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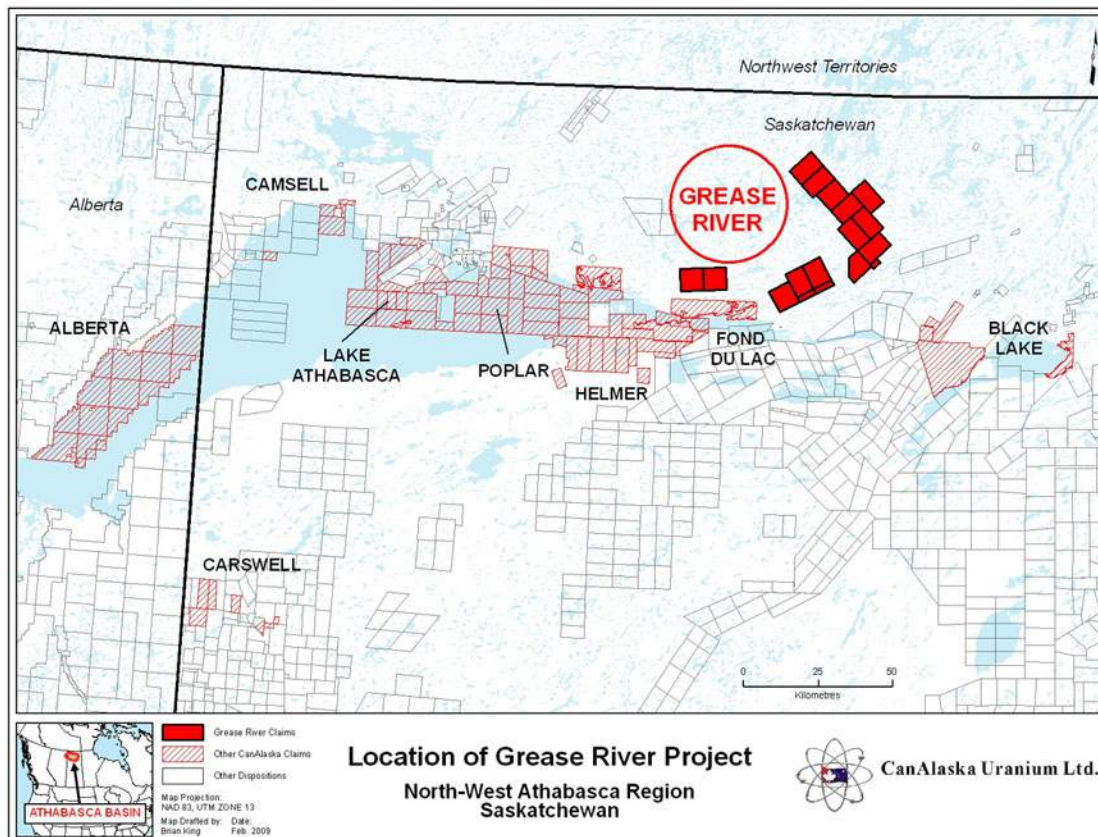
NEWS RELEASE

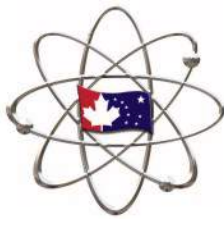
URANIUM MINERALIZATION IN GRANITE AT GREASE RIVER PROJECT, NORTHERN ATHABASCA BASIN

Vancouver, Canada, February 17th, 2009 - CanAlaska Uranium Ltd. (TSX.V – CVV) (“CanAlaska” or the “Company”) is pleased to announce results from summer prospecting on its Grease River project. Multiple zones of uranium mineralization have previously been reported from basement rocks, just north of the northern limit of the Athabasca sandstone (see Press Release - March 3, 2008). Prospecting and mapping during summer 2008 concentrated on several structures with higher grade uranium, found during 2007 work, and areas of extensively mineralized granite. The current results detail the sampling of non-magnetic granitic rocks at the margin of a granite plug along a strike length of 1.5 kilometres.

Grease River Project Location

The Grease River Project covers approximately 81,821 hectares of land (202,184 acres) in three separate claim blocks that extend from Bulyea River, north of Fond du Lac, to Marytnuik Lake, north of Stony Rapids, and covers four geological domains.

