

The Uranium Discovery Company



8 King Street East  
Suite 710  
Toronto, ON M5C 1B5  
Canada

T 416.868.1491  
F 416.868.1497  
[www.u3o8corp.com](http://www.u3o8corp.com)  
TSX-V: UWE

## Press Release

### **U3O8 Corp. extends near-surface uranium mineralization over a 28km<sup>2</sup> area in the Laguna Salada Project, Argentina**

#### ***Free-digging surficial uranium in sandy gravel offers low-cost mining potential***

Toronto, Ontario – October 27, 2010 – **U3O8 Corp. (TSX Venture: UWE)**, a Canadian-based company focused on exploration and resource expansion of uranium and associated commodities in South America, reports that successful exploration has increased the size of its uranium-vanadium discovery at Laguna Salada, in Chubut Province, Argentina, to 28 square kilometres (“km<sup>2</sup>”) in extent (Figure 1). A total of 1,090 trenches have been excavated to determine the extent of the mineralized layer which occurs from surface down to a maximum depth of three metres in unconsolidated sandy gravel. The average thickness of the mineralized layer is 0.9 metres at average uranium and vanadium grades of 155 parts per million (“ppm”) U<sub>3</sub>O<sub>8</sub> and 842ppm V<sub>2</sub>O<sub>5</sub> respectively at a cut-off grade of 50ppm U<sub>3</sub>O<sub>8</sub> (Table 1).

“Uranium and vanadium at Laguna Salada occur within a low-grade flat mineralized layer located just beneath surface in a soft sandy gravel that should be amenable to simple and low cost mining techniques,” said Dr. Richard Spencer, President and CEO of U3O8 Corp. “Laguna Salada is comparable to known surficial uranium deposits in Namibia such as the free-digging Tubas Red Sand at an average grade of 160ppm U<sub>3</sub>O<sub>8</sub><sup>1</sup>. Infill trenching is underway towards our goal of completing a National Instrument 43-101 (“NI 43-101”) resource estimate on the project by the end of 2010. Thereafter, our exploration will focus on similar targets in the vicinity of Laguna Salada with the objective of increasing the size of the overall resource in the district.”

**Table 1 – Summary Trench Results from the Laguna Salada Project**

Summary of assay results from the 465 trenches (of the 1,090 trenches excavated) in the Laguna Salada Project that have grade-thickness values greater than 50 (parts per million - metre).

Grade-Thickness Interval	Number of Trenches in Grade-Thickness Interval	Thickness of Mineralized Zone			Grade (ppm)		Area (m <sup>2</sup> )	Average Density (tonnes/m <sup>3</sup> )
		Minimum (m)	Maximum (m)	Average (m)	U <sub>3</sub> O <sub>8</sub>	V <sub>2</sub> O <sub>5</sub>		
GxT 50-100	211	0.1	1.6	0.81	96	761	16,500,000	1.68
GxT 100 - 250	204	0.2	2.1	0.94	169	864	9,801,000	1.68
GxT 250 - 1400	50	0.25	2.4	1.04	524	1,333	1,737,000	1.68
Total Area GxT >50	465	0.1	2.4	0.93	155	842	28,038,000	1.68

The results have been separated into three groups according to the uranium grade-thickness value from each trench. Grade-thickness (the uranium grade in ppm multiplied by the thickness in metres of the uranium-bearing layer in each trench) provides a way of visualizing the distribution of uranium as shown in Figure 2. This table shows the average grade and average thickness of all the trenches within each of the three groups or contour-bounded intervals (each of which is coloured differently in Figure 2). The arithmetic average thickness of the uranium-vanadium-bearing layer in the 465 trenches is 0.93 metres at an average sample grade of 155ppm U<sub>3</sub>O<sub>8</sub> and 842ppm V<sub>2</sub>O<sub>5</sub>. The average density of the gravel is 1.68 tonnes per cubic metre.

Mineralization at Laguna Salada is contained in two flat-topped mesas that are about 10 metres higher than the surrounding plain. Carnotite, the principal uranium-vanadium mineral at Laguna Salada, occurs as a powdery filling between the sand grains in the gravel and also as a partial rim on pebbles. Tests done at the time of sampling suggest that dry sieving through a quarter-inch (nominal six millimetre) mesh may provide a simple and inexpensive means of augmenting the uranium and vanadium grade of the sand.

