Alexco Expands Flame & Moth Deposit: Reports Grades Up to 71 Ounces per Ton Silver Over 2.9 Meters, Mineralized Intervals to 7.4 Meters Grading 25.7 Ounces per Ton Silver, and Accompanying Gold

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VANCOUVER, BRITISH COLUMBIA -- (Marketwire) -- 10/09/12 -- Alexco Resource Corp. (TSX: AXR)(NYSE MKT: AXU) today announced successful preliminary results from the initial 2012 shallow drilling campaign at its Flame & Moth deposit. Flame & Moth currently contains an Indicated resource of 11.054 million ounces of silver and an Inferred resource of 3.882 million ounces of silver (see news release dated June 28, 2012 entitled "Alexco Announces Initial Resource Estimates for Flame & Moth and Bermingham"). The drilling campaign, comprising 23 drill holes, has extended silver mineralization approximately 100 meters up dip to the shallow subsurface immediately adjacent to Alexco's milling complex within the Keno Hill Silver District in Canada's Yukon Territory. Initial holes drilled in this upper portion of the deposit have identified two mineralized structures up to 10 meters apart with each zone averaging about 3 to 3.4 meters true width containing average silver grades of 13 to 20 ounces per ton (opt), accompanied by gold (ranging from 0.1 grams per tonne (gpt) to more than 6 gpt over select intervals) as well as lead and zinc.

Alexco President and Chief Executive Officer, Clynt Nauman, said, "With this first batch of results, the Flame & Moth discovery has now been extended over 825 meters along strike and remains open, with down plunge and down dip extensions still pending further drill results. Extending the mineralization to the shallow subsurface will have obvious potential economic benefits. Furthermore, the continuity of thickness, the locally very high silver grades, and the consistent presence of gold with base metals indicates that we are chasing a significant and possibly unique silver system in the Keno Hill Silver District. With these and further pending drill results we hope to recalculate the resource at Flame & Moth during the first quarter of 2013, and hopefully position the company to advance engineering investigations of the deposit in 2013."

Highlights

Selected results for 2012 to date at Flame & Moth include the following significant composite or individual assay intervals above 30 gpt silver:

-- K-12-0430 intersected mineralized vein material over 4.27 meters true width from 253.63 meters with a composite assay of 1,705 gpt (49.7 opt) silver, including 2.91 meters true width from 260.63 meters at 2,456 gpt (71.6 opt) silver.

-- K-12-0405 intersected mineralized vein material in two zones: over 7.38 meters true width from 141.41 meters with a composite assay of 880 gpt (25.7 opt) silver, including 4.58 meters true width from 143.43 meters at 1,398 gpt (40.8 opt) silver, and also over 13.95 meters true width from 152.00 meters with a composite assay of 523 gpt (15.3 opt) silver, and contains 6.85 gpt gold over the 0.14 meter true width interval from 156.80 meters.

-- K-12-0400 intersected mineralized vein material over 7.57 meters true width from 106.77 meters with a composite assay of 460 gpt (13.4 opt) silver that included an interval of 0.18 meters true width that assayed greater than 10,000 gpt (292 opt) silver.

-- K-12-0409 intersected mineralized vein material over 17.77 meters true width from 134.30 meters with a composite assay of 364 gpt (10.6 opt) silver, including 0.92 meters true width from 134.30 meters at 903 gpt (26.3 opt) silver (composited to 155 gpt), and including 0.19 meters true width from 147.65 meters at 6,380 gpt (186.1 opt) silver, and 1.41 meters true width from 151.37 meters at 801 gpt (23.4 opt) silver.

-- K-12-0414 intersected mineralized vein material over 19.22 meters true width from 152.00 meters with a composite assay of 362 gpt (10.6 opt) silver, including 4.69 meters true width from 168.26 meters at 1,111 gpt (32.4 opt) silver.

-- K-12-0416 intersected mineralized vein material, over 10.39 meters true width from 50.00 meters with a composite assay of 439 gpt (12.8 opt) silver, including 2.01 meters true width from 50.00 meters at 1,302 gpt (38.0 opt) silver, and 0.22 meters true width from 57.96 meters at 2132 gpt (62.2 opt) silver.

