

Press Release

U308 Corp. cuts 5.9 metres grading 0.13% (2.5 pounds per short ton) U₃O₈ at Aricheng North

Assay results from additional 12 holes confirm uranium mineralization is open at depth – results to be included in upcoming resource estimate

Toronto, Ontario – December 23, 2008 – **U308 Corp. (TSX Venture: UWE)**, a Canadian uranium exploration company, reports uranium mineralization from an additional 12 bore holes drilled in the Aricheng North fault-breccia zone in the Kurupung Batholith, located in the basement near the Roraima Basin in Guyana (Figure 1). These assay results confirm the mineralized shoots continue at depth and verify their orientation. The extension of the mineralization defined by this drilling will contribute to the resource estimate underway on Aricheng North. Based on all mineralized bore hole intercepts to date, the Aricheng North structure has an average estimated true thickness of 4.5 metres at an average grade of 0.149% (3.0 pounds per short ton) U₃O₈. U308 Corp. has now drilled a total of 92 bore holes for 15,433 metres at Aricheng North.

“The additional drilling shows that the mineralized shoots at Aricheng North plunge down-dip, and confirms that mineralization is open at depth and along strike to the southwest. Having confirmed the orientation and continuity of the mineralization, we are in a position to continue drilling to efficiently expand the resource at Aricheng North when market conditions improve,” said Dr. Richard Spencer, U308 Corp’s President and CEO. “Recent drill results from both Aricheng North and Aricheng South will expand the combined initial resource estimate currently being prepared on these structures. As a result of incorporating the intercepts from recent drilling, the resource estimate is expected to be ready in January 2009.”

Aricheng South and Aricheng North are U308 Corp’s first basement-hosted uranium-bearing structures to move to resource estimation – on track with the goal of building up a resource inventory of economic size. Further exploration drilling on the next basement targets in the company’s pipeline of projects will be advanced subject to prevailing market conditions.

Mineralization at Aricheng North occurs in a northeast-trending shear zone breccia in granodiorite in the Kurupung Batholith. Uranium mineralization is associated with an albite-chlorite-hematite mineral assemblage. Phase I, II and III drilling has delineated uranium mineralization over a 750 metre long sector of the structure to a maximum depth of approximately 190 metres below surface. The mineralized structure dips approximately 75° to the northwest, and varies in width from 1.5 metres to 22 metres.

A long section of uranium grade and thickness shows that uranium is concentrated in three mineralized shoots that plunge down-dip and are open at depth (Figure 2). The mineralized shoots contain higher-grade zones that have a shallow plunge to the southwest and are located where secondary shear zones intersect the principal structure.

Drill hole locations relative to the ground scintillometer survey and previous drilling (results released on May 9, 2007, June 19, 2007, January 24, 2008, February 6, 2008 and September 24, 2008) are shown in Figure 3. All reported assay results are available on SEDAR at www.sedar.com and www.u308corp.com.

Table 1 – Assay Results for Aricheng North

Summary of significantly mineralized intercepts cut in the additional 12 holes (2,550 metres) drilled in the Phase III program on the Aricheng North target.

Bore hole number	Intercept				Grade	
	From (m)	To (m)	Interval (m)	Estimated True Thickness (m)	U ₃ O ₈ (%)	U ₃ O ₈ (lb/st)
ARN-081	180.0	188.0	8.0	5.9	0.126	2.52
ARN-082	174.0	181.5	7.5	5.7	0.115	2.30
ARN-083	59.0	55.0	6.0	4.6	0.160	3.20
	49.5	53.5	4.0	3.1	0.211	4.22
ARN-084	179.5	181.0	1.5	1.1	0.083	1.66
	188.0	189.5	1.5	1.1	0.061	1.22
ARN-085	No Significant Results					
ARN-086	No Significant Results					
ARN-087	No Significant Results					
ARN-088	No Significant Results					
ARN-089	No Significant Results					
ARN-090	179.5	196.0	16.5	12.6	0.105	2.10
	194.0	195.5	1.5	1.1	0.580	11.60
ARN-091	150.5	153.5	3.0	2.3	0.136	2.72
ARN-092	141.5	143.0	1.5	1.4	0.094	1.88

Note: lb/st is an abbreviation for pounds per short ton. 1 short ton = 2,000lbs or 0.907 metric tonnes.

Quality Assurance & Quality Control

Diamond drilling at Aricheng North produced NQ (47.6 millimetre diameter) core. The core was halved with a diamond saw on site and half core samples were delivered to ACME Laboratory's preparation facility in Georgetown, Guyana. Sample blanks and certified standards were inserted at an average frequency of 1 per 25 samples. Sample pulps were then shipped by ACME to their analytical facility in Vancouver, BC, Canada, for analysis for uranium by ICP-MS after hot, four-acid digestion.