Exploration at Laguna Salada has been mainly through mechanized trenching since the unconsolidated nature of the gravel renders conventional diamond, aircore or reverse circulation drilling an ineffective means of sampling (Figure 3). The areas that have been trenched at nominal 400 by 400 metre spacing are being in-filled to nominal 200 by 200 metre spacing in preparation for the NI 43-101 resource estimation planned for completion by the end of the year.

### **Regulatory Update in Chubut Province**

The Laguna Salada Project is located in Chubut Province of Argentina, where an open-pit mining ban is currently in effect. Draft legislation is under review in the Provincial Legislature, which proposes that mining carried out in an environmentally and socially responsible manner be allowed in the central, semi-desert plain of the region. A similar approach that allows mining in the central plain, which is an area of low economic viability, has already been adopted in the adjacent Santa Cruz Province. Laguna Salada and several other mining projects are situated in this central plain of Chubut Province including CNEA's (Argentinean National Nuclear Authority) Cerro Solo uranium deposit and Pan American Silver's Navidad silver project, which it plans to mine by open-pit methods. Both of these projects are moving towards production and indications are that a change in Chubut Province's mining policy may be made in 2011.

### **Quality Assurance & Quality Control**

Exploration trenches were excavated at a nominal 400 metre by 400 metre square grid and in-filled to a 200 metre by 200 metre grid in the mineralized areas. The mineralized layer, identified with a scintillometer, was marked in the trench wall and its thickness and depth below surface recorded before the sample profile was removed with the bucket of the excavator.

Sample material was placed on a tarpaulin where it was homogenized and quartered, one quarter being bagged and weighed before being shipped to the laboratory in Mendoza City in Argentina. Standards, blanks and other control samples constitute approximately 13% of the total number of samples submitted to the laboratory. The samples were dried, jaw crushed to -10 mesh (2.0mm grain size), riffle split and pulverized with a puck and ring to -140 mesh (106 micron grain size). A split of the -140 mesh pulp was analyzed using Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) after four-acid digestion. Samples sent to Alex Stewart Assayers were prepared and analyzed in Mendoza, while those submitted to ALS Chemex were prepared in Mendoza City and the pulps analyzed in its assay laboratory in Lima, Peru.

Dr. Richard Spencer, President & CEO of U3O8 Corp., a Qualified Person within the definition of that term in NI 43-101 of the Canadian Securities Administrators, has supervised the preparation of, and verified the technical information in this release.

## **About U3O8 Corp.**

U3O8 Corp. is a Toronto-based exploration company, focused on exploration and resource expansion of uranium and associated commodities in South America – a promising new frontier for exploration and development. U3O8 Corp. has one of the most advanced portfolios of uranium projects in the region comprising NI 43-101 compliant resources in Guyana to significant historic resources in Colombia and near-resource and discovery potential in Argentina.

For further information on U3O8 Corp's Laguna Project, refer to the technical report entitled "The Geology of Uranium Mineralization of the Laguna Salada Project, Chubut Province, and exploration strategies for exploration of early-stage properties in Argentina" prepared by Richard Spencer and Richard Cleath dated March 23, 2010, which is available on the company's web site at [www.u3o8corp.com](http://www.u3o8corp.com) or on SEDAR at [www.sedar.com](http://www.sedar.com). Potential quantity and grade is conceptual in nature. There has been insufficient exploration to define a mineral resource at the Laguna Salada Project to date, and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

*(1) The Tubas Red Sand uranium deposit referred to in this press release has not been independently verified by U3O8 Corp. and information regarding this deposit is drawn from publicly available information. There is no certainty that further exploration of U3O8 Corp's Laguna Salada Project or other targets will result in the delineation of a similar mineral resource.*

## **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 possibility that the open-pit mining ban in Chubut Province may not be lifted or amended on terms that would allow for mining of the Laguna Salada Project, the impact of general economic conditions, industry conditions, volatility of commodity prices, risks associated with the uncertainty of exploration results and estimates and that the resource potential will be achieved on exploration projects, currency fluctuations, dependence upon regulatory approvals, and the uncertainty of obtaining additional financing and exploration risk. There is no assurance that the Laguna Salada Project will add to U3O8 Corp's resource base in the short-term, or at all. 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.*

For information, please contact:

U3O8 Corp.  
(416) 868-1491

Nancy Chan-Palmateer  
Vice President, Investor Relations  
[nancy@u3o8corp.com](mailto:nancy@u3o8corp.com)

Richard Spencer  
President & CEO  
[richard@u3o8corp.com](mailto:richard@u3o8corp.com)

