



News Release

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

September 10, 2019 - Alexco Resource Corp. (NYSE American: AXU) (TSX: AXU) (“Alexco” or the “Company”) reports initial results from the 2019 Bermingham “deep target” drilling program at the Keno Hill Silver District property in Canada’s Yukon Territory. The 2019 drill program was designed to follow up prior drill results indicating potential for deeper mineralization at Bermingham (see news release dated January 21, 2019, entitled “Alexco 2018 Reconnaissance Drilling Confirms Continuation Of Bermingham Mineralization at Depth and Identifies an Offset Extension, Identifies New Gold Targets”), with a specific aim to test for the presence of mineralization in a deeper stratigraphic zone, which also hosts the adjacent historic Hector Calumet deposit. Success in the 2019 Bermingham deep drilling program will now drive a much larger follow up drilling program, the timing and drill-technology for which is under review.

Shallower drilling has also been completed adjacent to the Bermingham Northeast Resource Zone with the aim of expanding the mineral resource adjacent to anticipated mining areas.

Highlights

Bermingham Deep

- K-19-0740, drilled approximately 200 meters (“m”) below the northeast portion of the Bermingham deposit, intersected the Bermingham Footwall Vein structure over an 8.15 m true width from 580.29 m that averaged 1,414 grams per tonne (“g/t”) (45.46 ounces per tonne (“oz/t”)) silver (“Ag”) including two discrete veins, one with 1.51 m true width grading 4,755 g/t (152.88 oz/t) Ag from 580.09 m, and the other with 0.42 m true width grading 10,105 g/t (324.88 oz/t) Ag from 590.82 m.
- K-19-0732, drilled at a similar depth and 150 m southwest of K-19-0740, also intersected the Bermingham Footwall Vein over a true width of 0.93 m grading 2,514 g/t (80.84 oz/t) Ag from 547.33 m including a true width of 0.48 m grading 4,750 g/t (152.72 oz/t) Ag over from 547.33 m.

Bermingham Northeast

- K-19-0733, drilled approximately 30 m beyond the indicated resource in the Northeast Zone, intersected the Bear Vein over a true width of 4.13 m grading 1,331 g/t (42.79 oz/t) Ag from 329.00 m including 1.11 m true width grading 2,672 g/t (85.91 oz/t) Ag from 329.00 m and 0.43 m true width grading 5,890 g/t Ag (189.37 oz/t) from 334.00 m.

Alexco’s Chairman and Chief Executive Officer Clynt Nauman commented: “The confirmation of high-grade silver mineralization at relatively deep levels below our existing Bermingham deposit is first and foremost an outstanding technical (and hopefully economic) success. This discovery confirms our view that the Bermingham deposit, which currently contains more than 40 million ounces of silver in all

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categories may be much larger, and certainly well within the upper quartile of historic or contemporary discoveries/deposits in the Keno Hill Silver District. Clearly a large follow up drilling program is now required; whether we execute this from underground or from the surface is still under review. Either way, these results are unlikely to alter our mine plan in the short term. In comparison however, and as reported here, the presence of high grade silver mineralization adjacent but beyond the current NE Zone resource may well expand our mining opportunity in this particular area. Again, further work is required”.

Geology and Drilling Detail

The 2019 exploration drilling has confirmed the presence of an extensive potentially deeply rooted mineralizing system at Bermingham, characterized by wide structural zones containing silver and base metal bearing veins up to and over 200 m depth below the outlined resource areas where deposition may have been related to possible higher-level boiling activity.

Drilling detail for Bermingham is as follows:

Bermingham Deep target - Five holes were completed for 3,707.5 m to test the Bermingham and Bermingham Footwall veins within the same stratigraphy that hosted the 96 million ounce historic producing Hector-Calumet mine located one km to the northeast of the Bermingham deposit. Hole lengths ranged up to 771.5 m and intersection points were designed at wide spacings of 50 – 180 m intervals to test structural and stratigraphic targets in a framework similar to the much shallower Bermingham deposit.

Bermingham Northeast – Four holes were completed for 1,432 m designed to test the potential for expanding the resource. Further drilling is now required to more thoroughly test open ground further to the northeast and at depth in that area.

Ongoing Drilling

Drilling continues on a series of shallow targets on Galena Hill with an additional 2,400 m to be completed in three primary target areas, with much of this work guided by geophysical work carried out in 2018. The targeting objective remains unchanged, to test for shallow, blind targets in areas where structural and stratigraphic extrapolations indicate the possibility for discovery of additional Bermingham or Flame & Moth type silver deposits. Results from this work will be available in Q4 2019.

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, who is a Qualified Person 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.