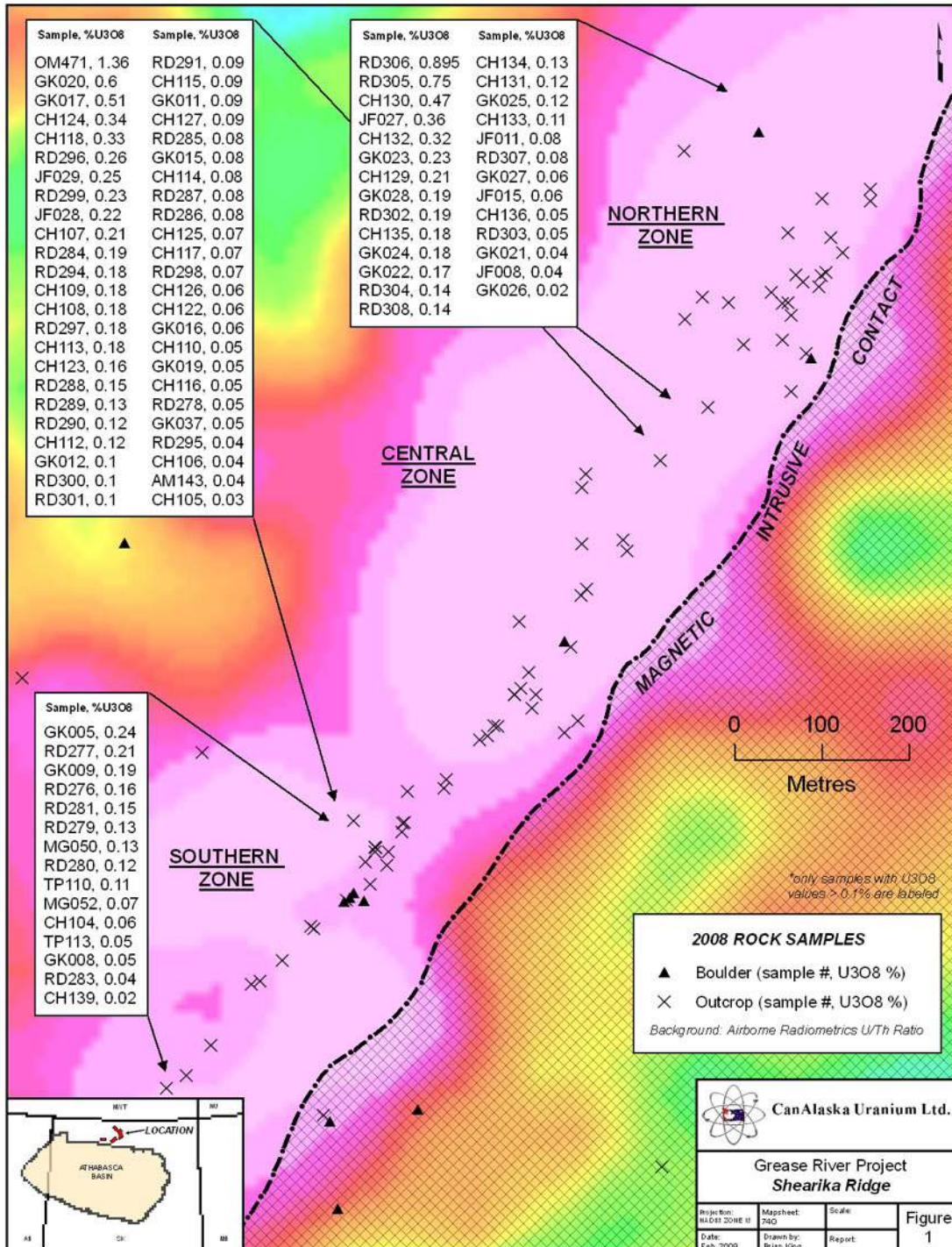


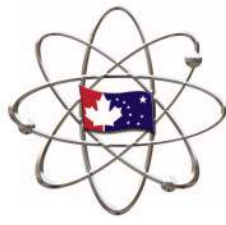


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Shearika Ridge Uranium Mineralization





