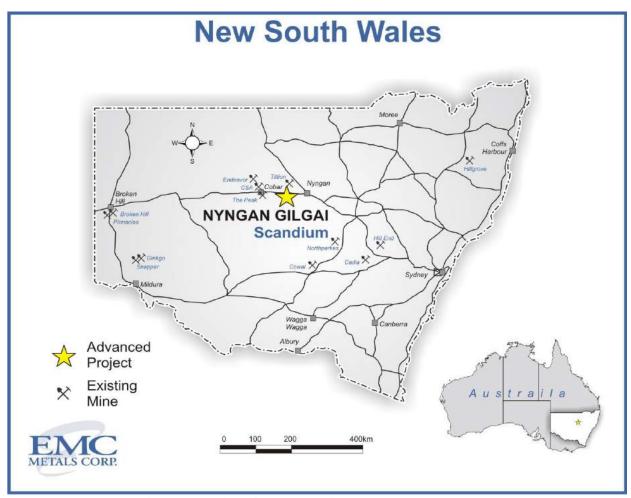


Figure: Location of Nyngan Project

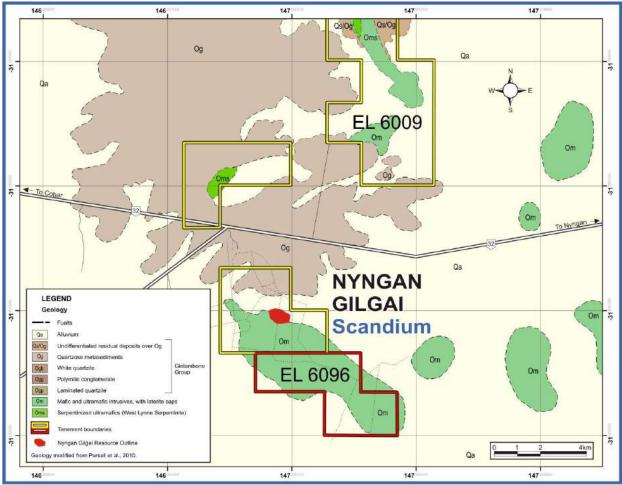


Figure: Location of the Exploration Licenses

#### Nyngan Scandium Project – Development Overview

EMC established rights to the Nyngan Scandium Project in February 2010, and began advancing the project understanding immediately. The first step taken was to establish a NI 43-101 Resource Report on the property for scandium, which was completed and filed on SEDAR in May 2010.

In the two years prior to EMC involvement, EMC's (former) partner, Jervois Mining Limited ("Jervois") of Melbourne, had commissioned several metallurgical studies on potential recovery systems for separating scandium from the lateritic clays which contained the resource. EMC adopted and pursued this flow sheet process architecture, in four key work programs:

- 1. Roberts & Schaefer (Utah, USA) was commissioned in 2010 to develop a preliminary, conceptual engineering and economic report for the processing elements of the project. The work was based entirely on prior Jervois-commissioned test work research. No mining or commercial elements of the project were considered, and the accuracy level was +/-50%, done for management only.
- 2. Hazen Research (Colorado, USA) was commissioned in 2010 to do bench scale test work to confirm the earlier property test work results provided by Jervois, which it did,
- 3. Hazen Research was subsequently commissioned in 2011 to do pilot scale test work to further confirm and optimize the process plant flow sheet, consistent with the acid bake systems, as initially defined, and
- 4. SNC-Lavalin (Brisbane, Australia) was commissioned in 2011 to do a feasibility study on the economics and process viability of the Nyngan Scandium Project, to absorb the Hazen test work results, to confirm the project was economic, and to satisfy the primary condition of the JV with Jervois. The SNC Report was done to inform management and the JV partners, and is not public information.

The Hazen test work and SNC Report were completed in early 2012. EMC had also commissioned some different test work programs with SGS-Lakefield (Toronto, Canada), using Nyngan resource material, beginning in late 2011 and continuing through 2013. This work focused on high pressure acid leach (HPAL) rather than acid baking with concentrated sulfuric acid, and the results showed more promise for Nyngan resource recoveries and suggested better suitability in the Nyngan locale.

Now that EMC is in full (100%) control of the Nyngan Scandium Project, the Company intends to commission more process test work in 2014, to support a refined and optimized process flow sheet for scandium recovery from the resource. The results of this work will be incorporated into a NI 43-101 Technical Report (feasibility study) for completion in Q3 2015.

## Nyngan Property – NI 43-101 Mineral Resource

In March of 2010, a NI 43-101 technical report which outlined a resources estimate on the Nyngan Scandium Project was completed and filed on SEDAR. The resource report, titled, "NI 43-101 Technical Report on the Nyngan Gilgai Scandium Project, Jervois Mining Limited, Nyngan, New South Wales, Australia", was prepared by or under the supervision of Max Rangott (BSc). The resource estimate is summarized below.

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

## **Nyngan Project - Flow Sheet Development Detail**

Jervois commissioned various technical reports and studies on the Nyngan property resource in 2008-09. These early technical/process reports were done by METCON Laboratories of Sydney, Australia, the Commonwealth Scientific and Industrial Organization (CSIRO), Australia's national science agency, and by other research work groups, proprietary to or sourced by Jervois. The CSIRO designed a preliminary processing plant flow sheet, that formed much of the early thinking around processing options at Nyngan.

EMC began efforts to duplicate this early work in late 2010, when the Company commissioned Hazen Research, Inc. of Golden, Colorado to review and verify historical work from the Australian groups. In January 2011, EMC announced results of phase I bench scale test work from Hazen that generally confirmed historical findings on

conventional acid leach systems, suggesting resource recoveries of up to 75%. No secondary recoveries were considered in these tests.

The second phase of the Hazen test work program, done to pilot plant scale, ran through all of 2011, and involved larger scale testing of the high temperature acid bake water leach systems, solvent extraction systems and product finish systems, as outlined and established by earlier CSIRO work. The overall objectives of this expanded test work program were to define and optimize a process or series of processes that achieved an 80% overall scandium recovery, with lowest possible capital and operating costs, and the most benign environmental impact, using standard and accepted processes.

On January 19, 2012 EMC announced the results of the phase II Hazen test work program. EMC received an independent metallurgical test-work report, titled "Purification of Scandium Extracted from Laterite Ore", outlining the results of a number of pilot-scale tests on Nyngan resource material, and estimated recoveries and grades of scandium oxide product. The report was independently prepared by Hazen and covered the full results of the phase II pilot scale test work programs, completed in late November 2011.

Highlights of the 2011 Hazen phase II pilot scale test work were as follows:

- Results of conventional sulfuric acid bake and water leach systems, at atmospheric pressure, demonstrated scandium recoveries averaging 75%,
- Results of conventional solvent extraction ("SX") on the pregnant leach solution, demonstrated scandium recoveries exceeding 99%,
- Results on final stage precipitation of scandium oxide, focused on highest combined purity and recovery, demonstrated scandium recoveries of 97.5%, at purity levels of 97.5% Sc<sub>2</sub>O<sub>3</sub>,
- Overall recovery results ranged from 70% to 80%, based on Nyngan ore type (limonite or saprolite), and
- All process assumptions were based on standard and accepted techniques for ore preparation, leaching, solvent extraction and final product preparation.

In late 2011, EMC also commissioned some test work on high pressure acid leach (HPAL) processes, with both Hazen and with SGS-Lakefield (Ontario, Canada). The initial HPAL work was applied to residue from the acid bake process sourced from the earlier Hazen test work, specifically to determine if additional scandium could be effectively recovered in a second pass with a pressure system. Those results were encouraging, and led to later test work in 2012-13 which applied HPAL techniques directly on the laterite resource material. No HPAL research results were included in the report and findings compiled for management by SNC-Lavalin in early 2012. However, the work that subsequently continued on HPAL, after that SNC Report was completed, is expected to be incorporated into future engineering studies and flow sheet strategies for the Nyngan project. Existing HPAL work results were done to bench scale, and not to pilot scale, and will be followed up with further test work in 2014 to confirm suitability as an alternative to acid bake techniques.