Mr. Richard Cleath (M.Sc.), Vice President of U3O8 Corp., a "Qualified Person" within the definition of that term in National Instrument 43-101 of the Canadian Securities Administrators, had overall responsibility for all aspects of target selection and drilling of the Aricheng North target. Mr. Cleath has supervised the preparation of, and verified, the technical information in this release.

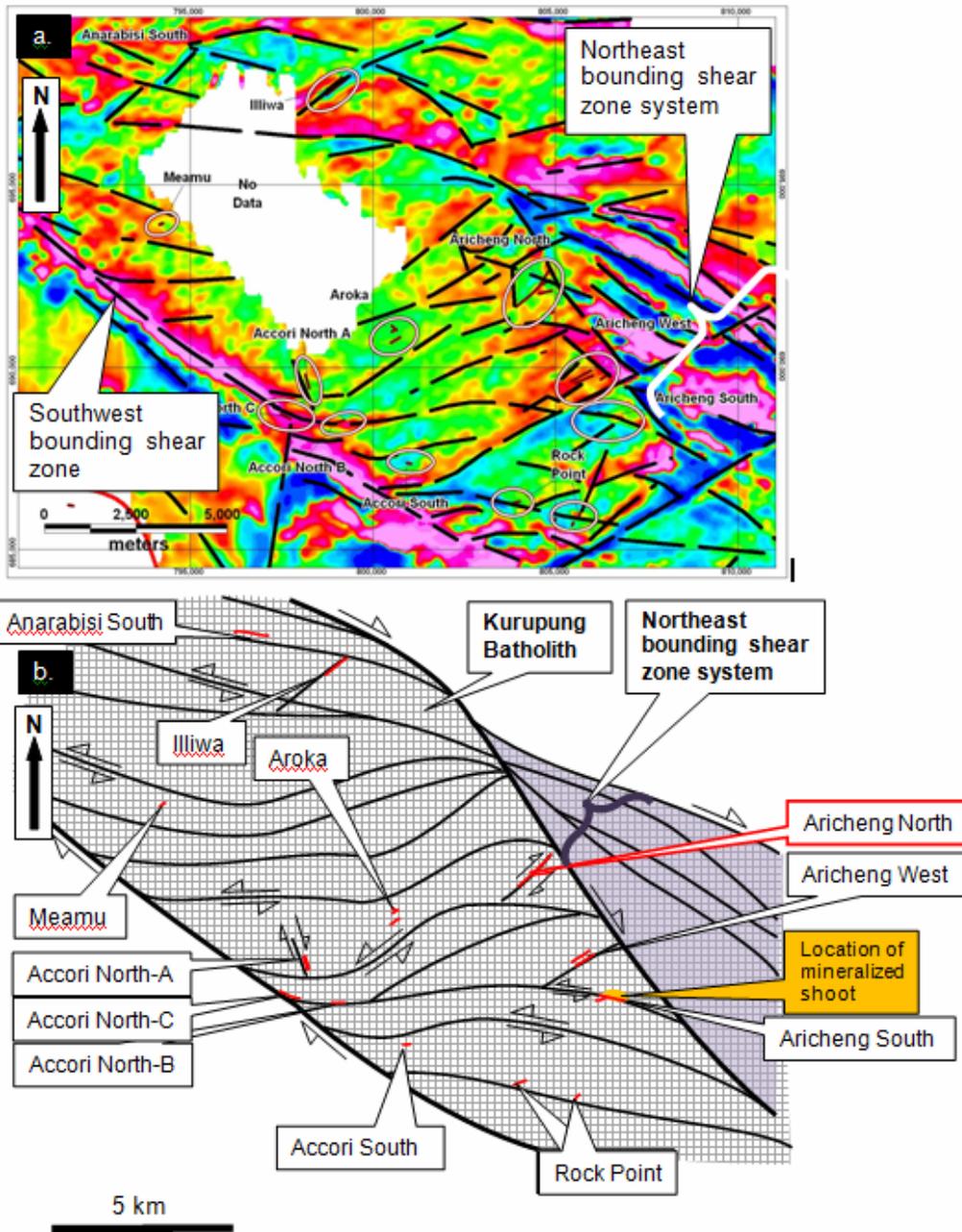


Figure 1 – Map of Magnetic Data and Interpreted Structures in Kurupung Batholith

- a. Map of magnetic data from the Kurupung Batholith show interpreted structures (black lines). The margins of the Kurupung Batholith are marked by southeast orientated magnetic anomalies that coincide with shear zones. The open “S”-shaped curves that extend between the bounding shear zones of the Kurupung Batholith are termed sigmoidal structures.
- b. Simplified structural interpretation of the Kurupung Batholith shows the sigmoidal structures extending between the bounding shear zones with known mineralized zones shown. The mineralized shoot in the Aricheng South structure is located where a splay-fault intersects the principal sigmoidal structure. The mineralized zone at Aricheng North is labeled in red.

