PRESS RELEASE

THE ROSE DEPOSIT IS ONE OF THE LARGEST RESOURCES OF "CONFLICT FREE" TANTALUM, WITH A NEW INDICATED RESOURCE OF 26,500,000 TONNES AT 1.30% Li_2O EQ OR 0.98% Li_2O, 163 PPM Ta_2O_5

JULY 27, 2011 – MONTREAL, QUEBEC – **CRITICAL ELEMENTS CORPORATION** (TSX.V: CRE) (US OTCQX: CRECF) (FSE: F12) is pleased to report an update to the independent resource estimate for its Rose deposit, James Bay, Quebec.

The Rose deposit now consists of **26,500,000 tonnes of indicated resources containing 1.30% Li_2O Equivalent (Eq) or 0.98% Li_2O** (259,700 tonnes of Li_2O or 642,238 tonnes of Li_2CO_3 Eq), **163 ppm of Ta_2O_5** (9,514,317 pounds of Ta_2O_5) and **10,700,000 tonnes of inferred resources containing 1.14% Li_2O Equivalent (Eq)** or **0.86% Li_2O** (92,020 tonnes of Li_2O or 227,565 tonnes of Li_2CO_3 Eq), **145 ppm Ta_2O_5** (3,417,400 pounds of Ta_2O_5). The resource was compiled using a cut-off grade of 41$/t for the open pit model and 66$/t for the underground model (taking Li and Ta recovery into consideration) based on the current estimation of the resource and market conditions. The NI-43-101 compliant technical report will be available on SEDAR within the next 45 calendar days.

This new indicated resource represents an increase of 131% in tonnage, 129% in Ta_2O_5 and 69% in Li_2O. The new inferred resources represent an increase of 393% in tonnage, 418% in Ta_2O_5 and 234 % in Li_2O.

The current resource estimate demonstrates that the Rose deposit is one of the more important resources of "ethical" tantalum. The resources are contained in twenty-three (23) subhorizontal pegmatites, at and near surface. The thickness of the zones varies from 2m to 21m.

"With an indicated resource of **642,238 tonnes of lithium carbonate and 9,514,317 pounds "*Conflict Free*" of Ta_2O_5**, Critical Elements have now the potential to become a major player at the global scale of supply of strategic elements. There is an excellent potential to increase the size of the deposit at Rose itself and at the nearby additional showings on the Rose property, considerably and quickly", stated Jean-Sébastien Lavallée, President & CEO of Critical Elements Corporation.

Highlights of the 43-101 property report, prepared by InnovExplo Inc., independent consulting firm include the following:

MINERAL RESOURCE ESTIMATE – July 20th, 2011
Critical Elements Inc. – Rose Project

Rose Resource Estimate dated July 20th, 2011

		Tonnes (x 1,000)	Li_2O equivalent (%)	Li_2O (%)	Ta_2O_5 (ppm)	Rb (ppm)	Cs (ppm)	Be (ppm)	Ga (ppm)
Indicated	**Open-pit model**								
	Lithium Zones	23,800	1.35%	1.05%	157	2,410	94	131	67
	Tantalum Zones	1,900	0.78%	0.33%	233	1,592	80	93	54
	Underground model								
	Lithium Zones	700	0.95%	0.63%	171	2,098	85	137	72
	Tantalum Zones	100	0.95%	0.60%	180	2,404	108	109	63
	Total Indicated	**26,500**	**1.30%**	**0.98%**	**163**	**2,343**	**92**	**128**	**66**

		Tonnes (x 1,000)	Li_2O equivalent (%)	Li_2O (%)	Ta_2O_5 (ppm)	Rb (ppm)	Cs (ppm)	Be (ppm)	Ga (ppm)
Inferred	**Open-pit model**								
	Lithium Zones	7,900	1.22%	0.95%	143	1,610	77	126	63
	Tantalum Zones	1,100	0.73%	0.28%	232	1,079	78	93	54
	Underground model								
	Lithium Zones	1,600	1.05%	0.88%	90	752	55	116	55
	Tantalum Zones	100	0.77%	0.09%	355	256	87	27	50
	Total Inferred	**10,700**	**1.14%**	**0.86%**	**145**	**1,418**	**74**	**121**	**61**

1) The Qualified People for the Mineral Resource Estimates as defined by National Regulation 43-101 were Pierre-Luc Richard, B.Sc., P.Geo. and Carl Pelletier, B.Sc., P.Geo. (InnovExplo Inc.), and the effective date of the estimate is July 20, 2011. National Regulation 43-101 and CIM definitions were followed.