-- K-12-0418 intersected mineralized vein material in two zones: over 2.62 meters true width from 46.12 meters with a composite assay of 408 gpt (11.9 opt) silver, and also over 2.46 meters true width from 73.14 meters with a composite assay of 1,354 gpt (39.5 opt) silver, including 0.78 meters true width from 75.41 meters at 3,964 gpt (115.6 opt) silver.

-- K-12-0399 intersected mineralized vein material over 11.84 meters true width from 61.04 meters with a composite assay of 387 gpt (11.3 opt) silver, including 4.01 meters true width from 65.00 meters at 640 gpt (18.7 opt) silver.

2012 Flame & Moth Geology Update and Results

Phase 1 of the 2012 Flame & Moth exploration program included 23 drill holes totaling 3,893 meters, which expanded the zone of silver mineralization above the current Indicated resource in the Lightning Zone of the Flame & Moth deposit over a vertical distance of approximately 100 meters to the shallow subsurface. In addition, the drilling has confirmed the presence of a subparallel mineralized vein that lies up to 10 meters into the hanging-wall of the Flame Vein along a strike length of approximately 130 meters and over a down-dip extent of approximately 125 meters. Within this upper zone, the Flame Vein averages a true width of approximately 3.4 meters with silver grades of approximately 20 opt, while the hanging-wall vein averages approximately 3.0 meters true width with silver grades of approximately 13 opt silver. This compares well to grades of 16 to 21 opt silver over an average width of 5.5 meters in the lower previously drilled area of the deposit (see news release dated February 14, 2012 entitled "Alexco Drills 8.9 Meters of 20.2 Ounces Per Ton Silver At Flame & Moth, Continues to Confirm and Expand Mineralization"). Overall, the mineralization currently identified in the upper zone of the deposit is expected to significantly increase the existing resource when recalculated following the completion of the deeper and more laterally extensive Phase 2 drilling which

is still in progress.

The northeast-trending, moderately southeast dipping mineralized Flame Vein structure has now been identified over a total strike length of approximately 825 meters within two fault offset segments. The deepest drill intersect is 400 meters below surface and the structure is open at depth down-plunge and along strike. The mineralized section of the Flame & Moth structure varies between 2.3 and 11.7 meters true width and averages approximately 5.5 meters.

Mineralization within the structure comprises multiphase quartz and siderite containing significant and locally massive galena, sphalerite, pyrite and pyrrhotite with associated silver sulphosalts, arsenopyrite and chalcopyrite mineralization. The continuity and consistency in silver grade and vein widths have now been confirmed at approximately 25 to 30 meter drill centers within two subparallel veins in the near-surface part of the mineralized system, and this provides confidence that the current resource estimate can be increased.

The above results complete reporting of Phase 1 of the 2012 drilling program at the Flame & Moth deposit, which was a 'blind' discovery in 2010 adjacent to the Bellekeno mill, where previously a total of 38 diamond drill holes for 10,875 meters were completed and used in the current resource estimation. These results are in addition to those previously announced (see news releases dated September 7, 2011 entitled "Alexco Intersects 6.04 Meters of 31.5 Ounces Per Ton Silver at Flame & Moth, Significantly Expands Mineralized Zone" and June 28, 2012 entitled "Alexco Announces Initial Resource Estimates for Flame & Moth and Bermingham").

Updated composite assay tables, along with a drill hole location map and a long section plot, for drill holes completed at the Flame & Moth prospect in Phase 1, 2012 are appended to this release, and are also available for review on the Company's website at www.alexcoresource.com.

Notes

The 2012 exploration drill program and sampling protocol has been reviewed, verified and compiled by Alexco's geologic staff under the supervision of Alan McOnie, Vice President, Exploration for Alexco and a Qualified Person as defined by National Instrument 43-101 ("NI 43-101"). A rigorous quality control and quality assurance protocol is used on the project, including blank, duplicate and standard reference samples in each batch of 20 samples delivered to the assay lab. Drill core samples were shipped to ALS Minerals Labs at Whitehorse, Yukon Territory for preparation, with fire assay and multi-element ICP analyses completed at the ALS Minerals facility in North Vancouver, British Columbia. The disclosure of scientific and technical information about Alexco's mineral projects contained in this news release has also been reviewed and approved by Mr. McOnie.

