



## PRESS RELEASE

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### **CRITICAL ELEMENTS HIRES AMBUCK ASSOCIATES TO ASSIST WITH THE FEASIBILITY STUDY AND PROVIDE THE DETAILED ENGINEERING FOR THE MINING PLAN**

**JANUARY 30, 2012** - MONTREAL, QUEBEC – **Critical Elements Corporation** (TSX.V: CRE) (US OTCQX: CRECF) (FSE: F12) is pleased to announce that they have hired AMBUCK associates for mine design and lead for the feasibility study.

The mining study, part of the feasibility study will include the following items:

- Review block model and import into optimization software. Also import model into underground mine design software.
- Analyze and model the geotechnical design for open pit and underground mining. Recommendations will be used in the open pit slopes and underground mine and stope design. Stope/pillar designs will be looked at and modelled using 3D elastic modelling to assess stope/pillar stability. Underground ground support systems will be recommended and specified for both development and production.
- Undertake open pit optimization, mine design, waste dump design, equipment selection and detailed production scheduling.
- Undertake underground mine design, mining method selection, equipment selection and detailed development and production scheduling.
- Determine mine infrastructure requirements for the open pit and underground and include, but not be limited to: mine water pumping, ore transport systems, crushing and loading facilities, ventilation systems, underground maintenance facilities, fuel and lube systems, backfill facilities, mine process and discharge water handling systems and compressed air and electrical distribution.
- Determine surface infrastructure requirements, including site access, required site services and transportation corridors will be determined. A site surface General Arrangement drawing will also be produced.
- Determine, using costing spreadsheets, mine capital and mine production costs (approximately +/- 10-15% accuracy) on a yearly basis. Costs will be based on budget quotes obtained from suppliers for all major cost component items.
- Determine other mine services operating costs based on development and production schedules.
- Estimate electrical loads for the surface and underground mines. The power distribution system will be evaluated accordingly.
- Determine surface infrastructure capital expenditures, in conjunction with Critical Elements personnel and its other consultants on surface infrastructure.
- Complete cash-flow model.
- Prepare mining sections of the Feasibility Study report.

## **STUDY PROJECT COORDINATION**

Mr. Malcolm Buck of AMBUCK Associates would also act as consultant project coordinator. He would aid Mr. Paul Bonneville in insuring all aspects of the Feasibility study are completed and the report prepared in compliance with NI 43-101, so it can be filed by Critical Elements with the appropriate regulatory authorities.

Critical Elements regrets to announce that Jean Rainville has resigned as a director of the Company, a position he had held since November 2010. The Board of Directors thanks Mr. Rainville for his hard work and wishes him all the best in his future endeavours.

## **ABOUT CRITICAL ELEMENTS CORPORATION**

Critical Elements is actively developing its 100%-owned Rose lithium-tantalum flagship project located in Quebec.

**A recent financial analysis of the Rose Project based on price forecasts of US\$260/kg (\$118/lb) for Ta<sub>2</sub>O<sub>5</sub> contained in a tantalite concentrate and US\$6,000/t for lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) show an after-tax Internal Rate of Return (IRR) of an estimated 25% for the Rose Project, with an estimated Net Present Value (NPV) of CA\$279 million at an 8% discount rate. The payback period is estimated at 4.1 years. The pre-tax IRR is estimated at 33% and the NPV at \$488 million at a discount rate of 8%. (Mineral resources that are not mineral reserves do not have demonstrated economic viability).**

The project hosts a current NI 43-101-compliant **Indicated resource of 26.5 million tonnes of 1.30% Li<sub>2</sub>O Eq. or 0.98% Li<sub>2</sub>O and 163 ppm Ta<sub>2</sub>O<sub>5</sub> and an Inferred resource of 10.7 million tonnes of 1.14% Li<sub>2</sub>O Eq. or 0.86% Li<sub>2</sub>O and 145 ppm Ta<sub>2</sub>O<sub>5</sub>.**

Critical Elements is presently in the tendering process for the various aspects of the feasibility study and has commissioned Genivar to complete an environmental impact study of Rose deposit and Acme Metallurgical Ltd. of Vancouver is carrying out project metallurgy.

Critical Elements' portfolio also includes rare-earth and tantalum-niobium projects in the Rocky Mountains of British Columbia and in Quebec, as well as a 50% interest in the Croinor project, which is located in Quebec and hosts a current NI 43-101-compliant measured and indicated resource of 814,228 tonnes at 9.11 g/t Au, for 238,414 ounces of gold at a 5 g/t cut-off.

Jean-Sebastien Lavallée (OGQ #773), geologist, shareholder and president and chief executive officer of the Company and a Qualified Person under NI 43-101, has reviewed and approved the technical content of this release.

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