2) Mineral Resources are not Mineral Reserves having no demonstrated economic viability.

3) Results are presented undiluted and in situ, and some resource blocks may be locked in pillars. The whole resource is included in a pit shell established by InnovExplo. The estimate includes twenty-three (23) zones (10 zones are categorized as lithium dominant and 13 are categorized as tantalum dominant). The resource estimate covers the drilled area of the Rose as well as the JR and the Hydro showings Totals may not sum correctly due to rounding.

4) The resource modeling used data from surface NQ core drilling samples collected by First Gold Exploration (now Critical Elements) in 2009 (10 DDH), in 2010 (148 DDH) and in 2011 (44 DDH) totalling 202 DDH including a total of 4,406 sampled assays from 25,201 metres of drilling. A fixed density of 2.71 g/cm³ was used based on the average density measured in mineralized lithologies. A minimum width of 2.0m was applied, using the grade of the adjacent material when assayed or value of zero when not assayed. Based on appropriate statistics, a capping of 15,000 was fixed for lithium, 650 for tantalum, 10,000 for rubidium, 600 for cesium, 900 for beryllium, and 150 for gallium, with all values in ppm. Raw assays were composited (after being capped) using 1.00 m drill hole intervals.

5) The Resources were compiled using a cut-off grade established on a "tonne value" of 41$ (open-pit model) and 66$ (underground model) based on the current estimation of the resource and market conditions. The "tonne value" considers a 64% recovery for lithium and a 70% recovery for tantalum. A price of 6,000$/t lithium carbonate ($Li_2CO_3$) and a price of 317$/kg Ta was considered (prices and opex produced by Genivar (internal study for Critical Elements; June 2011). No valuation was included for any of the other elements. The cut-off used must be re-evaluated in light of the present market pricing for lithium and tantalum as well as exchange rates, recovery and mining cost. Possible recovery of other elements should also be considered. Li_2O equivalent was determined based on lithium and tantalum prices and their respective recovery ratio.

6) No Measured Resources were estimated. Indicated and Inferred Resources were evaluated from drill holes results using a block model approach (inverse distance squared interpolation) with 5m blocks within GEMS software (version 6.2.4). The interpolation was constrained within twenty-four (24) individual 3D solids (one solid did not produce any tonnes at the established cut-off).

7) Calculations used metric units (meters, tonnes and ppm). Results were rounded to reflect their estimated nature. Tonnes are rounded to 100,000. Grades reported in percent were rounded to two decimals while grades reported in part per million (ppm) were rounded to the closest integer.

EXTRACTS FROM THE NI 43-101 COMPLIANT REPORT:

"The mineralized pegmatitic dykes are oriented N296 and show a shallow dip to the northeast averaging 15 degrees (locally from 5 to 20 degrees). The deposit was identified over a strike of 1,800 metres and remains open along strike and at depth."

"Based on lithium and tantalum grades, the deposit is, so far, only limited by topography. It is open along strike to the southeast and to the northwest as well as at depth."

"The block model indicates that the entire reported resource extends to a depth of 300 metres, which is limited by the existing drilling."

"There is considerable potential to increase tonnage with additional drilling of the known pegmatitic dykes at depth and along strike. In addition, the current geological setting suggests that there is a reasonable potential to identify new zones in the immediate environment. The authors believe that the gap between the "LR" drill holes and the "JR" drill holes exists because of the absence of drilling and that it should be drilled in order to link the two areas."