About Alexco

Alexco Resource Corp. owns and operates 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, is Canada's only operating primary silver mine. 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. The Company's goal is to produce 7 million to 10 million ounces of silver annually within the next decade. 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.

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 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, the Company has applied several material assumptions, including, but not limited to, the assumption 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.

APPENDICES

Drill Hole	Easting (m)	Northing (m)	Elevation (m)	Azimuth	Dip	Depth (m)
K-12-0396	483915.97	7086682.17	903.19	288	-46	212.00
K-12-0397	483916.47	7086682.21	903.06	280	-60	155.00
K-12-0398	483863.82	7086614.93	908.74	331	-48	163.00
K-12-0399	483840.51	7086662.54	902.53	272	-50	159.00
K-12-0400	483862.42	7086612.92	908.70	308	-51	171.00
K-12-0401	483843.43	7086663.64	902.68	325	-52	165.00
K-12-0402	483862.55	7086612.30	908.68	283	-49	167.90
K-12-0404	483797.45	7086626.81	900.55	299	-45	77.20
K-12-0405	483905.68	7086590.20	912.93	320	-47.5	200.00
K-12-0406	483798.59	7086626.16	900.62	299	-69	104.00
K-12-0407	483807.79	7086582.21	901.45	308	-45	128.00
K-12-0409	483905.47	7086589.70	913.00	305	-49	189.25
K-12-0411	483808.72	7086581.56	901.49	308	-65	98.00
K-12-0413	483809.93	7086582.50	901.48	262	-65	146.00
K-12-0414	483906.17	7086589.37	913.07	299	-57	266.00
K-12-0416	483821.04	7086640.29	901.42	292	-50	101.00
K-12-0417	483906.88	7086590.73	912.98	320	-57	239.00
K-12-0418	483821.95	7086639.89	901.53	292	-70	122.00
K-12-0420	483919.88	7086682.67	902.80	277	-59	149.00
K-12-0421	483874.78	7086533.12	910.37	308	-46.5	164.00
K-12-0424	483873.84	7086531.36	910.23	282	-63.5	209.00
K-12-0425	483873.22	7086531.47	910.14	282	-50.5	218.00
(i) K-12-0429	484005.00	7086546.00	926.00	291	-47	74.00
K-12-0430	484006.77	7086542.55	926.24	291	-47	290.00

Table 1
Location of Flame & Moth drill holes Phase 1, 2012

(i) Denotes abandoned hole
Map Coordinate Projection UTM NAD83 Z8

Hole	From (m)	To (m)	Inter-val (m)	Ag (g/t)	Ag (oz/ tonne)	Ag (oz/ ton)	Au (g/t)	Pb (%)	Zn (%)
K-12-0396	103.91	104.09	0.18	72.40	2.33	2.11	0.03	0.43	1.40
	189.58	191.59	2.01	41.60	1.34	1.21	0.02	0.45	0.73

