



PRESS RELEASE

STRATEGIC ANALYSIS LINKED TO ROLLOUT OF SECONDARY CARBONATE PROCESSING PLANT FOR THE ROSE MINING PROJECT

FEBRUARY 28, 2012 – MONTREAL, QUEBEC – **CRITICAL ELEMENTS CORPORATION** (TSX.V: CRE) (US OTCQX: CRECF) (FSE: F12) is actively working on development of the Rose mining project, which includes construction of a primary processing plant as well as a secondary processing plant for lithium carbonate. The planning process for the latter facility is well underway and Critical Elements is planning rollout of the lithium carbonate secondary processing plant.

Critical Elements therefore has commissioned SECOR to conduct a strategic analysis linked to rollout of the secondary processing plant. SECOR will work in conjunction with the Critical Elements management team to determine the key factors for success and the optimal framework for operating the plant. The findings of this analysis will be available to Critical Elements senior management in May 2012.

Jean-Sébastien Lavallée, President & CEO of Critical Elements, is very pleased with this joint initiative: “We want the Rose project to become a driving force in wealth creation for Quebec, especially for the local communities that will host our operations, as well as for our employees and shareholders. The Rose mining project will benefit from SECOR’s experience and from its team in the Quebec and international mining sectors.”

ABOUT SECOR

Founded in Quebec more than 35 years ago, SECOR is the largest independent strategic consulting firm in Canada. The company’s mission is to support management teams making strategic decisions that will have a major impact on success of their organization. With recognition for its unique approach to strategy in both the private and public sectors, SECOR has consistently earned distinction for its concern with and ability to identify the major strategic issues of an organization or industry, while factoring in the organizational, economic and financial impact resulting from the directions chosen.

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 Ta₂O₅ contained in a tantalite concentrate and US\$6,000/t for lithium carbonate (Li₂CO₃) 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% Li₂O Eq. or 0.98% Li₂O and 163 ppm Ta₂O₅ and an Inferred resource of 10.7 million tonnes of 1.14% Li₂O Eq. or 0.86% Li₂O and 145 ppm Ta₂O₅.**

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 506,700 tonnes at 10.66 g/t Au, for 173,700 ounces of gold at a 5 g/t cut-off.

Jean-Sébastien 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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