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RESOURCES

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SIGNIFICANT INCREASE IN INDICATED RESOURCES AND GRADE AT MATOUSH

Montreal, September 17, 2009 – Strateco Resources Inc. ("Strateco") is pleased to announce that the indicated mineral resources at its Matoush property has doubled in the past 12 months to reach **436,000 tonnes** grading **0.78% U₃O₈** containing **7.46 million pounds U₃O₈**.

Wholly-owned by Strateco, the Matoush property lies 300 km north of Chibougamau in Quebec's Otish Mountains.

Scott Wilson Roscoe Postle Associates Inc. (Scott Wilson RPA) has updated the NI 43-101-compliant resource estimate for the Matoush project based on drill results available as of September 1st, 2009 and using similar methods as applied in the previous estimate (Scott Wilson RPA, Sept. 2008). At a cut-off grade of 0.10% U₃O₈, the indicated mineral resources are now estimated at **436,000 tonnes** grading **0.78% U₃O₈** containing **7.46 million pounds U₃O₈**, and the inferred mineral resources are estimated at **1.16 million tonnes** grading **0.50% U₃O₈** containing **12.78 million pounds U₃O₈**. These resources lie in the AM-15, MT-34 and MT-22 zones, and extend over a strike-length of 1.4 km. The Matoush structure has been traced 11 km to the south and 2.5 km to the north.

The increase in the indicated resources from 3.73 million pounds grading 0.67% U₃O₈ (Scott Wilson RPA, Sept. 2008) to 7.46 million pounds at 0.78% U₃O₈ is significant. The indicated resources for the MT-34 zone, which lies in the upper part of the ACF-4 stratigraphic unit, is now estimated at **174,000 tonnes** grading **0.89% U₃O₈** containing **3.42 million pounds U₃O₈**. It should be noted that no indicated resources have yet been estimated for the MT-22 zone due to the current drill hole spacing, which is about 50 metres by 50 metres. This zone will be drilled at a tighter spacing during the underground exploration program.

Mineral reserves have not been estimated for the Matoush project.

Table 1 - Mineral Resource Estimate for Matoush - September 1, 2009

	Tonnes (x 1,000)	Grade (% U₃O₈)	Pounds U₃O₈ (x 1,000)
Indicated			
AM-15	262	0.70	4,039
MT-34	174	0.89	3,420
Total Indicated	436	0.78	7,458
Inferred			
AM-15	33	0.34	249
MT-22	822	0.53	9,526
MT-34	302	0.45	3,003
Total Inferred	1,157	0.50	12,777

Notes:

1. CIM Definition Standards have been followed for classification of Mineral Resources.
2. The cut-off grade of 0.1% U₃O₈ was estimated using a U₃O₈ price of US\$75/lb and assumed operating costs.
3. High U₃O₈ grades were cut to 9%.
4. The Mineral Resource estimate uses drill hole data available as of September 1, 2009.
5. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
6. Totals may not sum correctly due to rounding.

The new estimate confirms that Matoush is a robust deposit, relatively insensitive to cut-off grades between 0.05% and 0.2% U₃O₈.

Table 2 - Mineral Resource Estimate for Matoush – Different Cut-off Grades

	Cut-off Grade (% U₃O₈)	Tonnes (x 1,000)	Grade (% U₃O₈)	Pounds U₃O₈ (x 1,000)
Indicated				
AM-15	0.3	190	0.89	3,709
	0.2	230	0.77	3,925
	0.1	262	0.70	4,039
	0.05	264	0.69	4,043
MT-34	0.3	139	1.05	3,238
	0.2	168	0.92	3,393
	0.1	174	0.89	3,420
	0.05	174	0.89	3,420
Total Indicated	0.3	329	0.96	6,947
	0.2	398	0.83	7,318
	0.1	436	0.78	7,458
	0.05	438	0.77	7,463
Inferred				
AM-15	0.3	20	0.48	209
	0.2	22	0.46	221
	0.1	33	0.34	249
	0.05	65	0.24	339
MT-22	0.3	509	0.72	8,082
	0.2	686	0.60	9,067
	0.1	822	0.53	9,526
	0.05	964	0.47	9,918

MT-34	0.3	136	0.80	2,395
	0.2	167	0.70	2,570
	0.1	302	0.45	3,003
	0.05	429	0.34	3,211
Total Inferred	0.3	665	0.73	10,686
	0.2	875	0.61	11,858
	0.1	1,157	0.50	12,777
	0.05	1,458	0.42	13,468

Management is also pleased to announce that it has increased its 2009 surface exploration program from 30,000 metres to 35,000 metres of drilling.