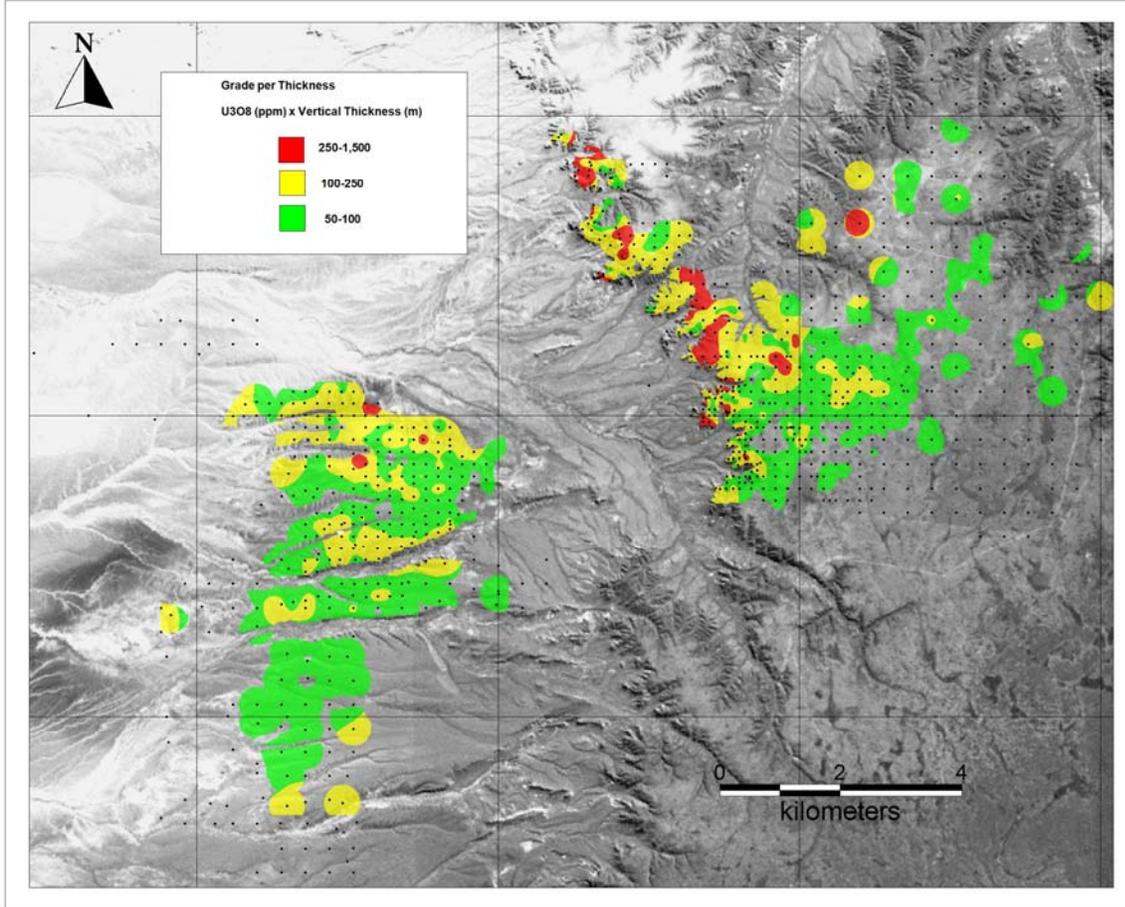
Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

**Figure 1 – The Laguna Salada Project in Argentina**



Map shows location of the Laguna Salada Project in the Patagonia region in Chubut Province, Argentina. Laguna Salada is located about 150km from the Cerro Solo deposit, one of Argentina's largest known uranium deposits, and about 300km from Pan American Silver's Navidad Project in the central semi-desert plain of Chubut Province.

**Figure 2 – Uranium Grade-Thickness Map of the Laguna Salada Project**



Uranium grade-thickness map of the Laguna Salada Project on a satellite image, which shows the principal geographic features of the area. Grade-thickness is the product of the thickness of the mineralized zone in metres and the  $U_3O_8$  grade in ppm. Two mineralized zones have been identified from a trenching program whose results are reported in this press release (Table 1).

**Figure 3 – Free-Digging Near Surface Mineralization in the Laguna Salada Project**



**Exploration at Laguna Salada has been mainly through mechanized trenching due to the unconsolidated nature of the gravel. The uranium-vanadium mineralization at Laguna Salada occurs within a flat layer located within three metres from surface in soft sandy gravel in a semi-desert environment.**