## **Nyngan Project Environmental Permitting**

In April, 2011 EMC announced a general progress report on the project which outlined a series of environmental work steps designed to advance the Environmental Impact Study ("EIS"). Work steps included both ground and surface water assessments, along with other assessments of Aboriginal, ecology, traffic, noise and air quality matters.

All of this work has subsequently been completed, including 8 water bores with ongoing test monitoring equipment, and reports on the various other targeted assessments, without material issues in any area. An aerial photography and contour mapping program was also completed, to support the feasibility study work regarding location of site facilities.

On January 18, 2012 EMC announced that that key elements of environmental site work on the Nyngan Scandium Project were completed and a Conceptual Project Development Plan (CPDP) submitted to the NSW, Australia state regulators. The CPDP submission forms the basis for an Environmental Impact Study ("EIS"), the foundation environmental document required for a mining permit in the state.

Specific EIS and property work, contained in the CPDP, completed by year end 2011:

- Draft ground water assessment study finalized and submitted to regulators,
- Surface water assessment results favorable, State review ongoing,

- Aboriginal heritage study finalized, no areas of significance,
- Soils study finalized, no issues, and
- Property aerial photography and contour mapping completed, location of site facilities defined.

#### Continuing EIS work underway:

- License applications (6), for access to groundwater as generated from property water bores have been submitted.
- Flora and fauna studies are ongoing; to-date no significant issues have arisen, and
- Traffic, noise and air quality baseline monitoring are ongoing.

The environmental work was performed under direction from R. W. Corkery & Co., (Orange, NSW, Australia), and formed part of the SNC-Lavalin Nyngan feasibility study.

## Nyngan Preliminary Economic Assessment

On October 14, 2014 the Company announced completion of a Preliminary Economic Assessment ("PEA"). entitled, *NI 43-101F1 Technical Report on the Feasibility of the Nyngan Scandium Project*. The PEA was prepared by the engineering firm of Larpro Pty Ltd, of Brisbane, Australia, and supported by Mining One of Melbourne, Australia and Rangott Mineral Exploration Pty Ltd of Orange, Australia, and confirms the technical and economic potential of the Nyngan Scandium Project (the "Project"). The PEA has been independently prepared as a technical report on the standards prescribed under NI 43-101 F1 Technical Report and is available for public review on the EMC website, <a href="www.emcmetals.com">www.emcmetals.com</a>, or on the Canadian public company reporting system SEDAR at <a href="www.sedar.com">www.sedar.com</a>.

The PEA is preliminary in nature and should not be considered to be a pre-feasibility or feasibility study, as the economics and technical viability of the Project have not been demonstrated at this time. While this PEA does not consider or include any Inferred Mineral Resources, and does include only Measured and Indicated Resources, it remains a preliminary analysis that is not sufficient to enable Project Resources to be categorized as Mineral Reserves. Furthermore, there is no certainty that the PEA will be realized.

We advise U.S. investors that while the terms "measured resources", "indicated resources" and "inferred resources" are recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize these terms. U.S. investors are cautioned not to assume that any part or all of the material in these categories will be converted into reserves. It should not be assumed that any part of an inferred mineral resource will ever be upgraded to a higher category.

The PEA concludes the Project has the potential to produce 35,975 kilograms of scandium oxide (scandia) per annum, at grades of 97%-99%, generating an after tax cumulative cash flow over a 20 year Project life of US\$565 million, with an NPV<sub>10%</sub> of US\$175 million. The PEA also concludes the project can achieve this financial result with a conventional flow sheet, employing high pressure acid leach (HPAL) and solvent extraction (SX) techniques, which have been modeled and validated from METSIM modeling and bench scale/pilot scale metallurgical test work.

#### **PEA Financial Highlights and Key Assumptions**

The PEA concludes the Project has the potential for robust economics, based on a capital estimate supported by conventional process designs. The overall PEA level of accuracy is +/-30%. The PEA is expressed in US dollar (US\$) currency, unless otherwise noted. A foreign exchange rate of US\$0.90 (1A\$=US\$0.90) to United States dollars (US\$) was applied in all conversions. No escalation for inflation was assumed in cash flows. All cash flows and discounted cash flows (NPVs and IRRs) in this news release are shown on an after tax basis, based on a 30% tax rate.

Highlights and key assumptions are as follows:

**Table 1. Nyngan PEA Financial Highlights** 

Summary Nyngan Project Key Project Parameters	NI 43-101 PEA Result
Capital Cost Estimate (US\$ M)	\$77.4
Resource Grade Assumption (ppm) Resource Processed (tpy) Mill Recovery Assumption (%) Oxide Production (kg per year)	371 75,000 84.3% 35,975
Scandia Product Grade	97-99.0%
Annual Cash Operating Cost (US\$ M) Unit Cash Cost (US\$/kg Oxide)	\$22.9 \$636
Oxide Price Assumption (US\$/kg) Annual Revenue (US\$ millions) Annual EBITDA (US\$ millions)	\$2,000 \$72.0 \$47.7
NPV (10%i) NPV (8%i) IRR (%)	\$175.6 \$217.8 40.6%
Payback (years)	2.5

#### **PEA Mineral Resource Estimate**

The PEA does not alter the existing Nyngan Project resource estimate, established in 2010. The NI 43-101 Measured and Indicated scandium resource totals 12 million tonnes at an average grade of 261ppm scandium, from both limonite and saprolite resource material. The PEA assumes that a portion of limonite-only resource, in one particular area of the overall resource, will provide a 20 year mining pit sufficient to supply the processing facility at a rate of 75,000 tpy and an average grade of 371ppm scandium. A 20 year mining pit design was developed from drill hole data in support of this assumption and included in the PEA.

The current Nyngan Project scandium mineral resource is as follows:

**Table 2. Nyngan Scandium Resource**(1)

Nyngan Project NI 43-101 Resource Summary Category	Tonnes	Grade (ppm Sc)	Cut-Off Sc (ppm Sc)	Overburden Ratio (t/t)	
Measured Resource	2,718,000	274	100	0.81:1	
Indicated Resource	9,294,000	258	100	1.40:1	
Total Resource	12,012,000	261	100	1.10:1	
NI 43-101 Technical Report on the Nyngan Gilgai Scandium Project, Jervois Mining					

NI 43-101 Technical Report on the Nyngan Gilgai Scandium Project, Jervois Mining Limited, Nyngan, New South Wales, Australia, dated March 2010, (Rangott Mineral Exploration Pty Ltd).

## **PEA Mining and Processing Assumptions**

Mining represents a relatively minor part of the overall Project activity, based on a plant feed of 240tpd or 75,000 tonnes per year requirement. Mine production is based on conventional open pit methods, strip ratios of 1.5:1 to 3:1

<sup>(1)</sup> Mineral resources that are not mineral resources do not have demonstrated economic viability.

(overburden/resource), contract mining assumptions and mining activity in campaigns of one month, three times per year, avoiding the wet season. The plant will run continuously, fed from field and plant stockpiles of mined resource, covered against moisture and weather.

The processing plant operations will size the input material, apply high pressure acid leaching (HPAL) using sulfuric acid, and then recover the liberated scandium using solvent extraction (SX), oxalate precipitation and calcination, to generate a finished scandium oxide product. The output of the plant is forecast at 35,975 kilograms per year, at grades between 97% and 99%, as  $Sc_2O_3$ . Product output will be refined to suitable grade for direct sales to end users, recognizing that grade varies based on application.

Plant tailings will be neutralized with lime to pH 8.5, dewatered, and stored in a permanent tailings facility meeting the environmental requirements of mining permits and NSW State regulators.