K-12-0397	114.02	114.30	0.28	50.30	1.62	1.46	-0.01	0.09	0.20
	122.00	122.27	0.27	250.00	8.04	7.27	0.10	2.13	0.61
K-12-0398	92.90	94.00	1.10	56.47	1.82	1.64	0.03	0.04	1.03
	96.65	96.88	0.23	121.00	3.89	3.52	0.29	0.90	4.15
	115.88	118.59	2.71	245.20	7.88	7.13	1.09	0.35	5.41
K-12-0399	61.04	73.64	12.60	387.77	12.47	11.28	0.31	2.39	10.16
including	61.56	61.82	0.26	1,390.00	44.69	40.54	0.50	1.74	21.90
and	67.12	67.74	0.62	1,100.00	35.37	32.08	0.77	2.25	31.38
K-12-0400	86.50	100.29	13.79	260.71	8.38	7.58	0.14	1.34	3.37
including	86.85	87.13	0.28	1,450.00	46.62	42.29	0.28	2.85	8.72
and	94.84	95.14	0.30	1,525.00	49.03	44.48	0.45	13.55	6.53
	102.45	103.79	1.34	64.00	2.06	1.86	0.03	0.64	1.45
	106.77	115.00	8.23	460.52	14.81	13.39	0.10	1.77	4.37
including	108.67	108.87	0.20	greater than 10000	greater than 321.51	greater than 291.67	0.15	30.52	15.40
and	109.00	109.20	0.20	2,310.00	74.27	67.38	0.08	5.37	15.20
K-12-0401	144.95	145.25	0.30	185.00	5.95	5.38	0.17	0.83	9.53
K-12-0402	91.32	95.20	3.88	30.62	0.98	0.89	0.06	0.08	0.93
	98.00	111.76	13.76	233.67	7.51	6.80	0.13	1.28	4.15
K-12-0404	25.82	38.92	13.10	193.32	6.22	5.62	0.44	0.66	3.62
including	32.00	32.34	0.34	1,550.00	49.83	45.21	1.65	5.41	11.30
K-12-0405	141.41	149.35	7.94	880.20	28.30	25.60	0.31	1.02	5.35
including	144.33	144.65	0.32	1,980.00	63.66	57.75	0.85	1.43	9.40
and	144.93	145.52	0.59	1,795.00	57.71	52.36	0.43	2.80	7.20
and	146.25	146.77	0.52	3,390.00	108.99	98.88	1.37	1.95	11.25
and	146.77	147.20	0.43	2,630.00	84.56	76.71	0.62	2.54	12.40

and	147.98	148.35	0.37	2,420.00	77.81	70.58	0.43	1.46	12.85
	152.00	167.00	15.00	523.40	16.83	15.22	0.36	0.94	3.14
including	155.00	155.35	0.35	3,220.00	103.53	93.92	1.22	1.45	5.74
and	155.80	156.60	0.80	3,940.00	126.68	114.92	2.57	3.50	11.05
and	156.80	156.95	0.15	734.00	23.60	21.41	6.85	0.48	6.06
and	156.95	157.25	0.30	2,170.00	69.77	63.29	0.51	1.58	10.50
and	158.00	158.22	0.22	1,865.00	59.96	54.40	0.93	0.82	2.55
and	158.22	158.35	0.13	2,780.00	89.38	81.09	1.94	11.95	7.43
K-12-0406	33.39	35.89	2.50	101.28	3.26	2.95	0.08	0.19	1.19
	45.00	53.70	8.70	207.47	6.67	6.03	0.17	0.57	2.95
K-12-0407	56.66	59.51	2.85	213.14	6.85	6.20	0.17	0.78	2.35
	61.55	71.66	10.11	68.18	2.19	1.98	0.06	0.52	2.14
K-12-0409	130.08	132.30	2.22	95.11	3.06	2.77	0.06	0.54	1.45
	134.30	153.20	18.90	364.32	11.71	10.59	0.17	1.74	4.16
including	136.75	137.00	0.25	1,290.00	41.48	37.63	0.71	1.17	20.10
and	147.65	147.90	0.25	6,380.00	205.12	186.09	2.33	24.77	1.77
and	151.52	152.00	0.48	1,535.00	49.35	44.77	0.75	6.69	3.95
K-12-0411	65.23	75.33	10.10	198.06	6.37	5.76	0.15	1.21	3.32
K-12-0413	76.93	83.00	6.07	172.88	5.56	5.03	0.14	0.60	3.14
K-12-0414	144.82	148.50	3.68	188.92	6.07	5.49	0.03	0.43	1.90
	152.00	174.35	22.35	362.43	11.65	10.54	0.23	1.83	3.40
including	169.50	169.64	0.14	1,485.00	47.74	43.31	0.14	6.50	6.24
and	170.00	170.23	0.23	1,420.00	45.65	41.42	0.52	7.41	0.11
and	170.23	170.32	0.09	3,190.00	102.56	93.04	0.53	39.11	0.40
and	170.32	170.88	0.56	3,840.00	123.46	112.00	0.49	12.65	5.91
and	170.88	171.58	0.70	2,000.00	64.30	58.33	0.41	4.21	15.75
	194.32	194.55	0.23	663.00	21.32	19.28	0.12	1.28	6.61