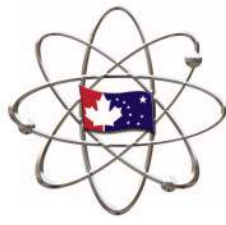
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An extensive zone of uranium mineralization in sheeted and stockwork-style brittle fractures in close sourced boulders and in white granite is located on the edge of a larger pink granite stock. The thin fractures have pervasive uranium mineralization, with high to very high radioactivity. Surface sampling of fractured and non fractured rock, as well as surface traverses using hand-held scintillometers, show the extensive nature of the uranium mineralization. The following table of samples, details numerous sites of higher radioactivity over an area of 1.5 km X 0.5 km. This area also shows extensive radioactivity from the airborne survey completed by CanAlaska in the previous season. The sample location and table of results in the attached figure show the distribution of the sampling with the trend of the strong U/Th radiometric anomaly.

Example of fractured white granite at Shearika Ridge





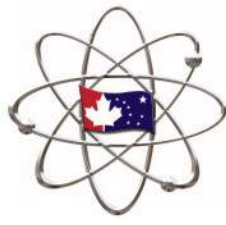
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Field Crew prospecting boulder field Grease River Property



Sampling high grade uranium mineralization in fractured white granite, Grease River Property

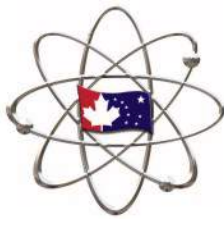


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Table 1 Shearika Ridge and Local Area Uranium Samples

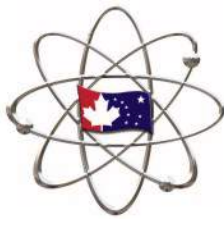
Sample	Target_Area	Type	Rock Type	U3O8%	Mo%	U/Th
OM471	Shearika	Outcrop	Pegmatite-Pink	1.36	0.13	6.70
AM122	Shearika	Boulder	Granite-White	0.99	0.05	8.98
JR396	Shearika	Boulder	Pegmatite-White	0.91	0.06	3.41
RD305	Shearika	Outcrop	Pegmatite-White	0.75	0.17	2.23
MG060	Shearika	Boulder	Pegmatite-White	0.65		6.37
OM432	Shearika	Boulder	Pegmatite-Pink	0.63	0.07	6.98
GK020	Shearika	Outcrop	Pegmatite-White	0.60		3.67
OM430	Shearika	Boulder	Granite-White	0.54	0.05	4.37
GK017	Shearika	Outcrop	Pegmatite-White	0.51	0.10	1.22
CH130	Shearika	Outcrop	Pegmatite-White	0.47		3.74
MG058	Shearika	Boulder	Granite-White	0.46		8.10
AM117	Shearika	Boulder	Pegmatite-White	0.37		2.26
JF027	Shearika	Outcrop	Pegmatite-White	0.36		2.92
CH124	Shearika	Outcrop	Pegmatite-White	0.34	0.09	3.39
AM116	Shearika	Boulder	Pegmatite-White	0.33		6.20
CH118	Shearika	Outcrop	Pegmatite-White	0.33		2.44
CH132	Shearika	Outcrop	Pegmatite-White	0.32		4.33
MG062	Shearika	Boulder	Pegmatite-White	0.32		3.43
OM427	Shearika	Boulder	Gneiss /Granitic	0.32		2.61
AK040	Shearika	Boulder	Granite-White	0.30	0.05	3.80
AK042	Shearika	Boulder	Granite-White	0.30		2.76
JR406	Shearika	Boulder	Granite-Pink	0.28		7.34
JR405	Shearika	Boulder	Pegmatite-White	0.28		3.36
AK039	Shearika	Boulder	Granite-White	0.27		4.09
RD296	Shearika	Outcrop	Pegmatite-White	0.26		4.89
CH188	Shearika	Boulder	Granite-White	0.26	0.08	1.95
OM465	Shearika	Boulder	Pegmatite-White	0.25		3.60
JF029	Shearika	Boulder	Pegmatite-White	0.25	0.06	2.23
OM421	Shearika	Boulder	Pegmatite-Pink	0.24		2.98
JR402	Shearika	Boulder	Pegmatite-White	0.24		1.88
GK005	Shearika	Outcrop	Pegmatite-White	0.24		1.35
GK023	Shearika	Outcrop	Pegmatite-White	0.23	0.06	4.53
CH121	Shearika	Boulder	Pegmatite-White	0.23		2.65
RD299	Shearika	Outcrop	Pegmatite-White	0.23		1.67
JF028	Shearika	Outcrop	Quartz Vein	0.22	0.10	2.95
DT078	Shearika	Outcrop	Granite-White	0.22		2.48
CH129	Shearika	Outcrop	Pegmatite-White	0.21	0.05	3.59
RD277	Shearika	Outcrop	Pegmatite-White	0.21		2.32
CH107	Shearika	Boulder	Pegmatite-White	0.21	0.10	0.83
OM431	Shearika	Boulder	Granite-White	0.19		6.26
RD302	Shearika	Outcrop	Pegmatite-White	0.19		3.32
RD284	Shearika	Outcrop	Quartz Vein	0.19		2.95
GK028	Shearika	Outcrop	Pegmatite-Pink	0.19		2.46