#### **PEA Capital Cost Assumptions**

Total capital costs for the Project are estimated at US\$77.4 million, and includes a 20% contingency. The majority (70%) of the capital cost in the PEA was Australian-sourced, and consequently initially priced in Australian dollars (A\$), supported by direct vendor capital pricing. Concrete and steel costs have been estimated from concept drawings, and piping, electrical and instrumentation costs were estimated using standard industry factors. The capital cost estimate is considered to be +/-30% accuracy. Capital costs included in overall cash flow include US\$2 million per year for sustaining capital items (US\$38M over full PEA term), and US\$3M in final reclamation costs in year 20. No salvage costs were assumed. On the basis that the resource is adequate for 45 years at the assumed grade, it is unlikely the Project would be closed in year 20 if current assumptions remain viable.

**Table 3. PEA Capital Cost Detail** 

Nyngan Project	NI 43-101 P	PEA Result
Capital Cost Summary	Capital	CapEx/Annual
(US\$)	Cost (US\$ M)	kg Oxide
, ,,	. ,	J
Pre-Stripping Cost	\$1.6	n/a
1,1,3		
Mining Equipment	contractor	
Mine Vehicles/Site Equipment	\$0.4	\$10
Processing Plant Equipment		
Ore Preparation	\$2.1	\$58
HPAL	\$13.7	\$381
CCD, Ph Adjust	\$5.9	\$164
Solvent Extraction	\$3.1	\$86
Product Precipitation	\$1.3	\$37
Tailings	\$1.3	\$36
Reagent Storage	\$2.6	\$72
Water/Steam/Services	\$6.6	\$183
Plant Subtotal	\$36.6	\$1,019
Other Site Costs		
Freight and First fills	\$2.1	\$59
Evaporation Ponds-Tailings Dam	\$6.7	\$186
Transformer Farm/Buildings	\$2.5	\$69
On/Offsite Utilities Supply	\$2.2	\$62
Other Costs Subtotal	\$13.5	\$376
Outro and Coate C. W O	<b>#</b> 4.0	<b>#440</b>
Owners Costs & Working Cap.	\$4.3 \$0.4	\$118
EPCM Costs (18%)	\$9.1	\$253
Contingency (20%)	\$11.9	\$332
	•	
Total Project Capital Cost	\$77.4	\$2,151
Total (20 Year) Sustaining Capital	\$38.0	N/A

## **PEA Operating Costs Assumptions**

Operating costs were estimated based on metallurgical test work results and METSIM modelling quantities and requirements. The single most significant cost item in operating costs is sulfuric acid, which is used in quantity and requires transport to site. The second most significant cost item is staff/labor cost. Reagents in total represent approximately 57% of total operating cash costs. Quantities were established through METSIM software outputs, and were 100% vendor-priced. The level of accuracy on the operating component costing in the PEA is +/-25%.

Operating cost details in the PEA are as follows:

Table 4. PEA Operating Costs, and Unit Costs Per kg Oxide

Nyngan Project	NI 43-101	PEA Result
OpEx Mine/Process Expense	Annual	Unit Cost Per
(US\$ millions)	US\$M Cost	kg Oxide
Mining Costs	\$1.4	\$38.78
Processing Cost		
Labor Cost	\$3.9	\$108.13
Utilities	\$0.8	\$21.96
Reagents	\$13.0	\$361.53
Lab Costs	\$0.2	\$6.95
Consumables	\$1.0	\$27.10
Total Processing Costs	\$18.9	\$525.67
Marketing & Insurance	\$0.7	\$18.76
Maintenance Spend	\$1.3	\$37.02
Mobile Equipment Cost	\$0.6	\$15.28
Annual Cash Operating Cost	\$22.9	\$635.51

## **PEA Revenue Pricing Assumptions**

The price assumption in the PEA is US\$2,000 per kilogram (kg), as an average price covering all product sold, over various product grades. Current pricing is substantially above these levels, based on small unit quantities and varying grades. The pricing benchmark applied in the PEA was supported by limited current trading and pricing information, EMC discussions with potential customers, and the understanding that lower prices than scandium trades for today will be necessary to penetrate potential markets with significant sales tonnages in the future.

## **PEA Sensitivities Analysis**

The project is most sensitive to changes in product pricing, and somewhat less sensitive to either operating cost or capital cost changes, as shown below.

Table 5. Profitability Sensitivities to Changes in Key Assumptions

Sensitivity to Financial Parameters	NPV (10%) (\$US M)	IRR (%)
PEA RESULT	\$175.6	40.6%
Operating Cost Sensitivity		
Cost Increase (10%)	\$163.9	38.6%
Cost Decrease (10%)	\$187.4	42.5%
Price Sensitivity		
Lower Realized Product Price (10%)	\$139.3	34.5%
Higher Realized Product Price (10%)	\$212.0	46.6%
Capital Cost Sensitivity		
Higher Capital Cost (10%)	\$169.6	37.0%
Lower Capital Cost (10%)	\$181.6	44.9%
Fx Sensitivity		
US\$/A\$ @ \$1.00	\$162.6	38.3%
US\$/A\$ @ \$0.80	\$188.7	42.8%

The PEA is presented on a 100% ownership basis. Potential conversion of an existing loan to the Company into a 20% interest at the project level in the Nyngan Scandium Project is a possibility, but at present the Company retains 100% of the Project.

All cash flows and financial analyses have been presented on a 100% equity basis. No debt leverage has been assumed in providing capital for development. No inflation factors have been applied to future cash flows, making the discounted cash flow performance measures constant dollar figures. Had inflation been applied to future cash flow streams, the NPVs and IRRs would have been higher.

The PEA incorporated considerable metallurgical test work independently prepared for EMC over the previous four years, along with engineering, project design work and economic estimates done previously for EMC management. The PEA also utilized existing environmental and detailed mine planning work previously undertaken on the property, and previously incorporated in prior management studies. The PEA had the benefit of prior flow sheet designs, and results, but it did not compare previous designs. The batch autoclave HPAL design presented in the PEA was the only design considered.

#### **PEA Conclusions and Recommendations**

This PEA consolidates a significant amount of metallurgical test work and prior study on the Nyngan Scandium Project. The work demonstrates a viable, conventional process flow sheet utilizing the HPAL leaching process, and good metallurgical recoveries of scandium from the resource. The metallurgical assumptions are supported by various bench and pilot scale independent test work programs that are consistent with known outcomes in other laterite resources. Combined with the capital cost estimate, the Project exhibits robust financial outcomes.

The PEA recommends that project owners proceed to a full feasibility study, including additional test work to confirm certain key process variants. Those recommendations include:

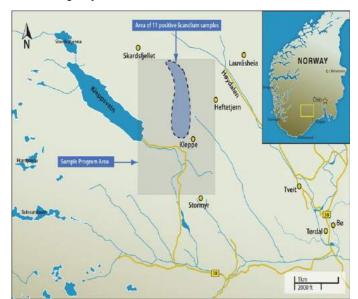
- Consider test work to support process changes that could reduce capital/operating costs,
- Conduct a comparative study between batch and continuous autoclave systems,
- Consider/test certain alternative reagents/techniques in the solvent extraction area,
- Conduct test work to develop engineering parameters around the materials handling properties of the laterite resource as it relates to optimum sizing for best leach results, and
- Conduct test work on pumping and settling properties of process slurries.

## Tørdal Scandium/REE Property (Norway)

During 2011 we entered into two option agreements with REE Mining AS of Norway, to obtain exploration rights to several properties in central and southern Norway. The Tørdal, Evje-Iveland and Hogtuva properties are classified as Norway Property for purposes of financial statement segment information.

Option agreements to acquire the Tørdal and Evje-Iveland exploration properties were entered into in April 2011, followed by an option agreement on the Hogtuva property in September 2011. Both of these agreements were subsequently renegotiated to secure 100% ownership positions for EMC. Based on exploration results and holding costs, the Evje-Iveland and Hogtuva properties were subsequently dropped and the Tørdal property holdings have been reduced from 140 sq km to 90 sq km.

