



PRESS RELEASE

CRITICAL ELEMENTS SUCCESSFULLY COMPLETES PILOT PLANT WORK AND PRODUCES SPODUMENE CONCENTRATE GRADING UP TO 6.56% Li_2O

APRIL 5, 2017 – MONTREAL, QUEBEC – **Critical Elements Corporation** (the “Corporation” or “Critical Elements”) (TSX-V: CRE) (US OTCQX: CRECF) (FSE: F12) is pleased to announce that it has successfully completed its pilot plant trials. The program confirmed the suitability and robustness of the beneficiation plant design. The outstanding results yielded lithium concentrate grades of up to 6.56% and recoveries of up to 83.4%. Results obtained in pilot plant testing demonstrate very good understanding of the processing of the mineralized material, and the commercial plant should generate results similar to the locked cycle tests with the optimized equipment.

Locked cycle tests returned outstanding results, with a lithium concentrate grade of 6.65% Li_2O and recoveries of up to 89.7%. Tantalite recoveries were 48.1% for Rose and 64.4% for Rose South, respectively, with grades of 1.44% and 2.39% Ta_2O_5 , respectively.

The trials also included testing of low iron content mineralized material suitable for higher-value Glass and Ceramics applications (Spodumene Tech Grade).

“I am very excited about our pilot plant results, which highlight the low risk profile of the project. The lithium market is desperately looking for new, reliable, and sustainable suppliers like Critical Elements, as yearly demand for lithium carbonate is expected to grow from 200,000 mt, to more than 600,000 mt”, said Dr. Steffen Haber, President.

“Helm congratulates Critical Elements on the successful recovery of this high quality spodumene. Our customers are looking forward to when we can supply their needs from the Rose Mine”, said Oliver Leptien, Executive Manager, Derivatives Business Unit of Helm AG

Lithium recoveries improved as the trial progressed, indicating an increased understanding of the process, which resulted in adjustments being made to the operation. The proposed plant design includes simple grinding, and industry-standard flotation circuits, and uses magnetic and gravity separation to upgrade the Spodumene and Tantalite ore.

Pilot plant trials were conducted in 12- and 48-hour phases at a rate of 250 kg/h on material from two different zones of the deposit, Rose and Rose South. Initial trials were performed during a 12-hour run to establish operating conditions, after which a 48-hour run was conducted to produce a concentrate and test the selected circuit design.

The series of pilot runs conducted using the Rose and Rose South materials confirmed the results with respect to lithium grade and recovery. The trials outlined results of up to 6.41% Li_2O with recovery up to 83.4% for Rose, and 6.56% Li_2O with recovery up to 81.9% for Rose South. With respect to tantalum, adjustments were made to the Ta recovery unit and an additional unit was added to improve recovery. The final four runs showed Ta recovery up to 69.1%. The pilot plant work indicates that similar recoveries can be obtained for tantalum as in laboratory testing, and the tantalum will be further concentrated by gravity or flotation, from a grade of 1-2% Ta_2O_5 up to 25% Ta_2O_5 .

"We are very enthusiastic about these recent results, which confirm the high-grade concentrate, and robust recovery profile of our project," said Jean-Sébastien Lavallée, Chief Executive Officer of Critical Elements Corporation. "The Rose lithium-tantalum project has always returned lithium recoveries and grades that were above industry standards. These results have now been confirmed at the pilot plant scale."

Jean-Sébastien Lavallée (OGQ #773), geologist, shareholder 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.

ABOUT CRITICAL ELEMENTS CORPORATION

A recent financial analysis (Technical Report and Preliminary Economic Assessment (PEA) on the Rose lithium-tantalum Project, Genivar, December 2011) of the Rose project, 100% owned by Critical Elements, 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) showed an estimated after-tax Internal Rate of Return (IRR) of 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 CA \$488 million at a discount rate of 8%. (Mineral resources are not mineral reserves and do not have demonstrated economic viability). (The preliminary economic assessment is preliminary in nature). (See press release dated November 21, 2011.)

The conclusions of the PEA indicate that the operation would support a production rate of 26,606 tons of high purity (99.9% battery grade) Li₂CO₃ and 206,670 pounds of Ta₂O₅ per year over a 17-year mine life.

The project hosts a current 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.

FOR MORE INFORMATION:

Jean-Sébastien Lavallée, P.Geo.
Chief Executive Officer
819-354-5146
jslavage@cecorp.ca
www.cecorp.ca

Investor Relations:

Paradox Public Relations
514-341-0408

*Neither the TSX Venture Exchange nor its Regulation Services Provider
(as that term is defined in the policies of the TSX Venture Exchange)
accepts responsibility for the adequacy or accuracy of this release.*



Figure 1 – Products from pilot



Figure 2 - Ball Mill & Derrick Screen. Overs from Derrick feed Ball Mill



Figure 3 - Derrick Screen with mineralized material





Figure 4 - Top L- R Ball Mill & Rod Mill, Bottom- Slon magnetic separator





Figure 5 - Mica Flotation Cells