

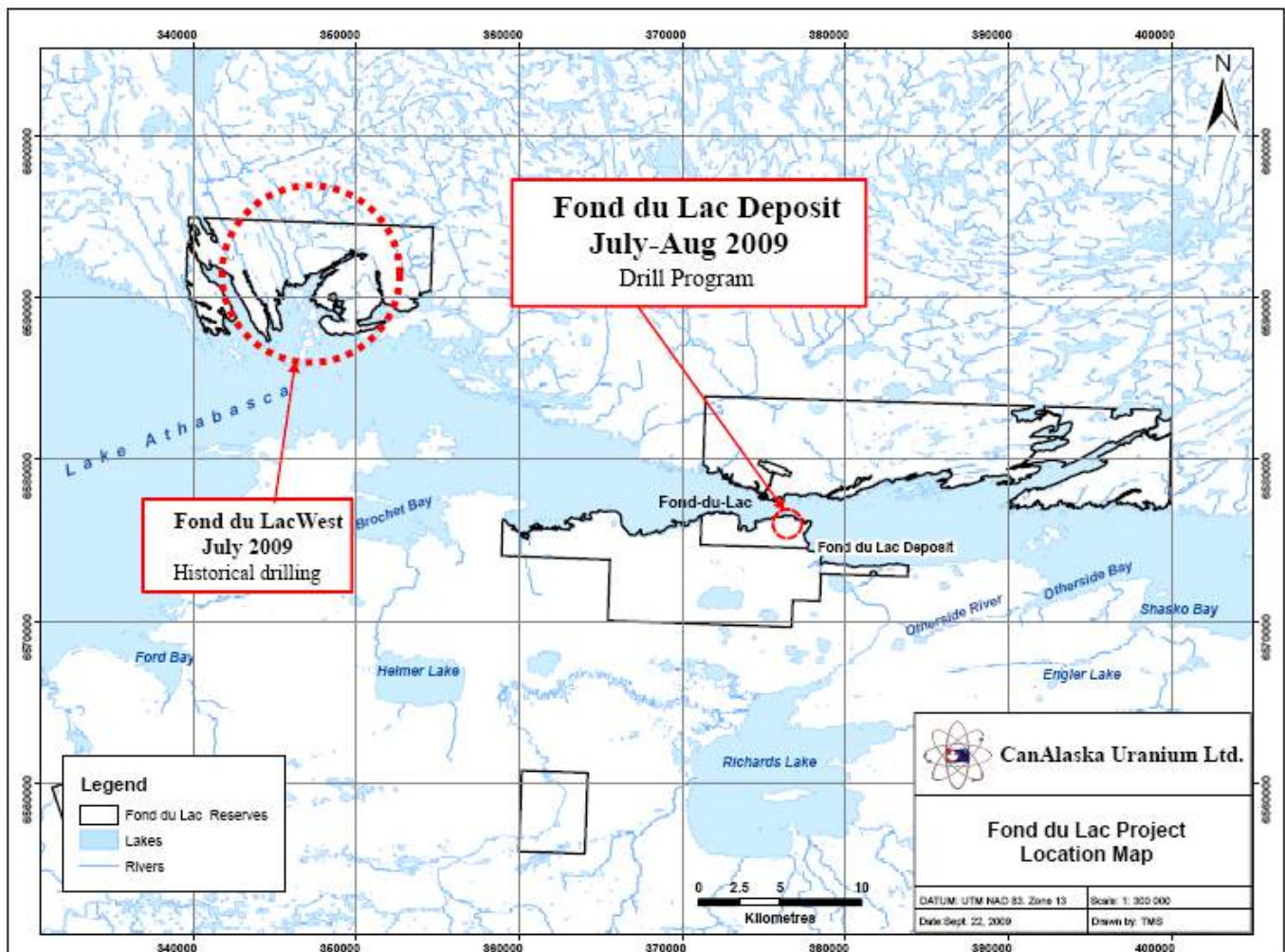
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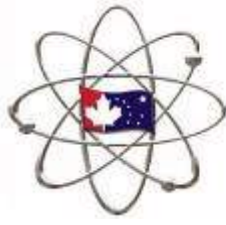
NEWS RELEASE

