



ALEXCO PROVIDES KENO HILL OPERATIONS UPDATE

June 22, 2022 - Alexco Resource Corp. (NYSE American/TSX: AXU) (“Alexco” or the “Company”) today provides the following update on operations and exploration at the Company's wholly owned Keno Hill Silver District (“**Keno Hill**”) in Yukon Territory, Canada.

Ramp-up of mining activity at Keno Hill continued to progress in May with sustained underground development performance aided by improved equipment availability at both the Flame & Moth and Bermingham mines. Similarly, the district mill saw improved throughput and metallurgical performance in the same period. Underground advance at Bermingham reached the 1120 level, where the upper portion of the high-grade Bear Zone has been cross-cut with two ore faces and predictive block model grades of 1,900 – 2,000 grams per tonne (“g/t”) silver (“Ag”) appearing to be well supported or exceeded in mine based rib and face assays. Additionally, in May, the Company milled approximately 5,750 tonnes of ore, representing an approximate 19% increase over April. The mill operated for 16 days in May, nine of those days operating at throughput above the nameplate capacity of 400 tonnes per day (“tpd”). The metallurgical performance continued to be robust, with over 93% total silver recoveries to concentrate and in excess of 16,300 g/t Ag in the lead concentrate.

While the underground performance improvements are notable, and the demonstrated supply of 150-250 tpd of ore to the mill has been important, it is also apparent from results to date that the rate of improvement in the advance of underground development remains insufficient to achieve the necessary number of production headings to sustain 400 tpd feed to the mill before the end of 2022. To rectify this imbalance, the Company has elected to temporarily suspend milling operations for five to six months and to focus all efforts on advancing underground development. After this development period is complete, the Company anticipates accessing, cross-cutting, and having available a total of approximately 120,000 tonnes of ore inventory grading 1,050 g/t Ag at the Bermingham and Flame & Moth mines by year end 2022. Ore extraction and milling operations will be restarted in January 2023, and with our anticipated production, cash self-sufficiency should be achieved within the first quarter of 2023. The Company estimates that more than four million ounces of silver will be delivered as ore feed to the district mill in 2023.

“As previously indicated in May, our operations ramp-up plan is running well behind schedule,” said Clynton Nauman Chairman and CEO of Alexco, “and at this juncture we have enough information to determine that the rate of improvement in underground performance is not sufficient to reach a sustainable 400 tpd and cash self sufficiency in 2022. We need to get further ahead with underground development, and that requires five to six months of focused underground advance to ensure we have available, and can maintain, two to three levels of development ahead of primary production levels in each mine. This refocussing of operations is the right decision and it is unquestionably in the best interest of the mine and the Company as a whole. The alternative of continuing to operate under the status quo with slowly improving ore deliveries to the mill for the balance of 2022, only serves to diminish the benefit of extremely high-grade ore, instead of using that benefit to generate free cash flow and hence returns for our shareholders early in 2023.”

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With transition of operations activities to an interim development focused plan, additional financing will be required. As of the date of this press release, the cash position of Alexco is approximately \$14 million with negative working capital of approximately \$4.5 million. The final scope, cost, and timing of the interim development-only plan and the subsequent transition back to full mill operations with concentrate shipments in January 2023 remains under review and will be communicated once completed. Additionally, the Company will continue to evaluate all financing and strategic options available to enhance the value of Keno Hill.

In other activities at Keno Hill, surface exploration began with two drills in May with focus in the vicinity of the historic Silver King mine and the Coral Wigwam area, approximately 800 meters along structural trend from the Bermingham Mine. Early indications from shallow geology-defining drill holes in the Coral Wigwam area have identified a structural geology framework potentially similar to that which hosts the Bermingham deposit. The next phase of this work will focus on deeper drilling of the targeted structure(s) within permissive stratigraphy, areas which proved highly productive in the adjacent Bermingham deposit.

Qualified Person

The disclosure of all other scientific and technical information in this news release regarding mine development and operations has been reviewed and approved by Sebastien D. Tolgyesi, P.Eng., P.Ge. (Keno Hill Operations Manager, Alexco), who is a Qualified Person as defined by National Instrument 43-101 – *Standards of Disclosure for Mineral Projects*.

About Alexco

Alexco is a Canadian primary silver company that owns and operates the majority of the historic Keno Hill Silver District, in Canada's Yukon Territory, one of the highest-grade silver mines in the world. Alexco started concentrate production and shipments in 2021 and is currently advancing Keno Hill toward steady state production. Upon reaching commercial production, Keno Hill is expected to produce an average of approximately 4.4 million ounces of silver per year contained in high quality lead/silver and zinc concentrates. Keno Hill retains significant potential to grow and Alexco has a long history of expanding the operation's mineral resources through successful exploration.

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Forward-Looking Statements

Some statements (“forward-looking statements”) in this news release contain forward-looking information concerning Alexco’s anticipated results and developments in Alexco’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 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 timing and results of development activity, the timing and 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, Alexco has applied several material assumptions, including, but not limited to, the assumption that Alexco will be able to raise additional capital as necessary, 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. Alexco 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.

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