



ALEXCO RECEIVES FINAL WATER USE LICENSE FOR KENO HILL, PROVIDES OPERATIONS AND CORPORATE UPDATE

July 27, 2020 – Alexco Resource Corp. (NYSE American/TSX: AXU) (“Alexco” or the “Company”) today announced that it has received from the Yukon Water Board (the “**Water Board**”) the final amended and renewed Water Use License (the “**WUL**”) for the Keno Hill Silver District (the “**District**” or “**Keno Hill**”). The Company also provided an update on Keno Hill mining operations, exploration and other corporate matters.

Mining Operations Update

With the recent announcement of the Company’s decision to move to production at Keno Hill, site activities have rapidly ramped up and are progressing according to plan. With the increasing activity, Alexco’s primary focus continues to be the health and safety of our employees, contractors and the communities in which we operate and our COVID-19 management plan continues with strict prevention measures in place, consistent with the guidelines of the Yukon Government and health officials.

Underground activities are currently focused on rehab and services at the Bellekeno mine, which will be the first mine to deliver ore to the mill in Q4, 2020. Underground development at Flame & Moth will begin in August, and Bermingham in September once surface facilities including the water treatment plant are commissioned. Initial delivery of the new underground mining fleet including loaders, trucks, jumbos, and bolters has begun and all major underground equipment units are on schedule for delivery consistent with the underground development schedule. The current focus of surface construction activities is the completion of camp expansion facilities, administration complex and support facilities as well as mill upgrades and modifications. The secondary ball mill has been set and the concentrate regrind mills and tailings filter press have been delivered to site. All other long lead time equipment, both surface and underground, is either on order or in transit and delivery and construction timelines remain consistent with the overall development schedule.

The Company continues to advance with recruitment and onboarding of the Keno Hill operations team. The senior management team at Keno Hill is in place and key supervisors, operators, miners and certified maintenance trades continue to be recruited, with a current count of 65 employees on board at Keno Hill. In addition, approximately 25 contract personnel are providing services with the majority of the vendors having partnership or joint venture arrangements in place with the First Nation of Na-Cho Nyak Dun Development Corporation.

Overall, the development and production plan continues to be on pace for mill commissioning and silver concentrate production in Q4 2020.

2020 Surface Exploration Update

Surface exploration drilling targeting the down plunge extensions of the high grade Bermingham deposit has begun. The initial 4,200 meters (“**m**”) drilling campaign will test for extensions of the previously discovered silver mineralization approximately 200 m vertically below the NE Zone of the Bermingham deposit, which overall contains an Indicated Mineral Resource of 32.9 million ounces of silver at an average grade of 930 grams per tonne (“**g/t**”) silver. The 2020 exploration drilling program will be focused at depth, approximately 250 m along strike northeast of the silver mineralization discovered in 2019, where best results returned

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1,414 g/t silver over an estimated true width of 8.15 m in the Bermingham Footwall vein structure (see news release dated September 10, 2019 entitled “Alexco Intersects 8.1 Meters (true width) at Composite Grade of 1,414 Grams per Tonne (45.5 oz/t) Silver at “Bermingham Deep” Target”).

Receipt of WUL

On July 23, 2020 the Yukon Water Board issued the final WUL authorizing Alexco to source and use water as well as deposit designated waste streams into approved facilities in and around planned production centres at the Bellekeno, Flame & Moth, and Bermingham mines as well as the District’s mill facility. The term of the License is 17 years and the conditions of the final WUL are substantially the same as the draft WUL previously announced on June 24, 2020 (see press release dated June 24, 2020 entitled “Alexco Moves Forward to Production at Keno Hill”). For complete details on the terms and conditions of the WUL, a copy can be found on the Water Board’s website at <https://apps.gov.yk.ca/waterline/f?p=127:LOGIN>.

Clynt Nauman, Chairman and Chief Executive Officer, commented, “With the final WUL now issued, construction and development operations advancing, and other commercial arrangements advancing on schedule in a strengthening silver pricing environment, we are well on our way to become Canada’s only primary silver producer. As scheduled, we look forward to commencing mine production and expect to be shipping concentrate in Q4 2020”.

Changes to Board of Directors

Alexco also announced today that Mr. Michael Winn has resigned from Alexco’s Board of Directors (the “Board”) effective immediately in order to focus on his increasing responsibilities at other publicly listed companies. Mr. Winn was a founding Board member of Alexco and served as its Chairman from 2006 through 2010 and again in 2015 to 2016. Mr Winn will remain as a Strategic Advisor to Alexco’s Board of Directors going forward.

Mr. Nauman added, “I would like to thank Michael for his dedication and extensive contributions to Alexco over the past 15 years. The Company has benefitted greatly from Michael’s advice and Board leadership and we are privileged to have him continue on as a Strategic Advisor to Alexco, while also wishing him success in his other future endeavors”.

2020 Second Quarter Results

Alexco will release its second quarter 2020 financial results after market close on Wednesday, August 12, 2020. Management will host an audio webcast conference call to review the results on Thursday, August 13, 2020 at 3:00 pm Eastern Time (Noon Pacific Time). To participate in the live call, please use one of the following methods:

Dial toll free from Canada or the US: 1-800-319-4610
Dial from outside Canada or the US: 1-604-638-5340

Confirmation Code#: Ask to join the Alexco conference call
Live audio webcast: <http://services.choruscall.ca/links/alexco20200813.html>

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 after the call.



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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 deposits in the world. Alexco is currently advancing Keno Hill to production and expects to start concentrate production and shipments in Q4 2020. As per Alexco's 2020 pre-feasibility study, Keno Hill is expected to produce an average of approximately 4 million ounces of silver per year contained in high quality lead/silver and zinc concentrates. Total production over an 8-year mine life is estimated at 1.18 million tonnes of ore at an average rate of 430 tonnes per day at an average grade of 805 grams per tonne. 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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Some statements ("forward-looking statements") in this news release contain forward-looking information plans related to Alexco's business and other matters that may occur in the future, made as of the date of this news release. 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 risks and uncertainties relating to the COVID-19 pandemic including but not limited to business closures, quarantines and a general reduction in consumer activity; actual results and timing of exploration and development, mining, environmental services and remediation and reclamation activities; future prices of silver, gold, lead, zinc and other commodities; possible variations in mineral 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 circumstances surrounding the COVID-19 pandemic, although evolving, will stabilize or at least not worsen; that the extent to which COVID-19 may impact the Company, including without limitation disruptions to the mobility of Company personnel, costs associated with implementation of health and safety protocols, increased labour and transportation costs, and other related impacts, will not change in a materially adverse manner; Alexco will be able to raise additional capital as necessary, that the proposed exploration and development activities 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.