CANALASKA INTERCEPTS 40.4 METRES OF URANIUM MINERALIZATION IN BASEMENT ROCKS AT FOND DU LAC

Vancouver, Canada, September 22nd, 2009 - CanAlaska Uranium Ltd. (TSX.V – CVV) (“CanAlaska” or the “Company”) is pleased to report assay results from its August 2009 drill program at the Fond Du Lac Project in the Athabasca Basin, Canada. The Company’s drill program of 19 holes was targeted on geophysical features which may represent the location of mineralized feeder zones for the Fond Du Lac unconformity-style sandstone hosted uranium deposit. Hole FDL 017, a step-out hole on the east side of a major crosscutting structure, intercepted a long zone of uranium mineralization in the basement rocks, east of, and below the Fond Du Lac deposit sandstone horizon. This zone starts at 41 metres (134 feet) below surface. **Hole FDL017 returned 40.4 metres averaging 0.32% U₃O₈ , including 6 metres averaging 1.13% U₃O₈ (22.6 lb/ton), with individual values of half-metre samples grading up to 3.77% U₃O₈.**

Figure 1





Further drill holes from the August program intercepted uranium mineralization in the basement and in the overlying sandstone. Significant assay results for the program are listed in Tables 1 and 2.

These drill results are the second set of significant assay results to be returned from summer work on the Fond Du Lac project. The Company previously reported on results from the West Fond Du Lac area, where a 2.4 km long zone of uranium stringer mineralization was re-sampled and mapped ([see Sept 16, 2009 news release](#)). Both areas are shown on the location map in Figure 1 above.

Table 1 - Fond Du Lac August, 2009 Drill Program Significant Uranium Intercepts.

Drill Hole	Rock Type	From (m)	To (m)	Width of Mineralization (m)	% U₃O₈	lb/ton U₃O₈
FLC011	Sandstone	18.45	28.65	10.20	0.08	1.59
FLC013	Sandstone	18.50	39.10	20.60	0.02	0.44
FLC014	Sandstone	12.30	27.90	15.60	0.10	2.02
FLC016	Sandstone	27.05	43.40	16.35	0.03	0.68
FLC017	Basement	54.50	94.90	40.40	0.32	6.36
<i>includes</i>	Basement	59.80	75.8	21.30	0.59	11.74
<i>includes</i>	Basement	59.80	65.80	6.00	1.13	22.64
FLC020	Basement	104.70	112.00	7.30	0.3	5.94
<i>includes</i>	Basement	111.00	112.00	1.00	1.33	26.65

The Fond Du Lac project is located on the northern portion of the Athabasca Basin, Saskatchewan, where the Athabasca sandstone units have minimal thicknesses of 20-75 metres overlying the unconformity. This area was explored by AMOK in the 1960's and AMOK and Eldorado Nuclear in the 1970's and early 1980's. The property is part of the Fond Du Lac Denesuline First Nation Reserve Lands, and CanAlaska is working with the community under an option to earn a 49% interest in the project. A small uranium resource (non 43-101 compliant) was previously discovered in the sandstone units, immediately above the unconformity. However, no significant effort was made to explore for structurally-hosted uranium mineralization in the basement rock at that time. The historic zones of uranium mineralization at Fond Du Lac are principally within the Manitou Falls Formation of the Athabasca Sandstone sequence, and are characterized by strong fracturing, intense silicification, zones of hematization and minor clay alteration. Zoning is apparent, with a central highly-mineralized-core. The mineralization is evident as disseminations and replacement in the sandstone.

