News Release

Alexco Commences 2019 Keno Hill Exploration Program and Advances Surface Capital Construction Program

June 27, 2019 – Alexco Resource Corp. (NYSE American: AXU) (TSX: AXR) ("Alexco" or the "Company") is pleased to announce the commencement of its 2019 summer surface exploration drilling program in the Keno Hill Silver District, focusing exploration in the vicinity of its Bermingham deposit where an indicated resource (including reserves) totalling 32.9 million ("M") ounces ("oz") of silver ("Ag") at an average grade of 930 grams per tonne ("g/t") Ag has been defined (see news release dated May 8, 2019, entitled "Alexco Files Technical Report on the Pre-Feasibility Study for Expanded Silver Production at Keno Hill Silver District"). The deposit remains open to the northeast and at depth into stratigraphic levels inferred to have controlled the deposition of the adjacent Hector-Calumet deposit that historically produced 96 M oz Ag at a recovered grade of 1,213 g/t Ag.

Along with the surface drilling program, Alexco has also commenced surface capital construction activities consistent with work outlined in the recently published pre-feasibility study ("PFS"). Initial capital work is focused on installation of the underground production-related portal infrastructure at the Bermingham decline, as well as installation of surface facilities, services and infrastructure to support future production.

Highlights of the 2019 Surface Exploration Program

- Alexco has initiated a minimum 7,500 meters, $2.25 M direct surface exploration diamond drilling program.
- The program will comprise approximately 20 drill holes, commencing with two drills on the Bermingham deposit, where at least ten holes will target local extensions of the shallower Northeast Zone, as well as systematically test the continuity and tenor of the high grade Bermingham mineralization at depth.
- At least six holes will be targeted to further trace mineralization near the Bermingham deposit and will include preliminary work to better understand the newly discovered continuation of the trend of Hector-Calumet - Bermingham mineralization southwest of the Brefalt fault.
- The surface drilling program is scheduled to be completed in September 2019, but can be extended if warranted.

In addition to the priority drill exploration to be conducted around Bermingham, the Company is also focused on other exploration designed to follow up on testing of blind mineralized structures, with signatures similar to that of Bermingham, that extend under shallow cover as identified by the detailed aerial geophysical survey conducted in late 2018. This represents a high priority exploration target area on the northern slopes of Galena Hill, where a combined total of 137 M oz Ag has been historically produced from the Hector–Calumet, Elsa-Dixie, No Cash, Bermingham and Ruby mines[1], as well as containing the newly discovered 32.9 M oz indicated Ag resource at Bermingham.

Clynt Nauman, Alexco CEO and Chairman commented, "After filing the positive PFS for Keno Hill last month, we have turned our attention to our 2019 exploration campaign while we wait for authorization of the final amendment of our Water Use Licence for ore production from the Bermingham deposit. As promised, we are continuing our measured and disciplined approach toward a final production decision pending completion of the permitting process."

1. *Cathro, R.J. 2006. Great Mining Camps of Canada 1. The History and Geology of the Keno Hill Silver Camp, Yukon Territory. Geoscience Canada, Vol. 33.*

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Construction Update

Site infrastructure construction projects are currently underway with a primary focus on projects that need to be completed for ore production from the Bermingham deposit. Installation of a multiplate portal cover at the entrance to the Bermingham decline is currently in progress and will be followed by construction of a coarse ore storage pad and facility and a lined water treatment pond in anticipation of the future water treatment plant at Bermingham. Civil excavation of the Bermingham maintenance shop base and completion of the haul road from the Bermingham portal to the Keno District mill are also in the 2019 project queue along with establishing additional camp bunkhouse facilities. These projects are all included in the recently published PFS on the Keno Hill Silver project and completion of these infrastructure improvements in 2019 will further de-risk the project in anticipation of a final underground development and production decision, which is now totally keyed to completion of the permitting process.

Permitting Update

As previously noted, the Company has submitted a water licence renewal application to the Yukon Water Board to renew the currently licenced Flame and Moth, Bellekeno, Lucky Queen and Onek projects as well as including the Bermingham deposit for ore production and discharge of treated water. Once the licence renewal process is complete, the Keno District Mine operations will be fully licenced until 2037. The water licence renewal application is currently in the technical adequacy stage and the Company continues to work closely with the Yukon Water Board technical staff to advance the application into the public comment stage. Given the current status of the Company's licence amendment application and in consideration of other (third party) major licensing amendments already in progress at the Yukon Water Board, the Company estimates that completion of the final Keno Hill licence amendment will be delayed into Q4 2019, which although delayed, is within the Company's current development and production timelines for a restart of the Keno Hill Silver project.

Qualified Person

The disclosure in this news release of scientific and technical nature regarding exploration projects on Alexco mineral properties has been reviewed and approved by Alan McOnie, FAusIMM, Vice President, Exploration, while that regarding mine development and operations has been reviewed and approved by Neil Chambers, P.Eng., Mine Superintendent, each of whom are Qualified Persons as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101").

About Alexco

Alexco owns the majority of the historic high-grade Keno Hill Silver District in Canada's Yukon Territory. Alexco also operates a wholly-owned subsidiary business, Alexco Environmental Group, that provides mine-related environmental services, remediation technologies and reclamation and mine closure services to both government and industry clients in North America and elsewhere.

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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 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.