



News Release

Alexco Receives Water Licence Amendment

May 20, 2013 - Alexco Resource Corp. (NYSE-MKT:AXU, TSX:AXR) today reports it has received the completed and signed Water Use Licence amendment from the Yukon Water Board allowing Alexco to process mill feed from its Onek and Lucky Queen mines in the Keno Hill Silver District in Yukon, Canada. Production from these mines would be supplemental to the Company's already-operating Bellekeno mine and is not included in Alexco's production guidance for 2013 of between 1.9 million and 2.1 million ounces of silver.

Alexco President and Chief Executive Officer Clynt Nauman said, "We are pleased to have received this licence, which opens the way for expanded silver production at Keno Hill. However, the recent and continuing decrease in the price of silver has also given us reason to closely evaluate all of our operating plans, and the decision on when to commence production at Onek will depend upon our currently ongoing analysis. In the current unstable metal price environment, it may very well make sense to defer Onek production until conditions stabilize and improve. I expect our analysis and interim plans will be completed within the next couple of weeks."

Nauman also commented on the importance of focusing on the extremely promising Flame & Moth deposit. "I can tell you that our new discovery at Flame & Moth, with its more than 23 million ounces of silver resource, is becoming an increasingly important part of our thinking. We are looking carefully at return on capital at all of our sites – Bellekeno, Onek, Lucky Queen and Flame & Moth – and it is important to remember that the price sensitivity of these different styles of deposits will ultimately drive any final commercial production decisions," he said.

The water licence amendment also applies to material delivered to the mill from the Lucky Queen mine, which is scheduled to go into production later in the year depending on submission of an updated waste rock management plan to eliminate re-handling and to provide more efficient long term storage of waste rock closer to the mine.

About Alexco

Alexco Resource Corp. owns and operates the Bellekeno silver mine, one of several mineral properties held by Alexco which encompass substantially all of the historical Keno Hill Silver District located in Canada's Yukon Territory. Bellekeno, which commenced commercial production at the beginning of calendar year 2011, is Canada's only operating primary silver mine. The Keno Hill Silver District lies within the traditional territory of the First Nation of Na-Cho Nyak Dun which has a fully settled land claim agreement with the Government of Canada and the Yukon, and Alexco operates within the District under a comprehensive cooperation and benefits agreement with the First Nation. Alexco's primary near-term exploration objective is to unlock value in the silver-rich Keno Hill District, and is focused on growth by advancing its promising District properties to development decisions. The Company's goal is to produce 7 million to 10 million ounces of silver annually within the next decade. Employing a unique business model, Alexco also provides mine-related environmental services, remediation technologies and reclamation and mine closure services to both government and industry clients through the Alexco Environmental Group, its wholly-owned environmental services division.

Keno Hill Silver District History

Between 1921 and 1988, the Keno Hill Silver District was a world-class silver producer, with more than 217 million ounces of silver produced at average grades of 40.5 ounces per ton silver, 5.6% lead and 3.1% zinc (Yukon

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Government's Minfile database). These historical production grades would rank Keno Hill in the top 3% by grade of today's global silver producers.

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Some statements ("forward-looking statements") in this news release contain forward-looking information concerning the Company's anticipated results and developments in the Company's operations in future periods, planned exploration and development of its properties, plans related to its business and other matters that may occur in the future, made as of the date of this news release. Forward-looking statements may include, but are not limited to, statements with respect to future remediation and reclamation activities, future mineral exploration, the estimation of mineral reserves and mineral resources, the realization of mineral reserve and mineral resource estimates, future mine construction and development activities, future mine operation and production, the timing of activities and reports, the amount of estimated revenues and expenses, the success of exploration activities, permitting time lines, requirements for additional capital and sources and uses of funds. Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the forward-looking statements. Such factors include, among others, risks related to actual results and timing of exploration and development activities; actual results and timing of mining activities; actual results and timing of environmental services activities; actual results and timing of remediation and reclamation activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of silver, gold, lead, zinc and other commodities; possible variations in mineable resources, grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accidents, labour disputes and other risks of the mining industry; First Nation rights and title; continued capitalization and commercial viability; global economic conditions; competition; and delays in obtaining governmental approvals or financing or in the completion of development activities. Forward-looking statements are based on certain assumptions that management believes are reasonable at the time they are made. In making the forward-looking statements included in this news release, the Company has applied several material assumptions, including, but not limited to, the assumption that market fundamentals will result in sustained silver, gold, lead and zinc demand and prices. There can be no assurance that forward-looking statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. The Company 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, except as otherwise required by applicable securities legislation.