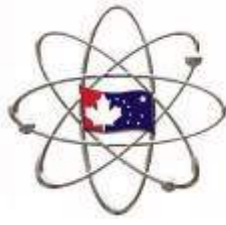
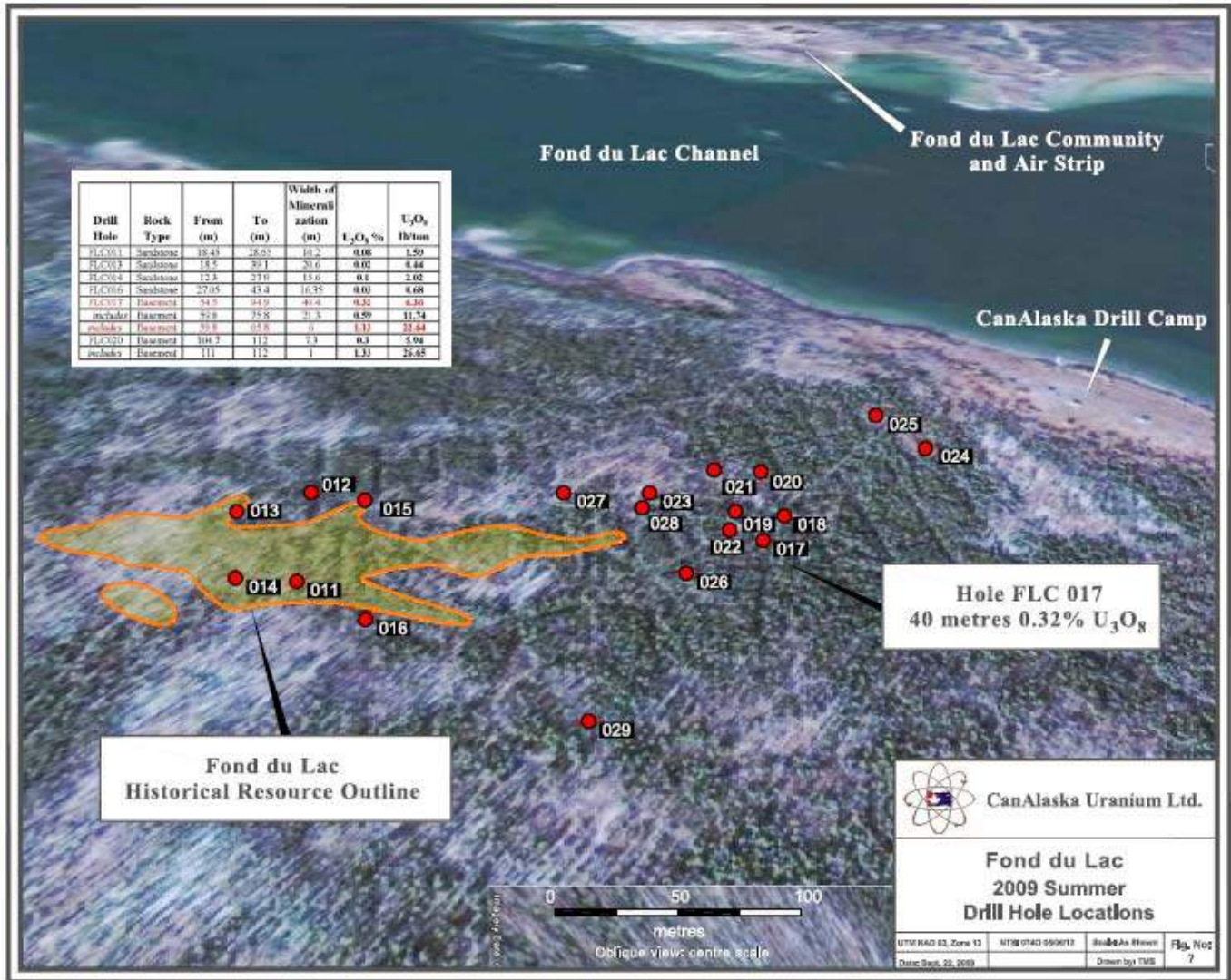
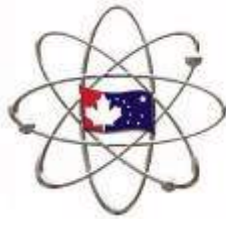