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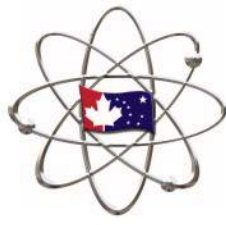
Sample	Target_Area	Type	Rock Type	U3O8%	Mo%	U/Th
GK009	Shearika	Outcrop	Pegmatite-White	0.19		2.30
RD297	Shearika	Outcrop	Pegmatite-White	0.18		5.20
GK024	Shearika	Outcrop	Pegmatite-White	0.18		5.14
CH189	Shearika	Boulder	Granite-White	0.18		5.06
CH135	Shearika	Outcrop	Pegmatite-White	0.18		4.27
CH108	Shearika	Boulder	Pegmatite-White	0.18	0.05	2.17
CH113	Shearika	Outcrop	Quartz Vein	0.18		1.32
RD294	Shearika	Outcrop	Pegmatite-White	0.18	0.06	1.16
CH109	Shearika	Boulder	Pegmatite-White	0.18	0.05	0.99
RD293	Shearika	Outcrop	Pegmatite-White	0.18		0.41
MG059	Shearika	Boulder	Pegmatite-White	0.17		4.23
TP123	Shearika	Boulder	Granite-White	0.17		2.12
GK022	Shearika	Outcrop	Pegmatite-White	0.17		1.98
ES072	Shearika	Boulder	Quartz Vein	0.17		1.25
CH120	Shearika	Outcrop	Pegmatite-White	0.17		0.89
RD276	Shearika	Outcrop	Pegmatite-Pink	0.16		4.17
CH123	Shearika	Outcrop	Pegmatite-White	0.16	0.06	1.91
RD281	Shearika	Outcrop	Pegmatite-White	0.15		2.81
RD288	Shearika	Outcrop	Pegmatite-White	0.15		2.48
OM428	Shearika	Boulder	Gneiss-/Granitic	0.15		2.19
CH140	Shearika	Outcrop	Granite-Pink	0.15		1.82
RD304	Shearika	Outcrop	Pegmatite-White	0.14	0.05	3.11
RD308	Shearika	Outcrop	Pegmatite-White	0.14		2.22
OM424	Shearika	Boulder	Pegmatite-White	0.14		1.82
CH187	Shearika	Boulder	Pegmatite-Pink	0.14	0.04	1.62
RD289	Shearika	Outcrop	Pegmatite-White	0.13		2.99
RD279	Shearika	Outcrop	Pegmatite-White	0.13		1.98
MG050	Shearika	Boulder	Granite-White	0.13		1.41
OM422	Shearika	Boulder	Pegmatite-Pink	0.13		1.08
CH134	Shearika	Outcrop	Pegmatite-White	0.13		0.40
CH131	Shearika	Outcrop	Pegmatite-White	0.12	0.05	3.99
CH112	Shearika	Outcrop	Pegmatite-White	0.12		2.94
RD290	Shearika	Outcrop	Pegmatite-White	0.12		2.61
RD280	Shearika	Outcrop	Pegmatite-White	0.12		1.76
GK025	Shearika	Outcrop	Pegmatite-White	0.12		0.30
AK041	Shearika	Boulder	Granite-White	0.11		4.77
CH133	Shearika	Outcrop	Pegmatite-White	0.11	0.10	4.21
TP125	Shearika	Outcrop	Granite-Pink	0.11		1.90
TP110	Shearika	Outcrop	Granite-White	0.11		1.11
RD300	Shearika	Outcrop	Pegmatite-White	0.10		2.47
JR400	Shearika	Boulder	Granite-White	0.10		2.18
GK012	Shearika	Outcrop	Pegmatite-White	0.10		2.10
RD301	Shearika	Outcrop	Pegmatite-White	0.10		0.58
JR403	Shearika	Boulder	Granite-White	0.09		5.78
CH127	Shearika	Outcrop	Pegmatite-White	0.09		2.55
RD291	Shearika	Outcrop	Pegmatite-White	0.09		2.34



