



**NEWS RELEASE**  
**TSX: EMC**  
**February 14, 2013**  
**NR 13-5**  
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## **EMC Announces Positive Results of 2012 Norway Exploration Program**

**Reno, Nevada – February 14, 2013 – EMC Metals Corp. (the “Company” or “EMC”) (TSX: EMC)** is pleased to announce promising results from field exploration work on the Tørdal property during the summer and fall months of 2012, focussed 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:**

- **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 very encouraging; warrant expanded exploration.**

### **Discussion—Norway Exploration Programs**

#### **Assay Results of Grab Samples at Tørdal**

EMC previously released the soil sample assay results of its 2011 summer exploration program on the Tørdal property, which 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 Type	Sample Location		Rare Earth Assay Results			Scandium
	Sample ID #	Blast ID #	HREE ppm	TREE ppm	% HREE	Sc ppm
Whole Rock Samples	TD1	7	307	427	72.0%	38
	TD2	7	142	204	69.7%	334
	TD3	3	104	138	75.0%	86
	TD5	4	460	533	86.4%	111
	TD6	2	177	223	79.3%	67
	TD7	9	180	219	82.0%	26
	TD8	8	935	1,028	90.9%	77
Select Mica-Phase Samples	TD9	7	130	171	75.8%	568
	TD10	3	92	123	74.5%	665
	TD11	9	159	191	82.8%	1,459
	TD13	1	52	59	88.1%	853
	TD15	3	724	883	81.9%	1,690
Select Garnet-Phase Samples	TD17	8	1,581	1,656	95.5%	141
	TD18	7	305	357	85.6%	23
	TD19	2	2,443	2,789	87.6%	246
	TD21	2	722	860	84.0%	150
Select Gadolinite-Phase	TD14	1	227,500	266,430	85.4%	26
	TD22	3	162,500	186,480	87.1%	64
	TD23	location 32	267,400	313,530	85.3%	<1

NOTE: All blast samples taken from Kleppe area (Area 1), total of 5 unique pegmatites

Assay results are as-reported elemental assay results from OMAC Laboratories, and are not converted to oxide equivalent (REO & Sc<sub>2</sub>O<sub>3</sub>). 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.

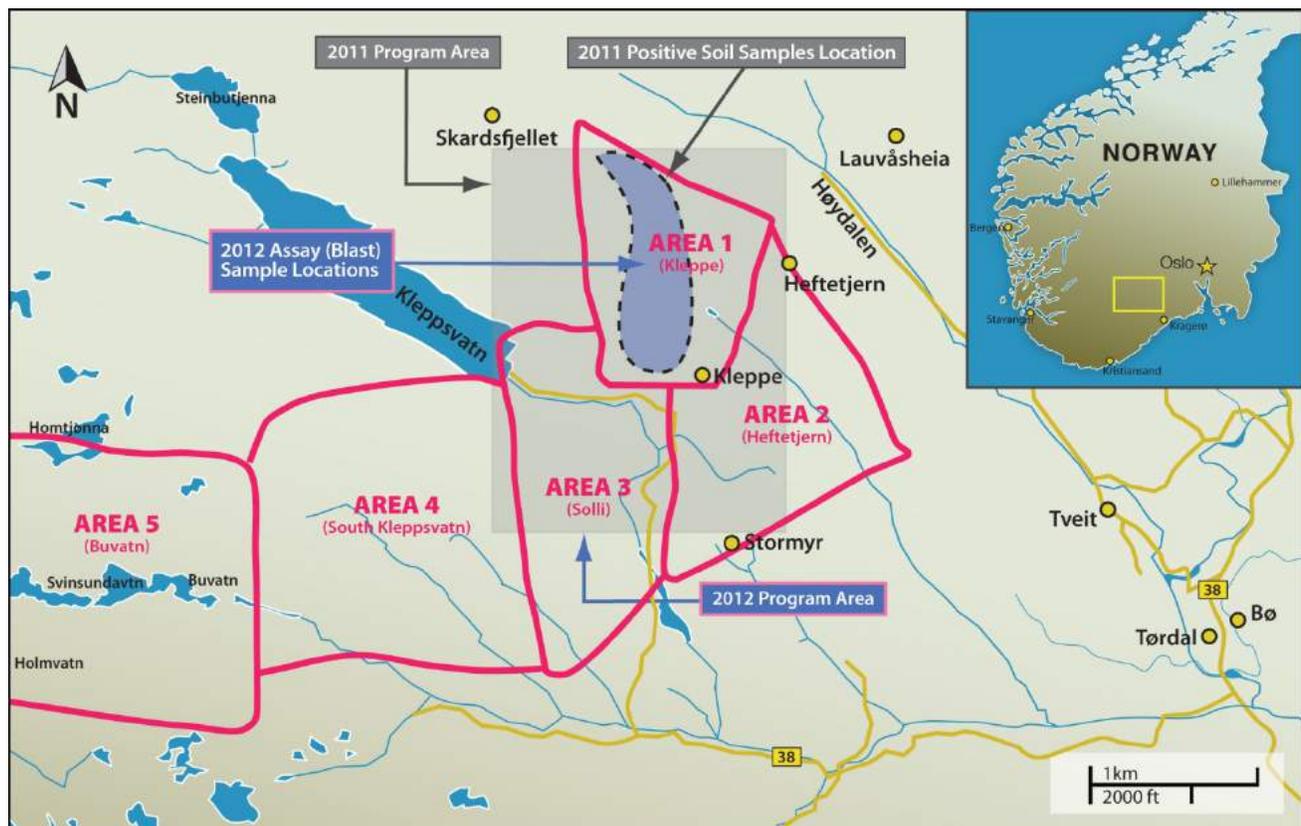
The results in the assay table indicate that all of the selected pegmatites contain interesting levels of both REE's and scandium. In general, all of the pegmatites contained both target elements, while the mica phase appears to hold the higher scandium concentrations with small REE additions, and the 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 will be available on EMC's website.