Figure 2



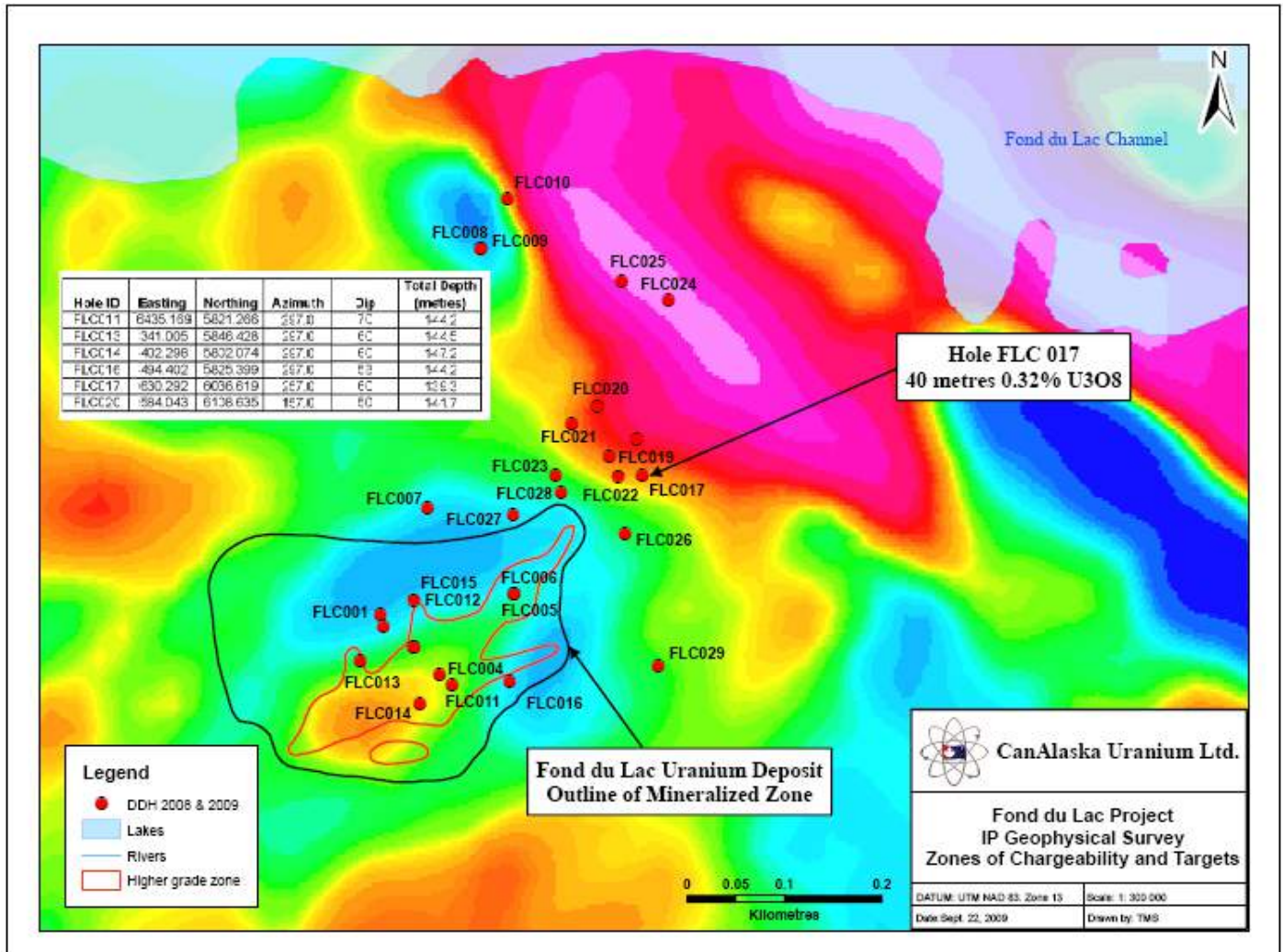
The 2009 drilling at Fond Du Lac was successful on two fronts. The drilling defined a new mineralized extension to the historical deposit as well as significant uranium mineralization in the basement.