"Different cut-offs were calculated. While the 41$/tonne cut-off is the official cut-off of this resource estimate for the open pit model and 66$/tonne is the official cut-off of this resource estimate for the underground model, other cut-offs are presented here:"

Open-pit model (Indicated Resource)

	Cut-off (BV $)	Tonnage (X 1,000)	BV($)	Li	Ta	Rb	Cs	Be	Ga	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O equivalent (%)	$/tonne ($Li_2O$+$Ta_2O_5$)
Li Zones	$ 26.00	24,300	126	4,775	128	2,387	93	129	67	1.03%	156	1.33	$ 126.01
	$ 31.00	24,100	127	4,811	128	2,398	93	130	67	1.04%	157	1.34	$ 126.82
	$ 36.00	24,000	127	4,833	129	2,404	93	130	67	1.04%	157	1.34	$ 127.31
	$ 41.00	**23,800**	**128**	**4,867**	**129**	**2,410**	**94**	**131**	**67**	**1.05%**	**157**	**1.35**	**$ 128.06**
	$ 46.00	23,400	130	4,938	129	2,414	94	132	67	1.06%	158	1.36	$ 129.56
	$ 51.00	23,000	131	4,994	130	2,421	94	132	68	1.08%	158	1.38	$ 130.83
	$ 56.00	22,600	132	5,057	130	2,423	94	133	68	1.09%	159	1.39	$ 132.20
	$ 61.00	22,400	133	5,090	130	2,428	94	133	68	1.10%	159	1.40	$ 132.91
	$ 66.00	21,900	134	5,164	130	2,436	95	134	68	1.11%	159	1.42	$ 134.48
	$ 71.00	21,400	136	5,245	130	2,444	95	134	68	1.13%	159	1.43	$ 136.17

	Cut-off (BV $)	Tonnage (X 1,000)	BV($)	Li	Ta	Rb	Cs	Be	Ga	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O equivalent (%)	$/tonne ($Li_2O+Ta_2O_5$)
Ta Zones	$ 26.00	2,700	62	1,142	172	1,480	74	88	51	0.25%	210	0.65	$ 61.52
	$ 31.00	2,400	66	1,260	180	1,525	77	91	52	0.27%	220	0.69	$ 65.72
	$ 36.00	2,200	69	1,358	185	1,528	78	91	52	0.29%	226	0.73	$ 68.90
	$ 41.00	**1,900**	**74**	**1,530**	**191**	**1,592**	**80**	**93**	**54**	**0.33%**	**233**	**0.78**	**$ 73.70**
	$ 46.00	1,600	79	1,741	198	1,664	81	92	55	0.37%	241	0.84	$ 79.44
	$ 51.00	1,500	82	1,816	201	1,700	82	94	55	0.39%	245	0.86	$ 81.64
	$ 56.00	1,300	87	1,959	210	1,757	84	94	56	0.42%	256	0.91	$ 86.53
	$ 61.00	1,100	92	2,087	223	1,841	87	95	58	0.45%	273	0.97	$ 92.19
	$ 66.00	900	98	2,335	228	1,862	91	98	60	0.50%	279	1.04	$ 98.38
	$ 71.00	700	105	2,634	231	1,828	94	96	62	0.57%	282	1.11	$ 105.09

Open-pit model (Inferred Resource)

	Cut-off (BV $)	Tonnage (X 1,000)	BV($)	Li	Ta	Rb	Cs	Be	Ga	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O equivalent (%)	$/tonne ($Li_2O+Ta_2O_5$)
Li Zones	$ 26.00	8,100	113	4,277	117	1,601	76	124	62	0.92%	143	1.19	$ 113.33
	$ 31.00	8,000	114	4,321	117	1,606	76	125	62	0.93%	143	1.20	$ 114.30
	$ 36.00	8,000	115	4,355	117	1,609	77	126	63	0.94%	143	1.21	$ 115.02
	$ 41.00	**7,900**	**116**	**4,400**	**117**	**1,610**	**77**	**126**	**63**	**0.95%**	**143**	**1.22**	**$ 115.95**
	$ 46.00	7,700	117	4,455	118	1,612	77	128	63	0.96%	143	1.23	$ 117.13
	$ 51.00	7,600	118	4,496	118	1,616	77	128	63	0.97%	144	1.24	$ 118.03
	$ 56.00	7,500	119	4,552	118	1,616	78	129	63	0.98%	144	1.26	$ 119.23
	$ 61.00	7,300	121	4,618	118	1,615	78	130	64	0.99%	144	1.27	$ 120.61
	$ 66.00	7,100	122	4,693	118	1,622	78	131	64	1.01%	145	1.29	$ 122.20
	$ 71.00	7,000	123	4,754	119	1,629	78	132	64	1.02%	145	1.30	$ 123.49