### Reconnaissance Results – Extended Pegmatite Mapping Program at Tørdal

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-lveland, 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 (Hefsetjern);** 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, amazonite 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. These observations led to the decision to drop Evje-Iveland, as part of an amended agreement which also enabled EMC to achieve an immediate 100% earn-in on Tørdal. (see EMC press release dated January 17, 2013 announcing early earn-in agreement with REE Mining).

The exploration results of the 2012 work program also allowed EMC to selectively reduce property holdings at Tørdal in January 2013. The property has been reduced from 140 sq km to 90 sq km, with lower ongoing exploration license holding costs as a result.

### **Next Steps in Norway Exploration Program**

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.

In 2013, EMC's exploration program plans include the following:

- Small bore drill program to test select pegmatite depth, size, and continuity, both of target mineralization within individual pegmatites, and similarity of mineralization between various pegmatities in defined areas, or fields,
- Drill core assay program to gain lab-assay reportable resource grades from core material, for scandium and REE, to support grab sample assay work done to date,
- Bench scale material testing work to determine if the resource may be amenable to simple concentration techniques (gravity concentration, magnetic separation, and limited flotation processes, particularly on micas), and also to field separation of various target minerals,
- Further geologic work to correlate scandium and REE presence within various host minerals in the pegmatites, specifically micas, feldspars, quartz, gadolinites and amazonites, and
- Identify individual pegmatite fields that favor either scandium or REE resources, based on identified host mineral occurrences.

#### **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.

#### **Mr. George Putnam, CEO of EMC Metals comments:**

"We are pleased to complete the early 100% earn-in on the Tørdal property, enabling us to focus our budgets on resource development, and to now identify an exciting target area within the property holding, based on work results. The 2012 summer work program has further convinced us that Tørdal is a very attractive near-surface discovery prospect for both scandium, and also REE mineralization. The target shows the right combination of potential scandium and REE grades, size, access, and simplicity of production potential, and we intend to now focus our Norway exploration attention here in 2013."

#### **About EMC Metals**



EMC owns a 100% interest in the Springer tungsten mine in Nevada, USA. The Company recently filed a NI 43-101 PEA on the Springer asset and is following a strategy to seek a near term restart of the facility. EMC also owns a 100% interest in the Carlin Vanadium property near Carlin, Nevada. Both the Springer and Carlin Vanadium properties have current NI 43-101 Technical Reports filed on SEDAR, copies of which are available on the Company website. In addition, EMC owns a 100% interest in both the Tørdal Scandium and Hogtuva Beryllium properties in Norway where we continue exploration for scandium and REE minerals.

In early 2012, EMC's 50% earn-in on the Nyngan Scandium Project was rejected by our Australian JV partner, Jervois Mining Limited. The dispute arising from that rejection is now settled, and EMC now controls 100% of the Nyngan Scandium Project, with a Technical Report on resources filed on SEDAR.

The technical information in this news release has been reviewed by both Willem Duyvesteyn and Casey Danielson, each a Qualified Person as defined by National Instrument NI 43-101. Both Mr. Duyvesteyn and Mr. Danielson are employed by EMC Metals Corp.

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