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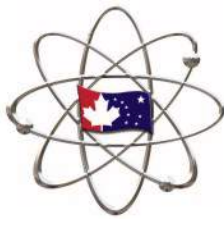
Sample	Target_Area	Type	Rock Type	U3O8%	Mo%	U/Th
GK011	Shearika	Outcrop	Pegmatite-Pink	0.09		1.57
CH115	Shearika	Outcrop	Quartz Vein	0.09		1.33
RD292	Shearika	Outcrop	Pegmatite-White	0.09		0.40
MG047	Shearika	Outcrop	Granite-White	0.09		0.33
RD307	Shearika	Outcrop	Pegmatite-White	0.08		3.26
RD286	Shearika	Outcrop	Pegmatite-White	0.08		3.20
RD287	Shearika	Boulder	Pegmatite-White	0.08		2.52
CH114	Shearika	Outcrop	Pegmatite-White	0.08		1.78
GK015	Shearika	Outcrop	Pegmatite-Pink	0.08		1.69
JF011	Shearika	Outcrop	Pegmatite-Pink	0.08		1.10
RD285	Shearika	Outcrop	Pegmatite-White	0.08	0.12	1.01
DT076	Shearika	Outcrop	Granite-White	0.07		2.48
ES071	Shearika	Boulder	Granite-White	0.07		2.18
CH125	Shearika	Outcrop	Pegmatite-White	0.07		1.87
TH015	Shearika	Boulder	Granite-Pink	0.07		1.84
CH117	Shearika	Outcrop	Pegmatite-White	0.07		1.47
RD298	Shearika	Outcrop	Pegmatite-White	0.07		1.44
MG052	Shearika	Boulder	Granite-White	0.07		1.42
JF015	Shearika	Boulder	Pegmatite-Pink	0.06		4.00
AM112	Shearika	Boulder	Pegmatite-White	0.06		2.35
WB010	Shearika	Outcrop	Gneiss-/Granitic	0.06		2.06
CH104	Shearika	Outcrop	Pegmatite-White	0.06		1.67
GK027	Shearika	Outcrop	Pegmatite-White	0.06		1.62
GK016	Shearika	Outcrop	Pegmatite-White	0.06		1.59
OM426	Shearika	Boulder	Pegmatite-White	0.06		1.46
CH122	Shearika	Outcrop	Pegmatite-White	0.06		1.38
JR401	Shearika	Boulder	Granite-White	0.06		0.89
CH126	Shearika	Outcrop	Pegmatite-White	0.06		0.69
RD303	Shearika	Outcrop	Pegmatite-White	0.05		5.49
AK038	Shearika	Boulder	Granite-White	0.05		2.46
GK019	Shearika	Outcrop	Pegmatite-White	0.05		2.33
RD278	Shearika	Outcrop	Pegmatite-White	0.05		2.07
CH116	Shearika	Outcrop	Pegmatite-White	0.05		1.96
GK008	Shearika	Outcrop	Pegmatite-White	0.05		1.85
CH110	Shearika	Outcrop	Pegmatite-White	0.05		1.40
CH137	Shearika	Boulder	Pegmatite-White	0.05		1.29
CH136	Shearika	Outcrop	Pegmatite-White	0.05		1.23
GK037	Shearika	Outcrop	Pegmatite-White	0.05		0.89
RD306	Shearika	Outcrop	Pegmatite-White	>1.2%		