#### **Tørdal Property Location**



The location of the Tørdal exploration property is provided in Figure 4 below.

## 2012 Tørdal Field Exploration

On February 14, 2013 we announced promising results from field exploration work on the Tørdal property during the summer and fall months of 2012, focused on scandium-bearing pegmatites. The 2012 work included independent assay results of pegmatite rock samples taken from one specific property area, and also includes an extensive pegmatite mapping program covering approximately 30 sq km. The assay results indicated the presence of high levels of scandium and various rare earth elements (REE's), including heavy rare earth elements (HREE's) in particular. Field XRF readings indicated elevated scandium content in hundreds of large and small pegmatite bodies found and mapped in the reconnaissance area.

Highlights of the results of the 2012 field exploration are as follows:

- Tørdal 2012 assays of pegmatite rocks show presence of both scandium and REE's,
- Best scandium assays exceed 1,600 ppm,
- Promising HREE assay results from pegmatites with gadolinite mineralization,
- Host rock mineralization points to higher grade scandium or HREE contents,
- 2012 summer exploration program mapped and sampled over 300 pegmatites,
- A total of 1,940 Niton XRF scandium readings were taken on whole rock samples, and
- Overall program results at Tørdal are very encouraging and warrant expanded exploration.

#### Tørdal Assay Results (Grab Samples)

Work originally began on the property in 2011, with a summer exploration program that consisted of reconnaissance, surface soil sampling, and limited pegmatite mapping work in a relatively small area north of the village of Kleppe, in Southern Norway.

As a follow-on from that 2011 program, the company then returned to the same area and conducted a series of 'blasts', using small explosive charges to generate whole rock samples on select exposed pegmatites, at the locations of the best soil sample results. The exploration team planned 9 blasts and conducted 8, on 5 different pegmatite bodies, from which they assembled 23 grab samples for analysis and assay by OMAC Laboratories in Ireland. Assay results on these samples were received in Q1 2012—in time to help formulate the 2012 summer/autumn season pegmatite mapping program, conducted on a much wider area.

Independent assay results on 20 of the 23 samples, covering all 5 targeted pegmatites, are shown below.

	Sample Location		Rare Ear	Rare Earth Assay Results		
Sample	Sample	Blast	HREE	TREE	% HREE	Sc
Туре	ID#	ID#	ppm	ppm	% HKEE	ppm
	TD1	7	307	427	72.0%	38
	TD2	7	142	204	69.7%	334
Whole Rock	TD3	3	104	138	75.0%	86
Samples	TD5	4	460	533	86.4%	111
Samples	TD6	2	177	223	79.3%	67
	TD7	9	180	219	82.0%	26
	TD8	8	935	1,028	90.9%	77
	TD9	7	130	171	75.8%	568
Select	TD10	3	92	123	74.5%	665
Mica-Phase	TD11	9	159	191	82.8%	1,459
Samples	TD13	1	52	59	88.1%	853
	TD15	3	724	883	81.9%	1,690
Select	TD17	8	1,581	1,656	95.5%	141
Garnet-Phase	TD18	7	305	357	85.6%	23
Samples	TD19	2	2,443	2,789	87.6%	246
Samples	TD21	2	722	860	84.0%	150
Select	TD14	1	227,500	266,430	85.4%	26
Gadolinite-	TD22	3	162,500	186,480	87.1%	64
Phase	TD23	location 32	267,400	313,530	85.3%	<1
NOTE: All blast	samples take	n from Kleppe	area (Area 1	), total of 5 u	nique pegmat	ites

Assay results are as-reported elemental assay results from OMAC Laboratories, and are not converted to oxide equivalent (REO &  $Sc_2O_3$ ). Heavy rare earth elements abbreviated "HREE"; and include Yttrium; Total rare earth elements abbreviated "TREE".

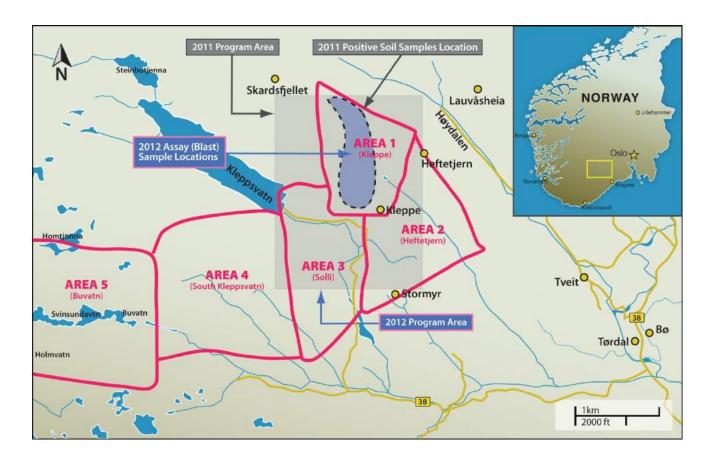
The numbered assay samples were formed either by random selection of fresh (un-weathered) whole rock material broken loose from individual pegmatite bodies, or alternatively, based on selectively collecting fresh rock material that was clearly (1) garnet-laden, (2) mica-laden, or showed clear visible (3) gadolinite mineralization. Gadolinite is a beryllium and rare earth-bearing mineral with the chemical formula [(Ce,La,Nd,Y)<sub>2</sub>FeBe<sub>2</sub>Si<sub>2</sub>O<sub>10</sub>]. The intent was to determine from assay results if certain visible mineralization correlated to the presence and concentrations of target elements; specifically scandium, rare earth elements (REE's), or other metals of interest and value.

The results in the assay table indicate that all of the selected pegmatites contain interesting levels of both REE's and scandium. In general, all of the pegmatites contained both target elements, while the mica phase appears to hold the higher scandium concentrations with small REE additions, and the gadolinite phase holds the highest REE concentrations and small scandium additions. The presence of garnet material in samples tended to generate interesting but moderate values for both REE's and scandium. Assay work was designed to identify 30 specific elements, including all 16 REE elements plus scandium, and the relative concentration of heavy REE's was of particular interest. The mica and garnet grab sample materials had generally only trace levels of thorium and uranium (average <15 ppm), while the gadolinite grab sample materials had thorium levels between 2,500-5,000 ppm, and uranium levels between 500-1,300 ppm. A full table of OMAC assay results related to these 23 sample analyses is available on EMC's website at www.emcmetals.com.

#### **Tørdal Pegmatite Mapping Program**

Following on from the 2011 work and the 2012 assay results, EMC conducted an expanded 2012 summer work reconnaissance program at both Tørdal and Evje-Iveland, from July through October. The goals of the 2012 program were to develop detailed mapping of outcropping pegmatite fields over a much broader area than the 2011 program, while also conducting field sampling of scandium mineralization on those pegmatites using a hand-held Niton XRF Analyzer.

The 2012 program concentrated on five separate areas (approximately 30 sq km) as can be seen in the map below:



A total of 1,940 Niton XRF readings were logged on whole rock and pegmatite mineral separates, logged against individually mapped and numbered pegmatite bodies. The XRF readings ranged up to +6,000 ppm scandium (on a mineral separate), and averaged 661 ppm on 1,504 total logged readings above the instrument's 20 ppm detection limit. XRF readings focussed on scandium data collection only, although the team diligently noted the visible presence of gadolinite and amazonite mineralization.

The reader is cautioned that hand-held Niton XRF readings are not the same as laboratory assays, and are not NI 43-101 compliant with regard to estimating resource grades. However, the Company is confident that these data readings are highly useful in confirming and shaping the next stage of the exploration program on this property.