	236.60	238.01	1.41	76.70	2.47	2.23	0.01	0.06	0.20
K-12-0416	37.72	40.37	2.65	66.75	2.15	1.94	0.12	0.18	0.48
	50.00	61.17	11.17	439.43	14.13	12.78	0.31	1.74	4.72
including	50.00	50.41	0.41	3,330.00	107.06	97.13	1.00	0.96	6.88
and	56.37	56.82	0.45	1,310.00	42.12	38.21	5.01	3.48	19.80
and	57.96	58.10	0.14	1,890.00	60.77	55.13	0.16	34.95	1.37
and	58.10	58.20	0.10	2,470.00	79.41	72.04	0.30	6.52	4.95
	63.17	63.59	0.42	61.60	1.98	1.79	-0.01	1.43	0.48
K-12-0417	163.86	165.90	2.04	349.58	11.24	10.17	0.62	0.66	1.33
K-12-0418	46.12	49.66	3.54	407.77	13.11	11.86	0.20	1.08	4.18
	64.43	71.00	6.57	118.86	3.82	3.46	0.06	1.55	1.43
	73.14	76.46	3.32	1,353.60	43.52	39.37	0.43	3.42	4.83
including	75.41	75.52	0.11	4,630.00	148.86	135.04	1.52	23.60	5.66
and	75.52	76.00	0.48	7,280.00	234.06	212.34	1.85	12.50	16.50
K-12-0420	120.43	122.00	1.57	41.99	1.35	1.22	0.01	0.11	0.39
K-12-0421	133.86	134.71	0.85	811.00	26.07	23.59	0.29	0.21	0.46
including	133.86	134.23	0.37	1,815.00	58.35	52.94	0.58	0.34	0.92
	141.58	149.00	7.42	162.77	5.23	4.73	0.13	0.81	2.60
K-12-0424	152.54	155.15	2.61	92.72	2.98	2.70	0.08	1.76	3.66
	157.74	164.21	6.47	342.04	11.00	9.95	0.20	3.02	5.95
	180.07	180.68	0.61	52.10	1.68	1.52	-0.01	0.36	0.46
K-12-0425	147.45	152.00	4.55	25.60	0.82	0.74	0.10	0.11	0.54
	162.79	163.26	0.47	750.60	24.13	21.83	0.17	1.94	5.12
K-12-0430	249.93	251.55	1.62	35.20	1.13	1.02	0.11	0.09	0.11
	253.63	254.33	0.70	49.10	1.58	1.43	0.25	0.12	0.10
	259.48	264.02	4.54	1,705.51	54.83	49.60	0.46	6.07	10.01

including	260.79	261.06	0.27	6,920.00	222.49	201.84	0.98	48.90	10.60
and	261.06	261.31	0.25	4,300.00	138.25	125.42	0.79	9.97	24.20
and	261.31	261.55	0.24	2,100.00	67.52	61.25	0.50	3.56	12.00
and	261.55	262.23	0.68	1,270.00	40.83	37.04	0.35	0.85	16.35
and	262.23	263.21	0.98	1,845.00	59.32	53.81	0.78	3.90	6.90
and	263.21	263.73	0.52	2,660.00	85.52	77.58	0.67	8.31	24.00

Table 2
Assay Composites Calculated for Flame & Moth Drill Holes Completed Phase 1, 2012
Using 30 g/t silver cut off with a maximum of 2 meters un-mineralized internal dilution for major intervals with smaller intervals comprising either 155 g/t silver composite assays, or individual assay intervals. This Table is not corrected to the true widths referred to in the text above.

To view the Figures associated with this press release, please visit the following link:
http://media3.marketwire.com/docs/axr-1009-fig1-2.pdf

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