APPENDICES

Table 1 – Drill Hole Details

Hole	Easting (m)	Northing (m)	Elevation (m)	Length (m)	Collar Azimuth	Collar Inclination
K-19-0731	479411.61	7086983.69	1343.54	381.80	288.0	-72.0
K-19-0732	479485.45	7086725.51	1369.39	635.16	323.0	-67.0
K-19-0733	479411.20	7086982.94	1343.50	359.00	275.0	-65.0
K-19-0734	479411.14	7086982.60	1343.50	368.65	270.0	-63.0
K-19-0735	479447.07	7087070.53	1339.57	322.11	300.5	-55.5
K-19-0736	479572.82	7086628.39	1381.61	758.00	319.0	-63.0
K-19-0737	479712.92	7086864.37	1376.79	771.50	295.0	-70.0
K-19-0738*	479573.00	7086628.15	1381.61	128.00	319.0	-56.5
K-19-0739**	479572.33	7086629.12	1381.42	723.60	319.0	-57.5
K-19-0740	479711.60	7086862.42	1377.02	692.00	290.0	-62.5
Total Meters				5,139.82		

* Hole Abandoned

** Assay Results Pending

Figure 1 – Drill Hole Locations

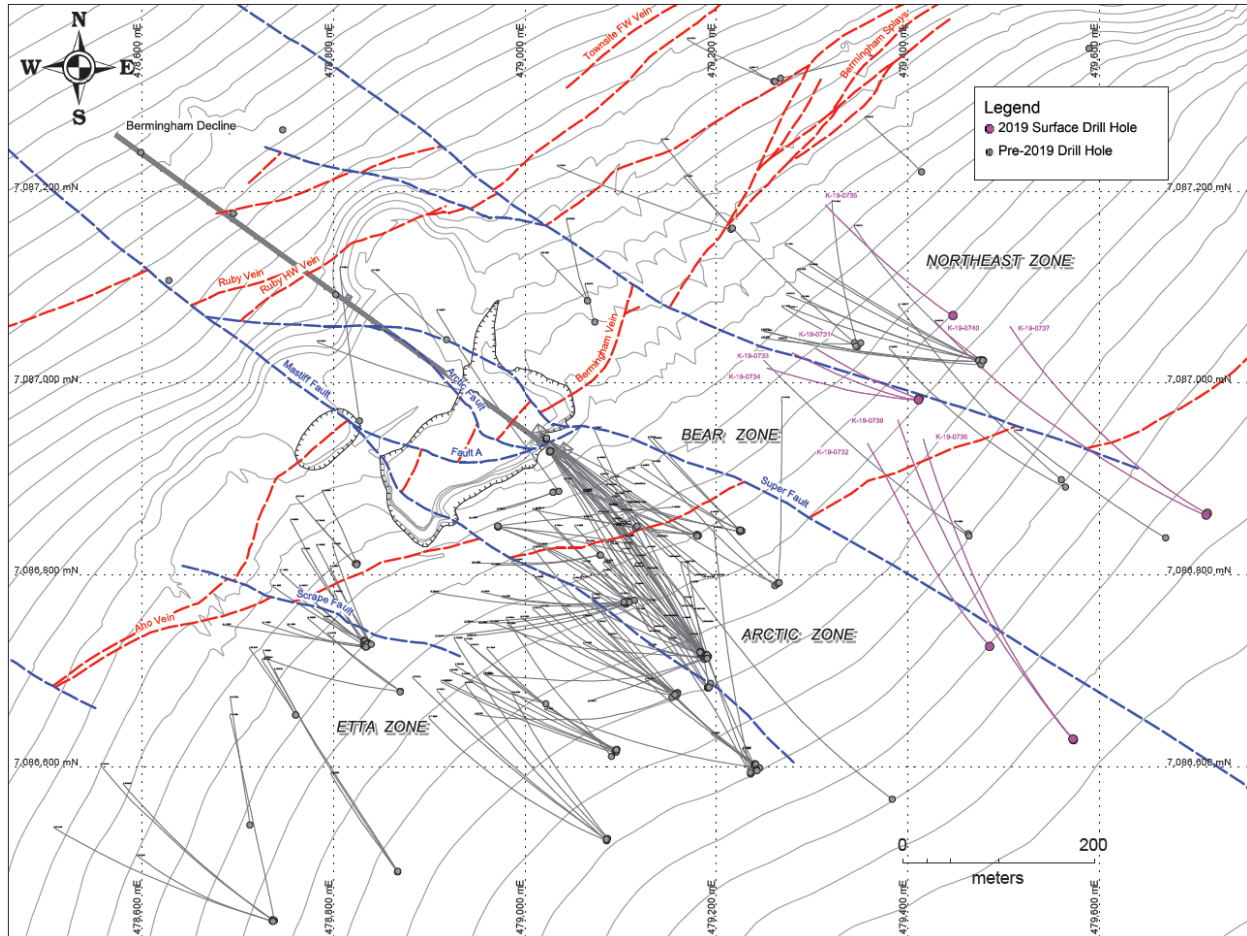


Table 2 – Assay Composites

Hole		From (m)	To (m)	Interval Length (m)	Est. True Width (m)	Ag (g/t)	Ag (oz/t)	Pb (%)	Zn (%)	Au (g/t)	Vein Name
K-19-0731		308.46	312.05	3.59	3.05	308	9.91	0.90	1.16	0.21	Birmingham
		368.90	370.44	1.54	0.89	621	19.97	1.57	0.99	0.15	Bear
K-19-0732		488.27	488.77	0.50	0.44	71	2.28	0.04	4.63	0.03	Birmingham
		495.25	496.19	0.94	0.83	56	1.81	0.51	7.33	0.24	Birmingham
		547.33	548.90	1.57	0.93	2,514	80.84	1.16	0.10	0.62	Birmingham Footwall
	<i>including</i>	<i>547.33</i>	<i>548.15</i>	<i>0.82</i>	<i>0.48</i>	<i>4,750</i>	<i>152.72</i>	<i>2.06</i>	<i>0.05</i>	<i>1.13</i>	
K-19-0733		292.78	298.85	6.07	5.34	279	8.97	1.21	2.14	0.13	Birmingham
		321.82	322.10	0.28	0.21	903	29.03	1.08	12.4 0	0.26	Bear splay
		329.00	330.50	1.50	1.11	2,672	85.91	2.72	0.16	0.13	
	**	<i>329.00</i>	<i>334.58</i>	<i>5.58</i>	<i>4.13</i>	<i>1,331</i>	<i>42.79</i>	<i>1.01</i>	<i>0.49</i>	<i>0.07</i>	<i>Wider Bear Vein Zone</i>
		334.00	338.00	4.00	2.96	953	30.64	0.50	1.59	0.10	Bear