The Grease River claims (81,821ha) were staked to cover areas with extremely high uranium in lake sediments coinciding with high uranium-thorium ratios and high total radioactivity as defined by earlier surveys carried out by the Geological Survey of Canada. The areas also correspond to the intersection of two geological boundaries, one of which is the Grease River Fault, a major shear zone over 5 kilometres wide. Several showings were known to occur within the southern claims of the new project, with historical surface samples of up to 1.6% U₃O₈ in sheared metasediments, before the commencement of the current exploration programs. In 2007 and 2008, CanAlaska survey crews completed sampling of over 20 separate zones of uranium mineralization on the Grease River project, and identified multiple zones of uranium mineralization associated with pegmatites, granites and cross cutting structures. The 2008 work concentrated on the profile of the larger targets. The Shearika ridge target is the largest zone of continuous mineralization on the property. This zone requires drill testing to establish average uranium grades and depth extent to the known mineralization.

Table 2: Other Zones of Uranium Mineralization - Grease River Project

Sample	Target_Area	Type	Rock Type	U3O8%	Mo%	U/Th
TH008	Fontaine Lake	Outcrop	Granite-Pink	0.22		0.59
ES078	Davenport Lake	Outcrop	Quartz Vein	0.11		2.35
RD275	Davenport Lake	Boulder	Granite-White	0.06		1.51
RD270	Addie	Outcrop	Granite-Pink	1.28		688
RD271	Addie	Outcrop	Granite-Pink	1.08		1599
RD272	Addie	Outcrop	Pegmatite-Pink	0.16	0.04	3.0
RD267	Bradley	Outcrop	Amphibolite	0.82		8642
RD268	Bradley	Outcrop	Pelite	0.13		141
FT001	Melanchuk Lake	Boulder	Granite-White	0.14		2.61
CH185	Melanchuk Lake	Boulder	Granite-White	0.14		1.64
AS001	Melanchuk Lake	Boulder	Pegmatite-Pink	0.11		1.58
CH183	Melanchuk Lake	Boulder	Granite-White	0.10		2.50
TP151	Melanchuk Lake	Outcrop	Granite-White	0.10		1.14
TP150	Melanchuk Lake	Outcrop	Granite-White	0.07		0.51
CH184	Melanchuk Lake	Boulder	Granite-White	0.06		2.35
CH182	Melanchuk Lake	Boulder	Granite-White	0.05		2.49
CH180	Melanchuk Lake	Boulder	Granite-White	0.05		1.70
CH181	Melanchuk Lake	Boulder	Granite-White	0.05		1.05



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The 2008 prospecting work on the Grease River property complemented the 2007 prospecting. The observed mineralization is of two styles; high U/Th (>20) and low U/Th. Both occur predominantly in pegmatitic to granitic rocks. The high U/Th samples are interpreted to be derived from secondary (hydrothermal) enrichment, whereas the low U/Th are metamorphic/intrusive enrichments.

Most of the work concentrated on the Sherika Ridge area, the best exposed 1.5 km of a 7 km long contact zone between a granite and paragneisses. White to pink pegmatites intrude a 500 metre wide paragneiss selvage and are uranium-enriched. Uranium occurs associated with biotite clusters and in fractures, sometimes along the contact with the paragneiss.

Similar mineralization was observed at Melanchuk Lake, south-west of the Sherika Ridge and as well at the Davenport showings. Additional prospecting in the Addie lake area produced good results (up to 1.28 % U₃O₈) with a very high U/Th ratio indicative of low temperature, hydrothermal, mineralization. Similar mineralization was observed in a 50 cm wide shear that was followed for 30 metres before disappearing in overburden at the Bradley showing. Locations of Davenport Lake, Addie Lake and the Bradley occurrences are shown on figure 2 of CanAlaska's March 3rd, 2008 news release.