A summary of results by area is as follows:

- Area 1 (Kleppe); Mapped more than 50 pegmatite bodies. Best average XRF Sc readings from 1,000-1,500 ppm, some very large surface expressions. Gadolinite present.
- Area 2 (Heftetjern); Partially mapped more than 40 pegmatite bodies, many large surface expressions, green amazonite mineralization. Better XRF Sc readings from 500-1,500 ppm.
- Area 3 (Solli); Mapped numerous large and small pegmatites. Generally lower XRF Sc readings, ranging 300-700 ppm. Red feldspars, quartz and gadolinite mineralization present.
- Area 4 (South Kleppsvatn); Partially mapped large area containing more than 80 pegmatites, generally mica-based. Typical XRF Sc readings in the 300-900 ppm range, with some reaching 1,500 ppm Sc.
- Area 5 (Buvatn); Partially mapped, numerous pegmatite bodies, some very large. Typical XRF Sc readings in the 300-1,000 ppm range. Old feldspar quarries, amonizite mineralization present.

Similar work done at Evje-Iveland (total 180 sq km) identified several interesting target areas, but scandium readings were not sufficiently attractive when compared to results at Tørdal, and led to the decision to drop the Evje-Iveland property. The exploration results of the 2012 work program also allowed EMC to selectively reduce property holdings at Tørdal.

#### **Tørdal Exploration – Next Steps**

EMC's mapping and sampling work has confirmed that much of the Tørdal property is heavily populated with complex, near-surface pegmatite bodies. Based on hand-held XRF readings and mineralogy, these pegmatites show excellent promise for significant scandium enrichment, particularly within bodies containing micas, and for REE mineralization where the rare earth silicate gadolinite is present. Based on the results of 2012 exploration work, planning for future exploration work is warranted, subject to funding constraints.

## Qualified Person and Quality Assurance/Quality Control

Sampling methods followed industry quality control standards. Mr. Kjell Nilsen, an independent geologist consultant currently employed by EMC, conducted the reconnaissance and sampling on the property. Individual whole rock grab samples were collected by hand shovel, from areas where blasted material could be seen to have come from blast points on pegmatite bodies. The assayed samples were individually bagged, sealed, logged on the grid map as to location, boxed in a container suitable for mailing, and sent by express mail to OMAC Laboratories Limited in Galway, Ireland for testing. Assay testing on the samples utilized an ICP-MS spectrometer (Inductively Coupled Plasma-Mass Spectrometry) to test for numerous elements, specifically scandium. The numerous Niton XRF (X-ray Fluorescence) readings were taken at field locations, logged and identified with individual numbered pegmatites, located on grid maps, by the field geology team. Mr. Willem Duyvesteyn, Chief Technology Officer of EMC, is the Qualified Person who is responsible for the design and conduct of the exploration program, and reviewed the program results.

## Honeybugle Scandium Property (NSW, Australia)

On April 2, 2014 the Company announced that it had secured a 100% interest in an exploration license (EL 7977) covering 34.7 square kilometers in New South Wales (NSW), Australia. The license area is located approximately 24 kilometers west-southwest from EMC's Nyngan Scandium Project and approximately 36 kilometers southwest from the town of Nyngan, NSW. The license held by EMC covers only a part of the Honeybugle geologic complex.

The Honeybugle tenement contains lateritic material common to the region. The property itself is located in semiarid broad-acre wheat farming country and is routinely planted. Farming is the largest industry in the area, although mining activity is evident, past and present.

The tenement includes four (4) distinct magnetic anomalies; Seaford, Woodlong, Yarran Park and Mallee Valley, which reflect underlying mafic to ultramafic bedrock. These areas were previously identified by groups exploring principally for platinum, nickel and cobalt in the 1980's, but scandium was of little interest. Surface soil and rock chip sampling conducted by previous license holders and EMC, on each of the four areas, did detect anomalous scandium values that are well above background levels (20-30 ppm). The results of this previous soil sampling work is what led to EMC's interest in acquiring the Honeybugle exploration tenements.

#### **Honeybugle Drill Results**

On May 7, 2014 the company announced completion of an initial program of 30 air core (AC) drill holes on the property, specifically at the Seaford anomaly, targeting scandium (Sc). Results on 13 of these holes are shown in detail, in the table below. These holes suggest the potential for scandium mineralization on the property similar to EMC's Nyngan Scandium property.

Highlights of initial drilling program results:

- The highest 3-meter intercept graded 572 ppm scandium (hole EHAC 11)
- EHAC 11 also generated two additional high grade scandium intercepts, grading 510 ppm and 415 ppm, each over 3 meters,
- The program identified a 13-hole cluster which was of particular interest;
- intercepts on these 13 holes averaged 270 ppm scandium over a total 273 meters,
- at an average continuous thickness of 21 meters per hole,
- representing a total of 57% (354 meters) of total initial program drilling.
- The 13 holes produced 29 individual (3-meter) intercepts over 300 ppm, representing 31% of the mineralized intercepts in the 273 meters of interest, and
- This initial 30-hole AC exploratory drill program generated a total of 620 meters of scandium drill/assay results, over approximately 1 square kilometer on the property.

The detail results of 13 holes in the initial drill program are as follows:

Honeybug	Honeybugle 30 Hole Drill Program - April 2014 Target-Scandium					
Drill Hole Number	Honeybugle Drill Area	Hole Type	From (meter depth)	To (meter depth)	Intercept Length (meters)	Total Scandium Grade (ppm)
EHAC 1	Seaford	Explore (AC)	21	42	21	218
		including	27	36	9	262
EHAC 2	Seaford	Explore (AC)	0	12	12	300
		including	0	9	9	333
EHAC 3	Seaford	Explore (AC)	3	12	9	295
		including	6	9	3	352
EHAC 5	Seaford	Explore (AC)	0	15	15	244
		including	12	15	3	333
EHAC 6	Seaford	Explore (AC)	0	24	24	185
		including	0	9	9	214
		including	18	24	6	214
EHAC 7	Seaford	Explore (AC)	9	51	42	225
		including	15	42	27	220
		including	42	51	9	252
EHAC 9	Seaford	Explore (AC)	6	27	21	272
		including	9	24	15	350
EHAC 10	Seaford	Explore (AC)	0	18	18	251
EHAC 11	Seaford	Explore (AC)	0	30	30	369
		including	9	15	6	461
		including	21	24	3	<i>572</i>
EHAC 12	Seaford	Explore (AC)	0	21	21	177
EHAC 26	Seaford	Explore (AC)	0	21	21	309
	Seaford	including	3	18	15	343
EHAC 28	Seaford	Explore (AC)	0	18	18	344
	Seaford	including	3	15	12	363
EHAC 29	Seaford	Explore (AC)	3	21	18	316
		including	9	18	9	396
Assumes 175 ppm	cut-off grade					

Seaford is characterized by extensive outcrops of dry, iron-rich laterites, allowing for a particularly shallow drill program. Thirty (30) air core (AC) holes on nominal 100-meter spacing were planned, over an area of approximately 1 square kilometer. Four holes were halted in under 10 meters depth, based on thin laterite beds, low scandium grades, and shallow bedrock.

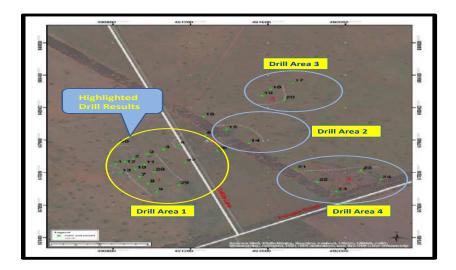
The 13 holes highlighted in the table are grouped together on either side of Coffills Lane, and represent all of the drill locations where meaningful intercept thickness generated scandium grades exceeding 175 ppm. Some of these 13 holes showed significant scandium values on the immediate surface, and alternately, other holes exhibited favorable scandium grades that began at shallow depth. The highest grade Sc sample was found in a 21-24 meter interval (572 ppm), although several holes produced better than 350 ppm Sc intercepts at depths of under 9 meters. The deepest hole (EHAC 7) was drilled to 57 meters, showing good scandium grades over a 12-meter horizon (245 ppm) near the bottom of the hole, from 39 to 51 meters depth. Higher scandium grades were associated with higher iron levels. Holes were drilled to a depth where they contacted the fresh ultramafic bedrock, which generally signalled the end of any scandium enrichment zones.