The intercepts in diamond drill hole FDL017 are located **70** metres North-East of the known uranium deposit, on the east side of a NNW trending mylonite zone. The mineralization occurs as narrow fracture fillings and breccia impregnation in mylonitic garnet-biotite gneisses. The main NNW structure was evident from the geophysical surveys performed by CanAlaska prior to the current drill programs (magnetics, VTEM, gravity and IP-resistivity surveys were carried out). The structural events appear younger than the main deformation associated with the Grease River Shear Zone, which cuts the property south of the area of current drilling.



The morphology of the new mineralized zone is not well known as yet, but appears to be trending in a general E-W direction and with a dip close to vertical. The known deposit to the southwest trends at 050°; an orientation that is parallel to the regional Grease River Shear Zone. Airborne magnetic surveys show that the Grease River Shear fabric offset by the well-developed regional North-West fabric, and to a lesser extent, a North-South fabric.

Figure 3



During the 2009 drilling campaign, uranium mineralization was encountered along high angle structures in biotite gneiss basement rocks where the uranium occurs as coatings on fractures and as rims around fragments within healed breccia. The mineralization has been tested over a vertical extent of 68 metres in the basement, to a depth of 99 metres, with some associated mineralization also occurring in sandstone above this mineralized zone, for a total vertical extent of 90 metres. Associated geophysical features from IP geophysical surveys are shown in Figure 3.

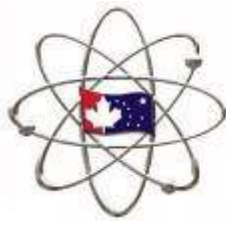
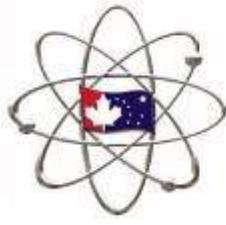


Table 2 - Full Assay Results, Drill Hole # FDL 017

Hole	Sample	Zone	From (Metres)	To (Metres)	Width (Metres)	% U ₃ O ₈
FLC017	24-0782	basement	53.00	53.50	0.50	0.0001
FLC017	24-0783	basement	53.50	54.00	0.50	0.0008
FLC017	24-0784	basement	54.00	54.50	0.50	0.0021
FLC017	24-0785	basement	54.50	55.00	0.50	0.1238
FLC017	24-0786	basement	55.00	55.50	0.50	0.2559
FLC017	24-0787	basement	55.50	56.00	0.50	0.0087
FLC017	24-0788	basement	56.00	56.30	0.30	0.0229
FLC017	24-0789	basement	56.30	56.80	0.50	0.4788
FLC017	24-0790	basement	56.80	57.30	0.50	0.0170
FLC017	24-0791	basement	57.30	57.80	0.50	1.1792
FLC017	24-0792	basement	57.80	58.30	0.50	0.1146
FLC017	24-0793	basement	58.30	58.80	0.50	0.3974
FLC017	24-0794	basement	58.80	59.30	0.50	0.0294
FLC017	24-0795	basement	59.30	59.80	0.50	0.3137
FLC017	24-0796	basement	59.80	60.30	0.50	1.1792
FLC017	24-0797	basement	60.30	60.80	0.50	0.0363
FLC017	24-0798	basement	60.80	61.30	0.50	3.7736
FLC017	24-0799	basement	61.30	61.80	0.50	1.0731
FLC017	24-0800	basement	61.80	62.30	0.50	0.2111
FLC017	24-0801	basement	62.30	62.80	0.50	0.1162
FLC017	24-0802	basement	62.80	63.30	0.50	0.3302
FLC017	24-0803	basement	63.30	63.80	0.50	1.3679
FLC017	24-0804	basement	63.80	64.30	0.50	3.1722
FLC017	24-0805	basement	64.30	64.80	0.50	0.5542
FLC017	24-0806	basement	64.80	65.30	0.50	0.3302
FLC017	24-0807	basement	65.30	65.80	0.50	1.4387
FLC017	24-0808	basement	65.80	66.30	0.50	0.0133
FLC017	24-0809	basement	66.30	66.80	0.50	0.0824
FLC017	24-0810	basement	66.80	67.30	0.50	0.0749
FLC017	24-0811	Basement	67.30	67.80	0.50	0.8137
FLC017	24-0812	Basement	67.80	68.30	0.50	0.7347
FLC017	24-0813	Basement	68.30	69.30	1.00	0.0278
FLC017	24-0814	Basement	69.30	69.80	0.50	0.0091
FLC017	24-0815	Basement	69.80	70.30	0.50	0.0246
FLC017	24-0816	Basement	70.30	70.80	0.50	0.0067
FLC017	24-0817	Basement	70.80	71.30	0.50	0.3844
FLC017	24-0818	Basement	71.30	71.80	0.50	3.0778
FLC017	24-0819	Basement	71.80	72.30	0.50	0.0285
FLC017	24-0820	Basement	72.30	72.80	0.50	0.0481
FLC017	24-0821	Basement	72.80	73.30	0.50	0.0460
FLC017	24-0822	Basement	73.30	73.80	0.50	0.1013
FLC017	24-0823	Basement	73.80	74.30	0.50	2.8420
FLC017	24-0824	Basement	74.30	74.80	0.50	0.0389
FLC017	24-0825	Basement	74.80	75.30	0.50	0.0608



