



News Release

Alexco Announces Amended Silver Streaming Agreement for Keno Hill

All amounts are expressed in US dollars unless otherwise stated.

June 16, 2014 – Alexco Resource Corp. (NYSE-MKT:AXU, TSX:AXR) is pleased to announce it has come to an agreement with Silver Wheaton Corp. to amend the Silver Purchase Agreement originally dated October 2, 2008, such that the fixed \$3.90 per ounce silver streaming production payment is replaced with a variable production payment based on the spot price of silver, with significant positive implications for Alexco and the Keno Hill Silver District in general.

The amended silver streaming agreement applies to 25% of Alexco's payable silver produced at its Keno Hill silver mining operations in Yukon, Canada. The newly agreed variable production payment is defined by a pricing curve with an apex at \$19.45 spot silver price where Silver Wheaton will make a production payment to Alexco of \$18.00 per ounce of silver delivered; that payment decreases by \$0.91 per ounce for each \$1.00 increase *or* decrease in silver price from \$19.45, returning to a fixed \$3.90 per ounce for spot silver prices of \$35.00 per ounce and higher. The amendments to the underlying Silver Purchase Agreement are subject to Alexco paying Silver Wheaton \$20 million by December 31, 2014 (or such later date as the parties may agree), with Silver Wheaton taking a lead role via participation in \$5 million of any Alexco equity raise in excess of \$10 million towards the \$20 million payment. In addition, a Silver Wheaton area of interest is established to include additional Alexco currently owned and future acquired properties within one kilometer of existing Alexco holdings in the Keno Hill Silver District. The amendment will be effective for a 10 year term from the time mining production recommences in the District, with an option for Alexco to extend the amendment for another 5 or 10 years for an additional \$10 million or \$20 million, respectively.

Alexco President and Chief Executive Officer Clynton R. Nauman said, "The amended Silver Purchase Agreement accommodates both Alexco and Silver Wheaton interests in re-establishing silver production at our expanding Keno Hill operations, but also represents a significant value proposition for Alexco shareholders. Simply put, the change not only protects our margins in lower silver price environments, it reduces our operating costs and considerably improves our leverage to upside movements in silver prices. It's important to remember that the impact of the silver stream is only on 25% of the ounces we produce, which leaves 75% of our production fully exposed to the upside. On the strength of this deal, and providing we are able to secure appropriate regulatory authorizations, we will move forward with our longer range plans to fully explore and develop our Flame & Moth deposit. Shorter term, depending on permitting as well as prevailing market conditions, our plan is to establish underground access and exploration platforms at Flame & Moth with a view to making a mine production decision for both our new Flame & Moth deposit and our currently suspended Bellekeno mining operation in 2015."

Amended Silver Purchase Agreement Highlights

- Silver Wheaton silver stream is preserved at 25%, but reflects a new variable production payment curve based on the spot price of silver, with a maximum payment to Alexco of \$18.00 per ounce of silver delivered when spot silver prices are \$19.45 and a payment floor of \$3.90 per ounce at \$35.00 spot silver price and higher.
- Amendment is subject to the payment of \$20 million by Alexco to Silver Wheaton, with Silver Wheaton participating as a lead order of \$5 million in any Alexco equity raise in excess of \$10 million, and establishment of a Silver Wheaton area of interest to include additional Alexco currently owned and future acquired properties within one kilometer of existing Alexco holdings in the Keno Hill Silver District.

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- Amendment term is 10 years from the time mining production re-commences in the Keno Hill Silver District, with an option for Alexco to extend the amendment term an additional 5 or 10 years for an additional payment of \$10 million or \$20 million respectively. Initial window to effect this amendment runs through December 31, 2014.
- 400 tonne per day mine(s) and mill completion test deferred to 24 months after delivery of first concentrate to smelter following restart of commercial operations upon amendment taking effect, and deferred immediately to December 31, 2015.
- Based on the figures contained in the Preliminary Economic Assessment (PEA) released December 2013 (see news release dated December 5, 2013 entitled “Alexco Releases Positive Preliminary Economic Assessment for Expanded Silver Production from Eastern Keno Hill Silver District, Yukon”), Alexco has determined the amended agreement contributes to an expected 20% to 25% reduction for All In Sustaining Costs¹ (AISC) to approximately \$16.50 per ounce of silver under the PEA based on a \$19.00 per ounce silver price compared to average AISC of approximately \$22.00 per ounce² during 2013 while the Bellekeno mine was in operation.
- The amended agreement increases Alexco’s share of net cash margin to 90% at silver prices less than \$20.00 per ounce, versus a loss of (20%) under the original 25% streaming arrangement, based on the PEA. Similarly, based on a \$19.00 per ounce silver price, the amended agreement increases the pre-tax net present value of the cumulative project PEA by \$26 million (net-of-tax \$23 million), net of the buy-down payment to Silver Wheaton.