The drill plan divided Seaford into four sub-areas, 1-4, as highlighted on the map below. Area 1 was relatively higher ground and therefore the least impacted by ground moisture. Consequently this dryer area received the greatest attention, although that had been the general intention in the plan. Area 1 received 17 holes, with 13 presented in detail in the table above. Areas 2-4 were each intended as step-out areas that need to be further examined in the next program. The three step-out areas did not generate results of particular note, although hole locations were not optimal due to ground conditions and access.

- Area 2 received 3 holes, 60 meters total, and generated Sc grades from 45-75 ppm,
- Area 3 received 4 holes, 87 meters total, and generated Sc grades from 47-122 ppm,

- Area 4 received 5 holes, 72 meters total, and generated Sc grades from 60-101 ppm, and
- The average depth of all of these holes was 18 meters, with the deepest 30 meters.

#### **Initial Drill Program Map**



This 13-hole cluster (Area 1) was noted to be in a relatively thick laterite zone which was constrained to the west by contact with metasediments, to the east by fresh ultramafic bedrock, and to some extent in the north by a poor intersection result in hole 30. Area 1 remains somewhat open to the south, with the two southern-most holes (EHAC 9 and EHAC 29) generating some of the best scandium grade intercepts in the area.

The surface and near surface mineralization at this property is an advantage, both in locating areas of interest for future exploration work, and also because of extremely low overburden ratios. This particular characteristic for the Honeybugle property is different to EMC's Nyngan property, where mineralization is typically covered by 10-20 meters of barren alluvium.

Further drilling at Seaford is warranted, based on the results of this introductory and modest program, specifically to the north and south of the existing area 1 drill pattern, along with investigation and select drilling at the other three remaining anomalies on the property.

#### Qualified Person and Quality Assurance/Quality Control

John Thompson, B.E. (Mining); Vice President - Development at EMC Metals Corp is a qualified person as defined in NI 43-101 and has reviewed the technical information on this property. The drilling, sampling, packaging and transport of the drill samples was carried out to industry standards for QA/QC. EMC employed an independent local geology consulting and drill supervisory team, Rangott Mineral Exploration Pty. Ltd., (RME) of Orange, NSW, Australia, to manage the drill work on-site. Bulk samples of drill returns were collected at one metre intervals from a cyclone mounted on the drilling rig, and a separate three-tier riffle splitter was used on site to obtain 2.0-4.5kg composite samples collected over 3 metre intervals, for assay. Individual sample identifiers were cross-checked during the process. The assay samples were placed in sealed polyweave bags which remained in RME's possession until the completion of the drilling program, at which time they were transported to RME's office in Orange. There, the sequence of sample numbers was validated, and the assay samples were immediately submitted to Australian Laboratory Services' (ALS') laboratory in Orange. The remnant bulk samples, which were collected in sealed polythene bags, were transported by RME to a local storage unit at Miandetta, for long-term storage.

ALS/Orange dried and weighed the samples, and pulverized the entire sample to 85% passing 75 microns or better (technique PUL-21). These 50g sample bags of pulps were then sent to the ALS laboratory at Stafford in Brisbane, Queensland for analysis. ALS/Brisbane analyzed the pulps for scandium, nickel, cobalt, chromium, iron and magnesium, using Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) after a four acid (total) digestion (technique ME-ICP61). The lower detection limit for scandium using this technique is 1ppm. For their

internal quality control, ALS/Brisbane added 4 standard samples (for 20 repeat analyses), 10 blank samples and 16 duplicate samples to the batch. Please see news release see news release dated May 7, 2014 and available on <a href="https://www.sedar.com">www.sedar.com</a> for further information on the Honeybugle drill results.

## Other Developments - Third Quarter 2014

#### Private Placements:

On July 11, 2014, the Company announced completion of a two tranche private placement for a total of C\$1,279,814 in gross proceeds, at a price of C\$0.085 per share. A total of 15,056,632 shares were issued. The Company paid finders' fees of approximately C\$32,600 on the transaction.

On August 27, 2014, the Company announced completion of a private placement for a total of C\$470,425 in gross proceeds, at a price of C\$0.085 per share. A total of 5,534,411 shares were issued. The Company paid finder's fees of approximately C\$2,975 on the transaction.

New EMC Board Director: On July 17, 2014, the Company announced that Mr. James R. Rothwell had been appointed to the EMC Board as an independent Director. Mr. Rothwell has held numerous senior management roles and board positions in Canadian public mining companies, including Chairman of Shore Gold Inc. and Kensington Resources Ltd., Board Director for Motapa Diamonds Inc. and President, CEO and Director of Inca Pacific Resources and Dia Met Minerals Ltd. Prior to these Canadian company positions, he served for 27 years with Utah International and BHP in a number of business roles in the US, Canada, Brazil and Australia. He has served on minerals industry associations in Australia, the USA and Canada. Mr. Rothwell has a BA (Economics) and an MBA (Finance/Accounting) from Stanford University.

**Stock Option Grants:** On July 25, 2014, the Company granted 3,375,000 stock options at an exercise price of C\$0.12 per share, exercisable until July 25, 2019, to directors, officers, and employees of the Company and 150,000 stock options at an exercise price of C\$0.12 per share, exercisable until July 25, 2017, to consultants of the Company.

#### **Subsequent Events**

**Preliminary Economic Assessment On Nyngan Scandium Project:** On October 14, 2014, the Company announced completion of a Preliminary Economic Assessment ("PEA") entitled, *NI 43-101F1 Technical Report on the Feasibility of the Nyngan Scandium Project.* The PEA was prepared by the engineering firm of Larpro Pty Ltd, of Brisbane, Australia, and supported by Mining One of Melbourne, Australia and Rangott Mineral Exploration Pty Ltd of Orange, Australia, and confirms the technical and economic potential of the Nyngan Scandium Project. The PEA has been independently prepared as a technical report on the standards prescribed under NI 43-101 F1 Technical Report and is available for public review on the EMC website, <a href="www.emcmetals.com">www.emcmetals.com</a>, or on the Canadian public company reporting system SEDAR at <a href="www.sedar.com">www.sedar.com</a>.

For additional discussion of the PEA conclusions please see Item 2, Principle Properties Review, Nyngan Scandium Project, Preliminary Economic Assessment.

#### **Operating results - Revenues and Expenses**

The Company's results reflect lower operating costs as the focus of business has turned to its scandium projects.

## Summary of quarterly results

	2014			2013				2012
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Net Sales	-	-	-	-	-	-	-	-
Net Income (Loss) Basic and	(779,384)	(221,294)	(271,804)	(2,197,558)	(22,060,858)	(521,895)	(910,288)	(1,623,015)
diluted Net Income (Loss) per share	(0.00)	(0.00)	(0.00)	(0.02)	(0.13)	(0.00)	(0.01)	(0.01)

## Results of Operations for the three months ended September 30, 2014

The net loss for the quarter was \$779,384, a decrease of \$21,281,474 from \$22,060,858 in the same quarter of the prior year. Details of the individual items contributing to the decreased net loss are as follows:

Q3 2014 vs. Q3 2013 - Variance Analysis						
Item	Variance Favourable / (Unfavourable)	Explanation				
Loss from discontinued operations	\$21,693,164	The Company's results from one year ago included a write-down of assets on the sale of the Springer mine in the second half of 2013.				
Interest expense	\$130,722	The Company reduced its debt load from one year ago with the sale of the Springer operations in the second half of 2013. The lower debt resulted in lower interest costs in the current quarter.				
General and administrative	\$58,062	\$59,500 of this favorable variance is the result of certain accruals for salary in 2013 being renegotiated to much lower costs in 2014. Without consideration of the renegotiated salaries, the actual variance is \$(1,438), bringing the costs in line for the two quarters.				
Amortization	\$117	Lower amortization is reflective of the fact that the assets held in our Sparks office are declining in value.				
Insurance	\$(11)	Costs for the comparative periods are almost identical.				
Travel and entertainment	\$(10,620)	In 2014 travel to Australia to work on the Nyngan project resulted in the higher costs when compared to 2013.				
Salaries and benefits	\$(11,445)	Increased salary expenses in Q3 2014 relate to the return of the CFO to a more active role in the Company when compared to one year ago.				
Professional fees	\$(15,978)	Unfavorable variance is due to legal fees incurred in association with June 2014 loan financing transaction. No such costs were incurred in Q2 2013.				
Consulting	\$(29,475)	In Q3 2013, certain consulting costs carried in the books of EMC were reallocated to Springer Mining Company, resulting in a credit balance in that period. This variance is favorable when the costs associated with the sale of Springer are taken into consideration.				
Foreign exchange loss	\$(43,369)	In Q3 2013, the Canadian dollar weakened against the US dollar making those assets held in Canadian dollars worth less when converted to US\$. In Q3 2014 the Canadian dollar weakened to a greater extent resulting in funds held in Canadian dollars being devalued.				