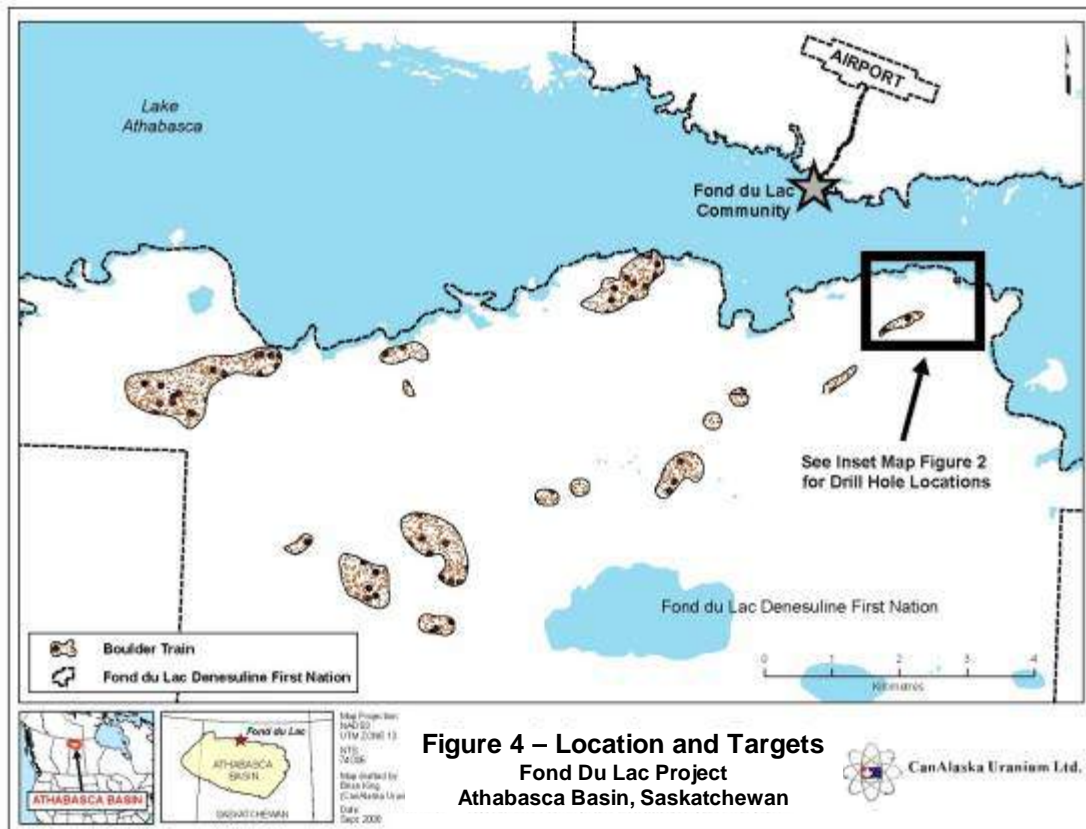
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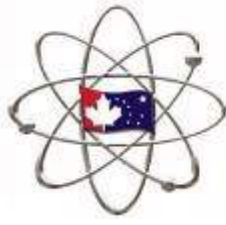
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FLC017	24-0826	Basement	75.30	75.80	0.50	0.0466
FLC017	24-0827	Basement	75.80	76.30	0.50	0.0002
	no assay		76.30	85.70	9.40	0.0000
FLC017	24-0828	Basement	85.70	86.30	0.60	0.0019
FLC017	24-0829	Basement	86.30	86.70	0.40	0.5743
FLC017	24-0830	Basement	86.70	87.10	0.40	0.2358
FLC017	24-0831	Basement	87.10	87.60	0.50	0.0249
	no assay		87.60	93.90	6.30	0.0000
FLC017	24-0832	Basement	93.90	94.40	0.50	0.0039
FLC017	24-0833	Basement	94.40	94.90	0.50	0.0243
FLC017	24-0834	Basement	94.90	95.40	0.50	0.0001