Nauman said, “We’re looking at a much improved Alexco through this agreement. It gives us a new financial operating basis with a significantly improved underlying fixed cost structure, which will have further near term benefits in terms of additional potentially mineable ore tonnes, and longer term impact in terms of expansion of exploration and development opportunities in the District as a whole. What has not changed for Alexco is our control of an entire high grade and prolific silver district, our proven and continuing exploration successes, and our location in one of the world’s safest mining jurisdictions.”

¹ AISC is presented as defined by the World Gold Council on a co-product basis, inclusive of silver stream costs, royalties, corporate G&A and in-mine exploration expenditures. Metal prices and foreign exchange rate assumed for the PEA AISC are \$19 per ounce silver, \$0.95 per pound lead, \$0.85 per pound zinc and C\$1=US\$0.96. AISC is a metric commonly used in the mining industry and investment community to compare costs on a per unit basis. However, AISC is a non-IFRS measure with no standardized meaning prescribed under IFRS. The World Gold Council is a non-regulatory industry body which has published a standardized definition of AISC, and other companies may not follow that definition.

² Bellekeno AISC for 2013 is adjusted for this purpose to reflect the same metal price and foreign exchange rate assumptions used to determine the PEA AISC.

Conference Call and Webcast

Further details of the amended Silver Wheaton streaming agreement will be discussed in an audio webcast conference call along with accompanying slides to be held by Alexco at 11 a.m. Eastern (8 a.m. Pacific) on June 17, 2014. To participate in the live call, please use one of the following methods:

Dial toll free from Canada or the US: 1-877-407-8031
Dial from outside Canada or the US: 1-201-689-8031
Live audio webcast: www.alexcoresource.com

Participants should connect five to ten minutes before the call.

The conference call will be recorded, and an archived audio webcast will be available at www.alexcoresource.com. Through July 17, 2014, a replay of the call will be available by telephone at the following:

Dial toll free from Canada or the US: 1-877-660-6853
Dial from outside Canada or the US: 1-201-612-7415
Replay Passcodes: Conference ID # 13585136



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Qualified Persons

The disclosure in this news release of scientific and technical information regarding exploration projects on Alexco's mineral properties has been reviewed and approved by Alan McOnie, FAusIMM, Vice President, Exploration, a Qualified Person as defined by National Instrument 43-101 – *Standards of Disclosure for Mineral Projects*.

About Alexco

Alexco Resource Corp. owns 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, was Canada's only operating primary silver mine from 2011 to 2013. Alexco is currently undergoing an interim suspension of operations at Bellekeno in order to decrease costs and reposition the District for long-term, sustainable operations. The Keno Hill Silver District lies within the traditional territory of the First Nation of Na-Cho Nyak Dun who have 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. 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 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 the amendment to the Silver Purchase Agreement, its impact on Alexco and the Keno Hill Silver District and the parties' rights, obligations and conditions thereunder, including Alexco's condition to pay Silver Wheaton \$20 million and obtain regulatory approvals for any financing related thereto, 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 anticipated timing of making a production decision in the Eastern Keno Hill Silver District including recommencement of production at the Bellekeno mining operation, 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 the parties' performance under the amendment to the Silver Purchase Agreement, including Alexco's ability to raise additional capital to make the \$20 million payment to Silver Wheaton to meet its condition thereunder; success and timing of regulatory approvals; 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 the Company will be able to raise additional capital to make the \$20 million payment to Silver Wheaton under the amendment, that regulatory approval will be obtained in a timely fashion, that the proposed exploration and development will proceed as planned, and 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.