Q3 2014 vs. Q3 2013 - Variance Analysis						
Item	Variance Favourable / (Unfavourable)	Explanation				
Exploration	\$(220,454)	In Q3 2013, very little exploration took place as the Company was making every effort to conserve cash. With a new financing agreement in place during June 2014 and private placements in Q2 and Q3 of 2014, the Company increased work effort on the Nyngan project in Australia.				
Stock-based compensation	\$(269,239)	The Company issued stock options in Q3 of 2014 of which 72% vested immediately and resulted in an expense of \$272,292. In 2013, a lower number of options were granted during the quarter, resulting in a lower option expense.				

## Results of Operations for the nine months ended September 30, 2014

The net loss for the nine month period was \$1,272,482, a decrease of \$22,220,559 from \$23,493,041 in the same nine month period of the prior year. Details of the individual items contributing to the decreased net loss are as follows:

Nine months ending September 30, 2014 vs. nine months ending September 30, 2013 - Variance Analysis			
Item	Variance Favourable / (Unfavourable)	Explanation	
Loss from discontinued operations	\$21,889,561	The Company's results from one year ago included a write-down of asset value on the sale of the Springer mine in the second half of 2013.	
Interest expense	\$377,762	In 2013, the Company was making interest payments on the loan taken out in February of 2012. This loan matured in August 2013 and the sale of the Springer operation was used to extinguish that debt. Smaller financings were taken subsequent which has resulted in lower financing costs.	
General and administrative	\$90,178	Lower overall activity in 2014 as well as a renegotiation of accrued costs has resulted in this favorable variance.	
Salaries and benefits	\$82,135	Decreased salary expenses in 2014 are as a result of the Company's decision to forgo salaries for key executives in an effort to conserve capital.	
Consulting	\$39,178	Consulting in the pursuit of the Springer mine and mill sale in 2013 resulted in the higher consulting costs when compared to 2014. No such costs were incurred in 2014.	

# Nine months ending September 30, 2014 vs. nine months ending September 30, 2013 - Variance Analysis

Item	Variance Favourable / (Unfavourable)	Explanation
Exploration	\$35,270	In 2014, the Company carried out a small exploration program at its Honeybugle operation and began work on the Nyngan project resulting in costs of \$292,763. In the prior year funds were expended to secure the Nyngan project in Australia resulting in the cost differential between the two comparative periods.
Insurance	\$8,016	In 2014, the Company received a refund on workers compensation premiums charged in the prior year. This adjustment resulted in current charges being lower than in 2013.
Amortization	\$349	Lower amortization is reflective of the fact that the assets held in our Sparks office are declining in value.
Travel and entertainment	\$(9,344)	In 2014, travel to Australia to work on the Nyngan project resulted in the higher costs when compared to 2013.
Professional fees	\$(20,849)	Unfavorable variance is due to legal fees incurred in association with June 2014 loan financing transaction. No such costs were incurred in Q2 2013.
Foreign exchange loss	\$(67,028)	In 2013, the Canadian dollar strengthened against the US dollar making those assets held in Canadian dollars worth more when converted to US\$. In 2014 there was weakening against the US dollar making the bank deposits held in Canadian funds lower in value.
Stock-based compensation	\$(206,209)	The Company issued stock options in Q3 2014 of which 72% vested immediately and resulted in an expense of \$272,292. In 2013, a lesser number of options were granted resulting in a lower option expense.

## Cash flow discussion for the nine month period ended September 30, 2014 compared to September 30, 2013

The cash outflow for operating activities was \$944,534, a decrease of \$70,743 (September 30, 2013 - \$1,015,277), due to decreased activity levels as described in the variance analysis in addition to an increase in accounts payable and the collection of accounts receivable during the period.

Cash outflows for investing activities were \$1,214,163, an increase of \$105,679 (September 30, 2013 – \$1,108,484), principally due to the final payment made to secure the Nyngan project which was larger than the Nyngan payment made in 2013.

Cash inflows from financing activities increased by \$571,713 to \$2,520,888 (September 30, 2013 - \$1,949,175), reflecting the repayment of a convertible debenture of \$650,000 and a promissory note of \$1,204,875 which was more than offset by the issuance of share capital of \$1,875,763 and the issuance of a loan of \$2,500,000. In Q1 2013, the Company took out the \$649,175 convertible loan and the promissory note of \$1,300,000.

#### **Financial Position**

Cash and restricted cash

The Company's cash position increased during the nine month period by \$362,191 to \$1,147,266 (December 31, 2013 - \$785,075) primarily due to the issuance of share capital netting the Company \$1,875,763 and the issuance of a new promissory note of \$2,500,000. This was partially offset by the repayment of a convertible debenture in the amount of \$650,000 and a promissory note of \$1,204.875.

Prepaid expenses and receivables

Accounts receivable decreased by \$94,740 to \$32,670 due primarily to the receipt of cash early in January on the finalization of the Springer sale (December 31, 2013 - \$127,410).

Property, plant and equipment

Property, plant and equipment consist of office furniture and computer equipment at the Sparks, Nevada office. The decrease of \$2,875 to \$7,403 (December 2013 - \$10,278) is due to amortization of net fixed assets.

Mineral interests

Mineral interests increased by \$1,364,031 to \$2,977,234 due to the final payment to acquire the Nyngan property in Australia of A\$1,400,000 (December 31, 2013 - \$1,613,203).

Accounts Payable

Accounts Payable has decreased by \$41,959 to \$205,654 (December 2013 – \$247,613) due to payment of deferred salary payments for key staff members from the first six months of this year.

Convertible Debenture

Convertible debentures decreased by \$650,000 to \$Nil (December 31, 2013 - \$650,000) due to the repayment of a convertible debenture taken out in O1 of 2013.

Promissory notes payable

The promissory notes payable increased by \$1,295,125 due to the negotiation of a new loan of \$2,500,000 which was partially offset by the repayment of the prior promissory note of \$1,204,875 (December 31, 201 - \$1,204,875).

Capital Stock

Capital stock increased by \$1,875,763 to \$89,186,471 (December 31, 2013 - \$87,310,708) as a result of a stock issuance in the period.

Additional paid-in capital increased by \$272,292, to \$2,380,619 (December 31, 2013 - \$2,108,327) as a result of expensing of stock options.

#### **Liquidity and Capital Resources**

At September 30, 2014, the Company had a working capital deficit of \$1,525,718 including cash of \$1,147,266 as compared to a working capital deficit of \$1,190,003 including cash of \$785,075 at December 31, 2013.

At September 30, 2014, the Company had a total of 15,378,750 stock options exercisable between CAD\$0.05 and CAD\$0.315 that have the potential upon exercise to generate a total of C\$1,608,638 in cash over the next five years. There is no assurance that these securities will be exercised. The Company's continued development is contingent upon its 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 the Company; however, management is committed to pursuing all possible sources of financing in order to execute its business plan. The Company continues its cost cutting measures to conserve cash to meet its operational obligations.