	Cut-off (BV $)	Tonnage (X 1,000)	BV($)	Li	Ta	Rb	Cs	Be	Ga	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O equivalent (%)	$/tonne ($Li_2O+Ta_2O_5$)
Ta Zones	$ 26.00	1,700	57	999	164	1,008	71	92	50	0.22%	200	0.60	$ 56.85
	$ 31.00	1,500	60	1,095	171	1,043	75	96	52	0.24%	209	0.64	$ 60.36
	$ 36.00	1,200	65	1,231	182	1,082	76	94	53	0.26%	222	0.69	$ 65.47
	$ 41.00	**1,100**	**69**	**1,313**	**190**	**1,079**	**78**	**93**	**54**	**0.28%**	**232**	**0.73**	**$ 68.97**
	$ 46.00	1,000	72	1,374	197	1,051	79	92	55	0.30%	241	0.76	$ 71.83
	$ 51.00	900	75	1,439	205	1,068	80	93	56	0.31%	250	0.79	$ 74.85
	$ 56.00	700	79	1,526	217	1,074	83	93	58	0.33%	265	0.83	$ 79.26
	$ 61.00	600	84	1,614	231	1,065	89	97	60	0.35%	282	0.89	$ 84.15
	$ 66.00	500	87	1,666	237	1,040	90	100	61	0.36%	289	0.91	$ 86.58
	$ 71.00	400	90	1,782	241	1,008	91	104	61	0.38%	295	0.95	$ 90.01

Underground model (Indicated Resource)

Li Zones

Cut-off (BV $)	Tonnage (X 1,000)	BV($)	Li	Ta	Rb	Cs	Be	Ga	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O equivalent (%)	$/tonne ($Li_2O$+$Ta_2O_5$)
$ 41.00	1,300	72	1,955	143	1,911	89	110	64	0.42%	174	0.75	$ 71.65
$ 46.00	1,100	76	2,108	147	2,000	87	116	67	0.45%	179	0.80	$ 75.61
$ 51.00	1,000	79	2,266	147	2,078	87	122	68	0.49%	180	0.83	$ 78.95
$ 56.00	800	85	2,640	138	2,104	88	131	71	0.57%	169	0.89	$ 84.70
$ 61.00	800	86	2,733	136	2,115	86	133	71	0.59%	167	0.91	$ 86.14
$ 66.00	**700**	**90**	**2,909**	**140**	**2,098**	**85**	**137**	**72**	**0.63%**	**171**	**0.95**	**$ 90.48**
$ 71.00	600	94	3,073	141	2,076	84	139	72	0.66%	172	0.99	$ 94.10
$ 76.00	500	100	3,522	125	2,023	84	139	71	0.76%	152	1.05	$ 99.68
$ 81.00	400	102	3,679	119	1,999	80	140	71	0.79%	145	1.07	$ 101.64
$ 86.00	300	108	3,961	123	2,124	83	142	72	0.85%	150	1.14	$ 108.16

Ta Zones

Cut-off (BV $)	Tonnage (X 1,000)	BV($)	Li	Ta	Rb	Cs	Be	Ga	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O equivalent (%)	$/tonne ($Li_2O$+$Ta_2O_5$)
$ 41.00	400	57	1,049	159	1,712	75	106	54	0.23%	195	0.60	$ 56.84
$ 46.00	200	75	2,114	145	2,016	92	95	57	0.46%	177	0.79	$ 75.38
$ 51.00	100	80	2,351	146	2,153	97	100	59	0.51%	178	0.85	$ 80.38
$ 56.00	100	84	2,548	144	2,282	103	104	61	0.55%	176	0.89	$ 84.12
$ 61.00	100	88	2,692	147	2,377	107	108	63	0.58%	179	0.92	$ 87.61
$ 66.00	**100**	**90**	**2,801**	**148**	**2,404**	**108**	**109**	**63**	**0.60%**	**180**	**0.95**	**$ 90.03**
$ 71.00	100	93	2,912	150	2,423	110	111	65	0.63%	183	0.98	$ 92.83
$ 76.00	100	96	3,089	148	2,404	108	113	65	0.67%	181	1.01	$ 96.07
$ 81.00	100	102	3,411	147	2,253	103	115	66	0.73%	179	1.08	$ 102.32
$ 86.00	0	106	3,596	147	2,215	102	117	66	0.77%	179	1.12	$ 106.07