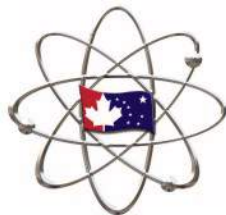
All of the samples from the Grease River project were submitted to Acme Laboratories Vancouver, an ISO 9001:2000 accredited and qualified Canadian laboratory, for the Group 4B analysis. These samples were analyzed for uranium and multi-element geochemistry by tri-acid digestion and ICP-MS. High grade uranium samples were assayed by Saskatchewan Research Laboratories and analyzed for multi-element geochemistry, including uranium and other elements by tri-acid digestion and ICP. The samples were collected by CanAlaska field geologists under the supervision of Dr. Karl Schimann, and were shipped in secure containment to the qualified Canadian laboratories noted above.

The Grease River Project is presently under option to Uranium Prospects plc and Yellowcake plc. Uranium Prospects and Yellowcake may earn 51% and 9% respective ownership interests in the project by contributing a total of Cdn\$5 million in exploration expenditures and sundry consideration in cash and common shares.

Peter Dasler, M.Sc, P. Geo. is the Qualified Person for this news release.

About CanAlaska Uranium Ltd. -- www.canalaska.com

CANALASKA URANIUM LTD. (CVV -- TSX.V, CVVUF -- OTCBB, DH7 -- Frankfurt) is undertaking uranium exploration in twenty 100%-owned and two optioned uranium projects in Canada's Athabasca Basin. Since September 2004, the Company has aggressively acquired one of the largest land positions in the region, comprising over 2,500,000 acres (10,117 sq. km or 3,906 sq. miles). To-date, CanAlaska has expended over Cdn\$50 million exploring its properties and has delineated multiple uranium targets. The Company's geological expertise and high exploration profile has attracted the attention of major international strategic partners. Among others, Mitsubishi Development Pty., a subsidiary of Japanese conglomerate Mitsubishi Corporation, has undertaken to provide CanAlaska C\$11 mil. in exploration funding for its West McArthur Project. Exploration of CanAlaska's Cree East Project is also progressing under a C\$19 mil. joint venture with a consortium of Korean companies led by Hanwha Corporation, and comprising Korea Electric Power Corp., Korea Resources Corp. and SK Energy Co, Ltd. A Memorandum of Understanding has also recently been executed with mining partner East Resources Inc. to commence exploration on the NE Wollaston Project comprising a potential 100,000 metres of drill testing.



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About Uranium Prospects Plc - www.uraniumprospects.com

URANIUM PROSPECTS PLC (PLUS:URPP) was floated on PLUS in London in July 2007. The Company was established to acquire, or purchase options to acquire, exploration rights over land where initial tests have indicated the potential for a high concentration of uranium deposits, either on its own or under a joint venture arrangement. In early August 2007, the Company acquired the option to purchase a 51% stake in a joint venture with CanAlaska Uranium Ltd. (40%) for the Grease River Project. It acquired the interest from Yellowcake Plc (PLUS: YEL) (9%) has assumed financial commitment for the project under the Grease River Option Agreement going forward.

About Yellowcake Plc - www.yellowcakeplc.co.uk

YELLOWCAKE PLC (PLUS:YEL) is the world's first portfolio company specialising wholly in investing in uranium explorers, developers and producers. Founded in February 2005, it floated on London's PLUS Market in July 2005. Yellowcake commenced investing in quoted and unquoted uranium companies in late September 2005 and currently its portfolio includes 32 companies, with operations in Africa, Australia, Canada, Kazakhstan, Mongolia, Paraguay and the United States. Its strategy also includes sourcing uranium projects and it has a 9% carried interest in the Grease River Option Agreement with CanAlaska (40%) and Uranium Prospects (PLUS: URPP) (51%).

On behalf of the Board of Directors

Peter Dasler, M.Sc., P.Geo.
President & CEO, CanAlaska Uranium Ltd.

Contact:

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Email: info@canalaska.com

The TSX Venture has not reviewed and does not accept responsibility for the adequacy or accuracy of this release: CUSIP# 13708P 10 2. This news release contains certain "Forward-Looking Statements" within the meaning of Section 21E of the United States Securities Exchange Act of 1934, as amended. All statements, other than statements of historical fact, included herein are forward-looking statements that involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the Company's expectations are disclosed in the Company's documents filed from time to time with the British Columbia Securities Commission and the United States Securities & Exchange Commission.