## Outstanding share data

At the date of this report, the Company has 198,604,790 issued and outstanding common shares and 15,378,750 stock options currently outstanding at a weighted average exercise price of CAD\$0.11.

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

At September 30, 2014, the Company 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 the Company.

#### Transactions with related parties

Accounts payable on September 30, 2014 included \$32,667 owed to related parties. Accounts payable on December 31, 2013 included \$170,000 owed to related parties.

A total of \$350,000 from the loan financing completed on February 22, 2013, \$579,875 from the loan financing completed on June 24, 2013 and all of the \$100,000 financing completed on August 27, 2013, were funded from a combination of Directors, insiders, and independent shareholders. The Company has paid \$78,500 in interest to related parties relating to these loans.

A \$100,000 loan financing completed in 2013 was from directors and officers. The loan was repaid in full in 2013.

The loan financing completed on February 22, 2013, of which \$350,000 was contributed from directors and officers, was repaid in the nine months ending September 30, 2014.

Of the \$79,033 interest expensed in the nine months, \$14,375 related to a director of the Company.

During the nine months ended September 30, 2013, the Company accrued expenses for consulting fees of \$76,500 payable to one of its directors. There were \$25,500 in consulting fees incurred during the nine month period ended September 30, 2014.

## **Proposed Transactions**

There are no proposed transactions outstanding other than as disclosed.

## **Critical Accounting Estimates**

The preparation of financial statements in conformity with generally accepted accounting policies requires management of the Company 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

The Company uses 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 the Company makes will likely change from time to time. At the time the fair value is determined; the methodology the Company uses 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.

#### Future income taxes

The Company accounts for tax consequences of the differences in the carrying amounts of assets and liabilities and their tax bases using tax rates expected to apply when these temporary differences are expected to be settled. When the future 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. The Company has taken a valuation allowance against all such potential tax assets.

The Company capitalizes the costs of acquiring mineral rights at the date of acquisition. After acquisition, various factors can affect the recoverability of the capitalized costs. The Company's 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. The Company is 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, the Company has assumed recent world commodity prices will be achievable. The Company has considered the mineral resource reports by independent engineers on the Nyngan project 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.

## **Recently Adopted Accounting Policies**

On June 10, 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-10 (ASU 2014-10), Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation. ASU 2014-10 eliminates the requirement to present inception-to-date information about income statement line items, cash flows, and equity transactions, and clarifies how entities should disclosure the risks and uncertainties related to their activities. ASU 2014-10 also eliminates an exception provided to development stage entities in Consolidations (ASC Topic 810) for determining whether an entity is a variable interest entity on the basis of the amount of investment equity that is at risk. The presentation and disclosure requirements in Topic 915 will no longer be required for interim and annual reporting periods beginning after December 15, 2014, and the revised consolidation standards will take effect in annual periods beginning after December 15, 2015. Early adoption is permitted. The Company adopted the provisions of ASU 2014-10 effective for its financial statements for the interim period ended September 30, 2014, and accordingly, is no longer presenting the inception-to-date financial information and disclosures formerly required.

Accounting Standards Update 2013-05 - Foreign Currency Matters (Topic 830) - Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity. This standard provides guidance with respect to the treatment of the cumulative translation adjustment upon the sale of a foreign subsidiary whereby the cumulative translation adjustment associated with that subsidiary are taken into net income of the parent company.

Accounting Standards Update 2013-11 - Income Taxes (Topic 740) - Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carry forward, a Similar Tax Loss, or a Tax Credit Carry forward Exists. This accounting standard deals with the treatment of tax loss carry forwards. The Company has reviewed this standard and has determined that it has little impact on the presentation of its financial statements.

## **Recent Accounting Pronouncements**

Accounting Standards Update 2014-15 – Presentation of Financial Statements – Going Concern (Subtopic 205-40). This accounting pronouncement provides guidance in GAAP about management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. In doing so, the amendments should reduce diversity in the timing and content of footnote disclosures. The policy is effective December 15, 2016. The Company is evaluating this guidance and believes it will have little impact on the presentation of its financial statements.

Accounting Standards Update 2014-08 - Presentation of Financial Statements (Topic 205) and Property, Plant, and Equipment (Topic 360) Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity. This accounting pronouncement provides guidance on the treatment of Property, Plant and Equipment plus the reporting of discontinued operations and disclosure of disposals of components of an entity. The policy is effective December 15, 2014. The Company is evaluating this guidance and believes it will have little impact on the presentation of its financial statements.

#### Financial instruments and other risks

The Company's financial instruments consist of cash, receivables, accounts payable and accrued liabilities, convertible debentures 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.

## **Information Regarding Forward-Looking Statements**

This Management's Discussion and Analysis of Financial Condition and Results of Operations contain certain forward-looking statements. Forward-looking statements include but are not limited to those with respect to the prices of metals, the estimation of mineral resources and reserves, the realization of mineral reserve 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 and limitations on insurance coverage and the timing and possible outcome of pending litigation. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "estimates", "intends", "anticipates" or "does not anticipate", or "believes" or variations of such words and phrases, or statements that certain actions, events or results "may", "could", "would", or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of EMC to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the actual results of current exploration activities, conclusions or economic evaluations, changes in project parameters as plans continue to be refined, possible variations in grade and or recovery rates, failure of plant, equipment or processes to operate as anticipated, accidents, labor disputes or other risks of the mining industry, delays in obtaining government approvals or financing or incompletion of development or construction activities, risks relating to the integration of acquisitions, to international operations, and to the prices of metals. While EMC has 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. EMC expressly disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

## Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

### Item 4. Controls and Procedures

#### **Disclosure Controls and Procedures**

At the end of the period covered by this Quarterly Report on Form 10-Q for the nine months ended September 30, 2014, an evaluation was carried out under the supervision of and with the participation of the Company's management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act). It is the responsibility of the Company's management for establishing and maintaining adequate internal control over financial reporting for the Company.

The Company took into consideration the following three characteristics common to companies of a similar size:

- The limited number of personnel in smaller companies, which constrains the Company's ability to fully segregate conflicting duties;
- The Company relies on an active Board and management with open lines of communication to maintain the effectiveness of the Company's disclosure controls and procedures; and
- The dynamic and evolving nature of smaller companies, which limits their ability to have static processes that are well-documented.

In addition, management has relied upon certain informal procedures and communication, and upon "hands-on" knowledge of senior management to maintain the effectiveness of disclosure controls and procedures.

Based on that evaluation, the CEO and the CFO have concluded that as of the end of the period covered by this report, the Company's disclosure controls and procedures and internal control over financial reporting are effective in ensuring that: (i) information required to be disclosed by the Company in reports that it files or submits to the SEC under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in applicable rules and forms and (ii) material information required to be disclosed in our reports filed under the Securities Exchange Act of 1934 is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow for accurate and timely decisions regarding required disclosure.

#### **Changes in Internal Control over Financial Reporting**

During the period covered by this report, there were no changes to internal control over financial reporting that materially affected or are reasonably likely to materially affect our internal control over financial reporting.

#### PART II - OTHER INFORMATION

#### Item 6. Exhibits

- 11.1 Statement of Computation of Per Share Earnings for the Quarter Ended September 30, 2014.
- 31.1 Certification of the Principal Executive Officer, pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934.
- 31.2 Certification of the Principal Financial Officer, pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934.
- 32.1 Section 1350 Certification of the Principal Executive Officer.
- 32.2 Section 1350 Certification of the Principal Financial Officer.

## **SIGNATURES**

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

Date: November 10, 2014

EMC METALS CORP.

(Registrant)

By: /s/ George Putnam

George Putnam

Principal Executive Officer

By: /s/ Edward Dickinson

Edward Dickinson

Principal Financial Officer