The 2009 drilling program is ongoing, with two drills working on the property. One of these is assigned to systematic drilling on a 200-metre grid to locate new mineralized zones in the southern extension of the MT-34 zone, in the upper part of the ACF-4 stratigraphic unit. The two most recent holes confirmed mineralization to the south. Hole MT-09-035, drilled 1.0 km south of the edge of the current mineral resources, intersected the mineralized zone over 2.9 metres grading 0.12% eU₃O₈, lying characteristically at the contact of the Matoush fault. Hole MT-09-036 was drilled 200 metres further south from MT-09-035, and intersected a 4.7-metre section of mineralization grading 0.26% eU₃O₈ (see longitudinal sections at www.stratecoinc.com).

These results confirm the enormous potential for increasing the resource on the Matoush and Eclat properties over a 11.1 km distance along the Matoush fault, to the south of the mineralized envelope hosting the resources. As previously reported, two holes drilled 200 metres apart, last winter in the upper part of the ACF-4 (EC-09-05 and EC-09-06) more than 6 km south of Hole MT-09-036 returned very good results (0.12% eU₃O₈ over 2.6 metres and 0.11% eU₃O₈ over 2.1 metres).

The second drill is presently carrying out a 2,000-metre program on the Pacific Bay property, adjacent to Matoush, where Strateco holds an option to acquire a 60% interest (see Pacific Bay's news release dated September 8, 2009, at www.pacificbayminerals.com).

Guy Hébert, President and CEO of Strateco, stated: "The Otish Mountains area of Quebec is on its way to becoming a major uranium mining camp, and our Matoush project is the heart of this. When we acquired the property in 2006, no mineral resource had been identified, and we had set ourselves the goal of delineating 15 to 20 million pounds of U₃O₈ to justify commercial production of 2 million pounds U₃O₈ per year for 8 to 10 years. We reached that resource goal very quickly. Furthermore, the mineralization on the Matoush property has one of the highest average grades in the world outside of the Athabasca Basin, if not the highest, without the problems associated with that area.

Given the currently-available information and the drilling program presently underway, which will likely exceed 120,000 metres over the next two years focused on the Matoush structure, our objective is now to determine the possibility of reaching 60 million pounds of U₃O₈.

The environmental studies required to build the mill and tailing ponds are scheduled to begin in 2010. The mill production capacity will be decided based on the resources outlined in 2011. The objective is now to sustain a minimum potential production of 4 million pounds of U₃O₈ per year.

Due to the growth in mineral resources and grade and the reduction of various estimated operating costs, the scoping study done in the fall of 2008 will be updated in the coming months. We expect the estimated production costs of US\$27.33 per pound of U₃O₈ to lower."

Strateco is eligible for exploration tax credits equal to about 50% of surface exploration expenses up until the Matoush property enters the commercial production phase.

This press release has been read and approved by Jean-Pierre Lachance, geol., Executive Vice President of Strateco Resources Inc. and David A. Ross, P.Geo., Senior Consulting Geologist at Scott Wilson Roscoe Postle Associates Inc. who are the qualified persons as defined under National Instrument 43-101.

This news release contains forward-looking statements subject to certain risks and uncertainties. There can be no assurance that these statements will prove to be correct, and actual results and future events could differ materially from those implied by such statements. These risks and uncertainties are discussed in the annual report filed with the securities commissions of Alberta, British Columbia, Ontario and Quebec and in the 10-K annual report filed with the US Securities and Exchange Commission.

CAUTIONARY NOTE TO U.S. INVESTORS -The United States Securities and Exchange Commission permits U.S. mining companies, in their filings with the SEC, to disclose only those mineral deposits that a company can economically and legally extract or produce. We use certain terms on this press release, such as "measured," "indicated," and "inferred" "resources," which the SEC guidelines strictly prohibit U.S. registered companies from including in their filings with the SEC. U.S. Investors are urged to consider closely the disclosure in our Form 10-K which may be secured from us, or from the SEC's website at <http://www.sec.gov/edgar.shtml>.

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