The new drill information is currently being modeled and linked with prior geophysical results and known geological features. The IP-Chargeability survey appears to show clear basement rock types, and the location of bounding structures (Figure 3). There is also good IP response over the area of the historical uranium deposit. Multiple drill targets have been identified by the Company's geologists. Some of these are formed from current drilling and surveys, whereas others are loosely-defined by correlating the location of mineralized boulder trains on surface (see attached Figure 4 for mineralized boulder trains and geophysical responses).

Figure 4





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CanAlaska is presently fully-funded for its operations and is budgeting for extensive fall-winter 2010 exploration programs, financed by its strategic joint venture partnerships and from current treasury. The Company is presently awaiting further assay results from summer exploration that was undertaken on the Lake Athabasca Project, and from extensive mapping and sampling work at the Poplar Project, where the company has been working for the past month with six Chinese-trained geologists from East Resources Inc. The assay results from these active projects will be provided as they become available to the Company.

All of the prospecting and drill samples from the Fond Du Lac Project were submitted to Acme Laboratories Vancouver, an ISO 9001:2000 accredited and qualified Canadian Laboratory to be analysed for uranium and multi-element geochemistry by tri-acid digestion and ICP-MS., or to the Saskatchewan Research Council Geoanalytical Laboratory for a Multi Element ICP analysis with Aqua Regia digestion. The samples were collected by CanAlaska field geologists under the supervision of Dr. Karl Schimann, and were shipped in secure containment to the laboratories noted above. Peter Dasler, M.Sc., P Geo. is the qualified technical person responsible 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 three optioned uranium projects in Canada's Athabasca Basin -- the "Saudi Arabia of Uranium". 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\$55 million exploring its properties and has delineated multiple uranium targets.

CanAlaska's geological expertise and high exploration profile has attracted the attention of major international strategic partners. Among others, Japanese conglomerate Mitsubishi Corporation has undertaken to provide the Company 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. Exploration recently commenced on the Poplar Project with Chinese mining partner East Resources Inc., comprising a potential 100,000 metres of drill testing. In addition, Canadian explorer Kodiak Exploration has also optioned the McTavish Project to advance exploration with the goal of attaining a 60% project interest earn-in by delineating a minimum of 35 million pounds U₃O₈.

On behalf of the Board of Directors

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