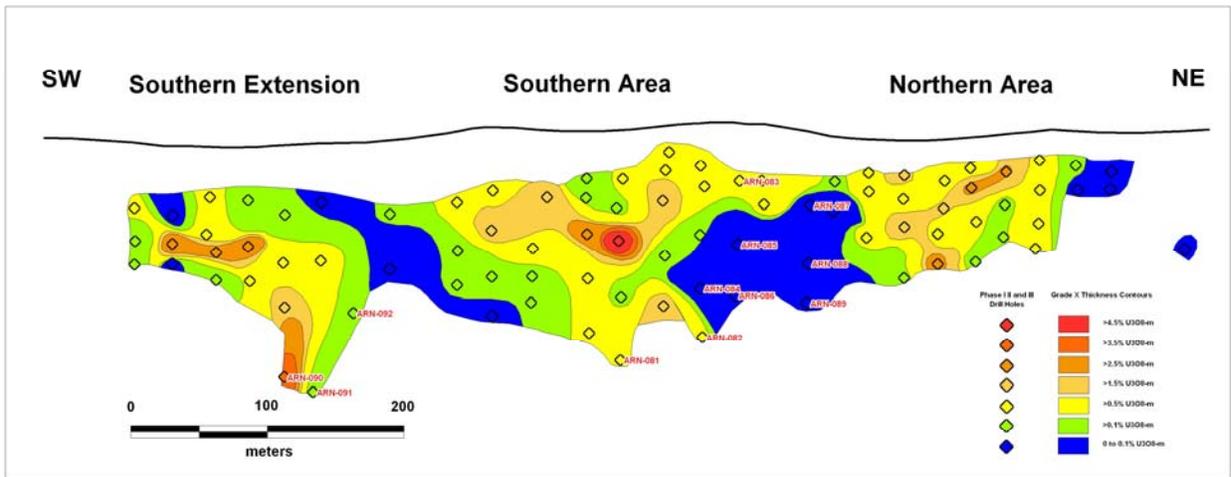


Figure 2 – Long Section of Aricheng North Structure

A provisional long section of the principal structure at Aricheng North shows the distribution of grade-thickness values (the product of the width of the mineralized interval in metres and its U_3O_8 grade in %) on a vertical projection of the structure. The circles demarcate the pierce points on the structure. A pierce point is the approximate location at which each bore hole intersects the structure. The additional 12 holes, whose results are reported here, are labelled in red. Based on the arithmetic average of all mineralized drill hole intercepts to date, the Aricheng North structure has an average estimated true thickness of 4.5 metres at an average grade of 0.149% (3.0 pounds per short ton) U_3O_8 .