	<i>including</i>	<i>334.00</i>	<i>334.58</i>	<i>0.58</i>	<i>0.43</i>	<i>5,890</i>	<i>189.37</i>	<i>2.19</i>	<i>2.94</i>	<i>0.35</i>	
K-19-0734		295.27	295.55	0.28	0.25	504	16.20	0.97	6.44	0.07	Birmingham
		316.60	317.00	0.40	0.27	176	5.66	1.44	0.44	0.04	Bear splay
		333.48	334.00	0.52	0.35	46	1.49	0.05	5.04	0.01	Bear
				0.00							
K-19-0735		237.68	238.72	1.04	0.99	147	4.73	0.65	0.35	0.29	Birmingham
		241.05	241.94	0.89	0.85	137	4.40	0.61	1.13	0.04	Birmingham
		281.79	282.85	1.06	0.77	45	1.45	0.08	0.16	0.03	Bear
K-19-0736		481.39	482.05	0.66	0.58	37	1.20	0.01	0.12	0.05	Birmingham
		715.40	720.32	4.92	2.95	60	1.92	0.76	0.61	0.05	Birmingham Footwall
K-19-0737		577.41	578.62	1.21	1.09	42	1.34	0.25	0.82	0.01	Birmingham
K-19-0740		170.06	171.78	1.72	1.12	51	1.64	0.32	0.05	0.12	Aho
		556.34	559.36	3.02	2.90	273	8.78	1.64	0.07	0.07	Birmingham
		565.79	567.31	1.52	1.46	308	9.90	0.60	0.06	0.03	Birmingham splay
		574.19	577.12	2.93	2.11	72	2.33	1.31	1.09	0.05	Birmingham Footwall splay
		580.09	582.19	2.10	1.51	4,755	152.88	8.86	0.09	0.78	Birmingham Footwall
	<i>including</i>	<i>580.92</i>	<i>582.19</i>	<i>1.27</i>	<i>0.91</i>	<i>7,680</i>	<i>246.92</i>	<i>14.1 0</i>	<i>0.12</i>	<i>1.25</i>	
		590.40	594.16	3.76	2.71	1,609	51.73	0.33	0.66	0.22	Birmingham Footwall
	<i>including</i>	<i>590.82</i>	<i>591.41</i>	<i>0.59</i>	<i>0.42</i>	<i>10,105</i>	<i>324.88</i>	<i>0.15</i>	<i>4.15</i>	<i>1.36</i>	
	***	<i>580.09</i>	<i>591.41</i>	<i>11.32</i>	<i>8.15</i>	<i>1,414</i>	<i>45.46</i>	<i>1.70</i>	<i>0.24</i>	<i>0.22</i>	<i>Wider Footwall Vein Zone</i>
		601.17	602.95	1.78	1.66	42	1.35	0.02	0.04	0.01	Bear
	608.63	610.43	1.80	1.67	50	1.59	0.01	0.02	0.01	Bear splay	

30 g/t Ag Cut to include up to 2 m waste

** 30 g/t Ag Cut to include up to 3.5m waste

*** 30 g/t Ag Cut to include up to 9 m waste