Underground model (Inferred Resource)

Li Zones

Cut-off (BV $)	Tonnage (X 1,000)	BV($)	Li	Ta	Rb	Cs	Be	Ga	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O equivalent (%)	$/tonne ($Li_2O$+$Ta_2O_5$)
$ 41.00	2,500	83	3,252	75	738	57	102	51	0.70%	92	0.88	$ 83.12
$ 46.00	2,300	87	3,435	77	762	56	108	52	0.74%	94	0.92	$ 87.25
$ 51.00	2,100	90	3,550	77	760	56	110	53	0.76%	95	0.95	$ 89.75
$ 56.00	1,900	93	3,779	73	758	56	113	53	0.81%	89	0.98	$ 93.50
$ 61.00	1,800	96	3,897	73	753	56	114	54	0.84%	89	1.01	$ 95.79
$ 66.00	**1,600**	**99**	**4,066**	**74**	**752**	**55**	**116**	**55**	**0.88%**	**90**	**1.05**	**$ 99.47**
$ 71.00	1,400	105	4,336	72	739	54	117	55	0.93%	88	1.10	$ 104.61
$ 76.00	1,200	108	4,519	72	733	53	119	56	0.97%	88	1.14	$ 108.37
$ 81.00	1,100	111	4,684	70	680	51	119	56	1.01%	86	1.17	$ 111.34
$ 86.00	1,000	115	4,884	69	645	50	119	56	1.05%	84	1.21	$ 115.10

Ta Zones

Cut-off (BV $)	Tonnage (X 1,000)	BV($)	Li	Ta	Rb	Cs	Be	Ga	Li_2O (%)	Ta_2O_5 (ppm)	Li_2O equivalent (%)	$/tonne ($Li_2O$+$Ta_2O_5$)
$ 41.00	400	50	623	168	586	53	95	47	0.13%	205	0.53	$ 50.00
$ 46.00	200	57	1,015	164	612	64	87	47	0.22%	200	0.60	$ 57.17
$ 51.00	200	60	914	186	686	67	78	48	0.20%	228	0.63	$ 60.06
$ 56.00	100	70	724	247	477	79	41	48	0.16%	301	0.73	$ 69.57
$ 61.00	100	72	568	272	402	84	33	50	0.12%	332	0.76	$ 71.90
$ 66.00	**0**	**73**	**425**	**291**	**256**	**87**	**27**	**50**	**0.09%**	**355**	**0.77**	**$ 73.26**
$ 71.00	0	75	394	300	162	89	23	49	0.08%	366	0.79	$ 74.64
$ 76.00	0	81	533	317	18	50	31	55	0.11%	387	0.85	$ 81.15
$ 81.00	0	88	2,372	179	137	56	88	60	0.51%	219	0.93	$ 88.26
$ 86.00	0	92	2,778	160	248	43	72	60	0.60%	195	0.97	$ 92.23

ABOUT CRITICAL ELEMENTS CORPORATION

Critical Elements is actively developing its 100%-owned Rose lithium-tantalum flagship project located in Quebec. The project hosts a current new NI 43-101 compliant **Indicated resource of 26.5 million tonnes of 1.30% Li_2O Eq. or 0.98% Li_2O and 163 ppm Ta_2O_5** and **Inferred resource of 10.7 million tonnes of 1.14% Li_2O Eq. or 0.86% Li_2O and 145 ppm Ta_2O_5** announced in this press release.

Critical Elements has commissioned a prefeasibility study for the project from Genivar, one of the largest independent engineering firms in Canada. Genivar is also doing an environmental study, and Acme Metallurgical Ltd. of Vancouver is carrying out project metallurgy.

Critical Elements' portfolio also includes rare-earth and tantalum-niobium projects in the Rocky Mountains of British Columbia and in Quebec, as well as a 50% interest in the Croinor project, which is located in Quebec and hosts a current NI 43-101 compliant measured and indicated resource of 814,228 tonnes at 9.11 g/t Au, for 238,414 ounces of gold at a 5 g/t cut-off.

Jean-Sebastien Lavallee (OGQ #773), geologist, shareholder and president and chief executive officer the Company and a Qualified Person under NI 43-101, has reviewed and approved the technical content of this release.

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