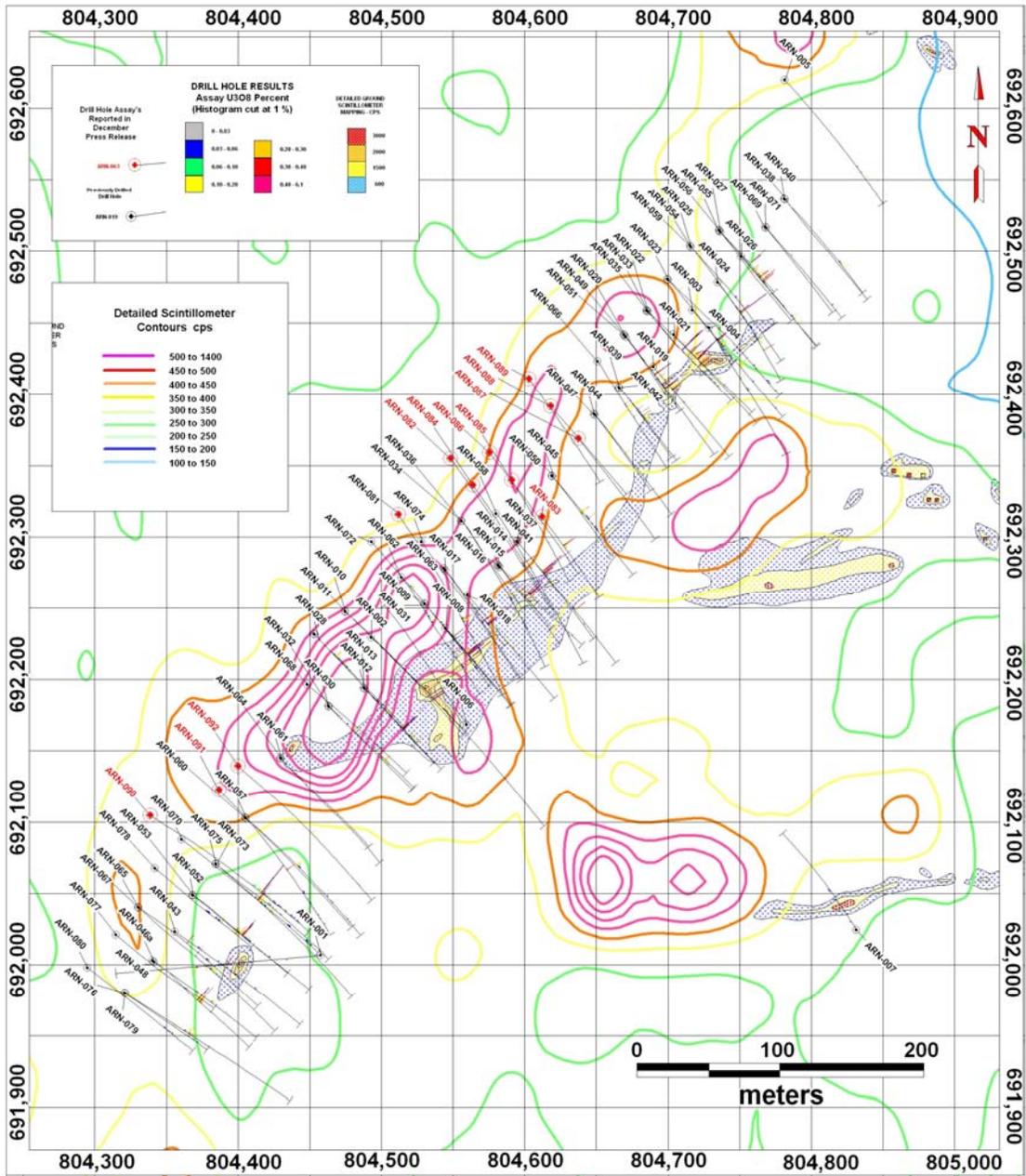


Figure 3 –Drill Hole Locations at Aricheng North

Map shows the ground scintillometer radiometric anomaly at Aricheng North with the location of Phase I, II and previously reported Phase III drill holes labelled in black. The additional 12 drill holes, results of which are reported here, are labelled in red.

About U3O8 Corp.

U3O8 Corp. is a Canadian uranium exploration company based in Toronto, Canada. Currently focused on uranium exploration in the Roraima Basin in Guyana, South America, U3O8 Corp's primary business objective is to explore, develop and acquire uranium projects in the Americas. The company is well funded with over \$10 million held solely in cash and Canadian chartered bank-backed Guaranteed Investment Certificates.

U3O8 Corp. has exclusive uranium exploration rights in an area covering approximately 1.3 million hectares that straddles the edge of the Roraima Basin in Guyana. The company is advancing a two-pronged exploration strategy that focuses on:

- Exploration for multiple uranium-bearing structures within structural systems in the basement adjacent to the Roraima Basin with the concept that the individual veins could potentially aggregate to a significant total resource; and
- Exploration for unconformity-style uranium deposits at the base of the Roraima Basin, which are similar to those of the prolific Athabasca Basin in Saskatchewan.

For further information on the company's properties, please refer to the technical report prepared for the company by Dahrouge Geological Consulting Ltd., which is titled "The Technical Report on the Prometheus Uranium Project" and dated September 15, 2006 as amended and restated December 12, 2006, available on SEDAR at www.sedar.com and on the company's website www.u3o8corp.com.

Forward-Looking Statements

Certain information set forth in this news release may contain forward-looking statements that involve substantial known and unknown risks and uncertainties. These forward-looking statements are subject to numerous risks and uncertainties, certain of which are beyond the control of U3O8 Corp., including, but not limited to, the impact of general economic conditions, industry conditions, volatility of commodity prices, risks associated with the uncertainty of exploration results and estimates, currency fluctuations, political risks, dependence upon regulatory approvals, the uncertainty of obtaining additional financing and exploration risk. Readers are cautioned that the assumptions used in the preparation of such information, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, undue reliance should not be placed on forward-looking statements.

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The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of this release.

U3O8 Corp. (TSX-V: UWE)
Basic shares outstanding: 23,057,700
Fully diluted shares outstanding: 25,471,000