



**NEWS RELEASE**  
**(TSX-V Symbol: UBR)**

**ASSAY RESULTS FROM THE 2008 DRILLING PROGRAMME AT THE  
USKAWANIS URANIUM PROJECT ARE NOW AVAILABLE.**

**SUBSTANTIAL DIS-EQUILIBRIUM BETWEEN RADIOMETRIC (GAMMA  
LOGGING) AND ASSAY RESULTS WAS IDENTIFIED OVER LARGE  
PARTS OF THE 2008 DRILLING PROGRAMME AREA**

**THE SOURCE OF THE DIS-EQUILIBRIUM HAS BEEN IDENTIFIED BY AN  
INDEPENDENT CONSULTANT AS DUE TO SUBSTANTIAL MIGRATION  
OF RADON ( $^{222}\text{Rn}$ ) COMING FROM UPWARD MOVEMENT OF GEOGAS**

**SINCE RADON ( $^{222}\text{Rn}$ ) ORIGINATES DURING THE DECAY CHAIN OF  
URANIUM, THE MOST PROBABLE CONCLUSION OF THE SIGNIFICANT  
RADON ( $^{222}\text{Rn}$ ) MIGRATION IN BOREHOLES IS THAT IT IS INDICATIVE  
OF A MUCH DEEPER URANIUM SOURCE.**

**Montreal, Quebec, February 3 2009: Uranium Bay Resources Inc. (TSX-V: UBR)** is pleased to update its shareholders on the conclusion emanating from the 2008 exploration programme at the Uskawanis Uranium Property ("**UUP**") led by its Exploration Manager and Technical Director, Mr. Viv Stuart-Williams. The field and drilling programme was conducted on the wholly owned 314 km<sup>2</sup> **UUP** situated SE of Hydro-Quebec's Opinaca Hydroelectric Reservoir along the Eastmain River, 180 km SE of Radisson, Quebec.

UBR's stated goal at **UUP** was to prospect for low-grade/high-tonnage uranium mineralization, similar to the large low grade uranium deposit, mined as an enormous open-pit operation at Rössing in Namibia. The principal exploration target at **UUP** was therefore expected to be large volumes of mineralized alaskitic (pale to white) granites and large volumes of pegmatites. Metasomatism or alteration of the hosting rock was also viewed as important. This was the type of mineralization drilled during the 2007 drilling programme.

Field work completed during summer 2008 involved ground location and investigation of the 44 uranium anomalies (targets) identified by Mr. Geoff Campbell of GAP Geophysics, (refer to news release dated June 9, 2008) and it was anticipated that large volumes of mineralized alaskitic (pale to white) granites and large volumes of pegmatites would be found elsewhere in the project area as this type of occurrence gives widespread airborne radiometric anomalies similar to those described in the GAP report.

The summer 2008 field work showed that this was not the case. When examined in detail the radiometric airborne anomalies were all concentrated on alaskitic (pale) granites that only had minor or NO associated pegmatite activity. Furthermore, when present associated pegmatites seemed to carry lower uranium grades than the hosting granites!

The summer field programme led to the identification of 14 targets for further investigation. Drilling was carried out until September 2008 on several of these alaskitic (pale) granites targets to investigate the radiometric anomalies identified, looking for near surface, low-grade/high-tonnage uranium mineralization.

During the drilling programme, all boreholes were investigated using a spectra gamma probe logging tool in order to give the Corporation real time data on the Uranium content of the core recovered. The data from the spectra gamma-probe logging indicated significant intersection of **Uranium (eU)** mineralization at potential economic grades. Furthermore, the gamma logging of N4-2 confirmed the ***apparent intersection of an interesting horizontal fracture zone containing several tens of centimeters of high grade mineralization with values exceeding 0.6% eU<sub>3</sub>O<sub>8</sub>***. These results were “strange” in that no high grade material detected in the hole by the logger seemed to have been recovered in the core (refer to news release dated August 20, 2008).

The N4-2 discovery and N3-4 results (radiometric analyses (eU) suggested values in excess of **150 ppm** for the entire hole) and low geochemical values (20-25 ppm) led the UBR technical team to suspect that significant **dis-equilibrium could be occurring at the UUP. Similar results elsewhere suggested that dis-equilibrium was not only present on the N4-2 hole but over much of the area being investigated, and was typical of the majority of the boreholes completed.**

Once this was recognized, the Corporation technical team set out to eliminate other explanations that could have given us these results. Assay using different techniques showed that the geochemical results were correct. Focus then shifted to checking the radiometric results or radiometric logging failure. Re-calibration showed the equipment to be working to specification.

This led to the conclusion that **both the geochemical and radiometric set of data were in fact accurate, and that we were dealing with large scale dis-equilibrium on UUP.**

### **How is that possible?**

The radiometric tool used in uranium exploration **does not calculate the amount of Uranium (<sup>238</sup>U) present in the ground but rather it extrapolates the amount of uranium using the high energy breakdown of Bismuth (<sup>214</sup>Bi) a daughter product of Uranium. Bismuth (<sup>214</sup>Bi) is a descendant of Radon <sup>222</sup>Rn in the Uranium (<sup>238</sup>U) decay series.**

The science behind Radiometric analysis is straight forward, when any atom of **Uranium (<sup>238</sup>U)** breaks down it breaks down via 13 intermediate elements (the breakdown elements are called “**daughter products**” of uranium). Generally, since the majority of real geological systems are approximated as being closed (at least in the short term) **Uranium (<sup>238</sup>U)** orebodies generally give good relationships between the **parent Uranium and the daughter progeny**, better than 10% correlation between the geophysical measurement (**eU<sub>3</sub>O<sub>8</sub>**) and the geochemical results (**U<sub>3</sub>O<sub>8</sub>**) should be expected. Therefore, if the sample of rock is a closed system then it makes no difference which breakdown element is measured - the amount of daughter products will directly relate to the initial volume of uranium since all breakdown elements are directly proportional.

Having said that, a **small percentage** of geological systems around the world are dynamic and material (**Uranium** or daughter products of **Uranium**) can and do move around in the rock. When **Uranium** (or “**daughter products**”) is slowly added or subtracted from the system the amount of **Bismuth (<sup>214</sup>Bi)** created will not be directly related to the initial volume of **Uranium**, and this is **dis-equilibrium**.

**The discovery of large scale dis-equilibrium in the hard-rock environment of UUP was unexpected, and the nature of the dis-equilibrium in a hard-rock is viewed as relatively**

**unique. Although dis-equilibrium is well documented in geological systems such as the roll-front uranium deposits in the United States and Niger, it is very unusual in hard-rock deposits which are generally closed systems.**

The transport mechanism for the addition of **daughter products** in the boreholes has been identified as **faults and fissures**. On the **borehole logs these show as large spikes in the down-the-hole radiometric logging**. This now leaves only two major questions to answer.

**What is the daughter product and what is the source of the dis-equilibrium found at UUP ?**

UBR radiometric consultant for the UUP project was Terratec Geophysical Services of Germany ([www.terratec-geoservices.com](http://www.terratec-geoservices.com)). The level and extent of the dis-equilibrium present on the concession was so significant that they mandated Dr. E. van der Graaf and Dr. J. Limburg from Medusa systems BV working in collaboration with the **Nuclear Accelerator Institute of the University of Groningen, NL** to make a detailed investigation into spectral gamma logs obtained on the UUP.

Some of the interesting points that emanate from the report are that the authors are of the opinion *“that indeed Radon ( $^{222}\text{Rn}$ ) caused the majority of the activity found, and that it could be coming from several tens to hundreds of metres away from the borehole locations”*. That *“Upward movement of bubbles of geogas that may contain radon is the only mechanism that is rapid enough to explain radon transported over distances of more than 100 m” and that “...it should be realized that the movement of geogas is upwardly directed and this will also limit the radial distances from the ore body to the borehole”*

From the same authors: ***“The conclusion is clear: the elevated uranium signal found in the boreholes under study is coming from radon dissolved in the borehole fluid. In borehole BHN4\_2, a very sharp point is observed at which the  $^{222}\text{Rn}$  concentration is “blowing up” by a factor of 10 or more. At this position in the borehole, there is an apparent radon feed possibly originating from radon in geogas. If the radon was derived from other, much slower transport processes, it would not have been possible to separate its signal from the  $^{238}\text{U}$  signal from the matrix. So, we conclude that the radon is likely to originate from geogasses from deeper layers below the boreholes”***.

Based on this report and the UBR technical team’s findings, the current interpretation for the significant level of dis-equilibrium at the UUP is that Radon ( $^{222}\text{Rn}$ ) gas is being added to granites at surface that have relatively low levels of uranium (20-25 ppm). The evidence suggests that the Radon ( $^{222}\text{Rn}$ ) is being transported to surface as geogas via cracks and joints within the granites.

By definition this has to imply that there **are much higher uranium levels in rocks either laterally or to depth**. A detailed discussion on this effect will be presented in the new NI 43-101 to be presented within the next few weeks.

## **Way Forward**

The discovery of substantial dis-equilibrium caused by the migration of Radon ( $^{222}\text{Rn}$ ) through geogas over large areas of the concession is an important indicator **that significant amounts of uranium may be found either laterally or to depth** and this give the **UUP** a unique an interesting perspective going forward.

The drilling results, radiometric and geochemical results and other aspects of the property will be detailed in an updated NI 43-101 to be issued within the next few weeks. That document will discuss the results in more detail and will make recommendations on the way forward.

**Mr. Bernard Tourillon, UBR's Chairman and CEO, comments:**

"With the completion of our drilling programme, UBR has once again demonstrated that the potential of the **Uskawanis Uranium Property** has yet to be fully understood, identified and developed. Although the results were not as originally expected the **possibility that the property has more potential than initially realized has now been opened-up.**"

"Our plan going forward will take into consideration current economics. This being said the long term potential of the UUP concession is there and once we received the complete report, management and Board will work diligently to implement a strategy to insure the long term development of the UUP project"

**"UBR's driven, methodical and scientific** approach to **Uranium exploration** confirms our leadership position in **Uranium exploration** James Bay region of in the Province of Quebec, currently recognized as one of the best jurisdiction in the world for natural resource exploration."

*Note:*

*Mr. Vivian Stuart-Williams, (SACNASP and P Geo), a Director of the Company and a Qualified Person as defined by National Instrument 43-101, supervised the preparation of the information in this news release.*

**About Uranium Bay Resources Inc.**

Uranium Bay Resources Inc. is a Canadian based junior resource and exploration company trading under the symbol UBR on the TSX Venture Exchange. The Company has 82,374,367 shares outstanding. The Company holds **100%** of the 314 km<sup>2</sup> **Uskawanis** Uranium property located just south of the Opinaca reservoir.

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