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Press Release

U3O8 Corp. further optimizes metallurgical process on the Berlin Project, Colombia

Advancement contributes economic benefits to the high-value potential of the deposit

Toronto, Ontario – October 17, 2012 – **U3O8 Corp. (TSX: UWE; OTCQX: UWEFF)**, a Canadian-based company focused on exploration and resource expansion of uranium and associated commodities in South America, reports that adding an acetic acid (vinegar) leach step to the metallurgical process by which the uranium, phosphate, vanadium, rare earths and other metals are extracted from the Berlin Project in Colombia, results in the following benefits:

- The reduction of acid costs by 50%;
- The production of a potentially saleable gypsum by-product;
- The concentration of the payable elements into 40-47% of the original mass through the selective removal of carbonate minerals;
- The reduction in the volume of tailings by 50-60%; and
- Taken together these benefits could have a material impact on project economics including reduced operating and capital costs, additional by-product credits as well as smaller equipment and tailings requirements.

"U3O8 Corp's extensive metallurgical testing has resulted in the development of a straightforward ferric leach method that works very efficiently to extract the mix of commodities on the Berlin Project," said Dr. Richard Spencer, U3O8 Corp's President & CEO. "This latest advance of leaching the mineralized material with vinegar makes the subsequent ferric iron leach process more efficient. In addition, the re-generation of the vinegar for recycling into the process yields a high-quality gypsum by-product for potential use in the local and international construction industry and booming agricultural sector in Colombia. Potential credits from the gypsum could significantly reduce acid costs as well as lowering capital costs, thereby making a positive contribution to the project's economics. A detailed flow sheet that defines the entire metallurgical process will be released shortly as we update on further optimization of the process and progress on the preliminary economic assessment due later this year."

Flow Sheet for the Berlin Project

The flow sheet that has been developed from the extensive metallurgical test work done on the extraction of metals and phosphate from the Berlin Project incorporates three components as follows (Figure 1):

(1) Beneficiation – the subject of this press release – provides a means of concentrating the commodities of value into as small a mass as possible for further processing;

(2) Extraction of the various commodities into solution ("pregnant" solution) using the acidic ferric iron method. Results released in U3O8 Corp's January 12, 2012 press release showed that excellent extraction of the metals and phosphate were achieved from the Berlin Project using a two-step ferric leach process, which was developed by improving on known technology that had been in commercial use in the Elliot Lake uranium mine in Ontario from the 1940's through to the 1970's. Step one is an acidic ferric iron leach, and step two is where the residue of the mineralized material is leached with weak sulphuric acid to liberate the commodities of value in the Berlin deposit; and

(3) Recovery of the individual commodities from the pregnant solution, which will be reported on shortly.

Beneficiation Using Acetic Acid (Vinegar) Leach

Mineralization at Berlin is in a limestone that contains about 55% carbonate – minerals that consume acid that is required to leach the metals and phosphate from the mineralized rock. Metallurgical tests showed that soaking the mineralized material in weak acetic acid efficiently and selectively removed the carbonate minerals and concentrated the elements of value in a small amount of carbonate-free residue that has 40%-47% of the mass of the original sample. This reduction in volume of material that undergoes the subsequent ferric leach extraction process, leads to smaller-sized equipment and lower reagent requirements, and consequently, should lower capital and processing costs. In addition, the large mass reduction makes the pregnant solution more compatible with conventional downstream metal recovery techniques and should contribute to lower costs associated with recovering the individual commodities. A further benefit of concentrating the phosphate and other metals into a much smaller volume is likely lower costs related to long-term storage of 50-60% less tailings.

In addition, not only can the vinegar be re-generated and recycled back into the leach circuit, but the re-generation process produces gypsum which assay results show to be of very high purity. Approximately 900 kilograms ("kg") of gypsum dihydrate could be produced per tonne of ore with a current market value of about $30 per tonne that would potentially generate revenue to offset the sulphuric acid costs required for re-generation. Approximately 500kg of sulphuric acid per tonne of ore would be required for acetic acid re-generation. At a site cost of about $110 per tonne of sulphuric acid, each tonne of ore would require approximately $55 of sulphuric acid, offset by about $27 derived from the gypsum, for an estimated net cost of $28 per tonne of mineralized material for the removal of carbonate. This contributes to an expected cost reduction of approximately 50% in sulphuric acid costs.

The chemical reactions involved in the above two points are as follows:

1. Consumption of carbonate (calcite) by acetic acid:

$CaCO_3$	+	$2CH_3COOH$	⇨	$Ca(CH_3COO)_2$	+	CO_2	+	H_2O
Calcite		Acetic acid		Calcium acetate		Carbon dioxide		Water

2. Re-generation of the acetic acid using sulphuric acid:

$Ca(CH_3COO)_2$	+	H_2SO_4	+	$2H_2O$	⇨	$2CH_3COOH$	+	$CaSO_4.2H_2O$
Calcium acetate		Sulphuric acid		Water		Acetic acid		Gypsum

Testwork on mineralized material from Berlin

A composite sample of mineralized material from seven bore hole intercepts from the maiden resource area at Berlin was subjected to acetic acid leaching for the selective removal of calcite (carbonate) as an initial concentration step prior to further processing of the mineralized material. This composite sample is considered representative of the Berlin resource since it contains mineralized material from approximately 10% of the intercepts drilled in the area to date (Figure 2).

The composite sample was subjected to four dilute acetic acid leach tests on material ground to a grain size of 106 microns (~0.1mm). The tests used a dilute acetic acid strength of 0.89 or 1.44 moles per litre at ambient temperature for 30 or 60 minutes (Table 1). The ore assayed 0.079% uranium, 0.23% vanadium, 3.1% phosphate, 466ppm molybdenum, 2,316ppm zinc and 0.22% nickel as well as containing valuable rare earths including yttrium at 312ppm and neodymium at 76ppm. The composition of major minerals in the ore was approximately 53% calcite, 2% dolomite (both are carbonate minerals) and 17% fluorapatite.

Only 5%-7% of the uranium contained in the original composite sample was dissolved in the vinegar leach, while the remainder of the uranium is contained in the residue that undergoes further processing for the extraction of the metals and phosphate (Table 1). This uranium dissolved in the acetic acid leach may be recovered from solution using conventional methods. The only other elements with notable tendencies to leach with acetic acid are nickel (13%-18%) and zinc (8%-11%). Acetic acid leaching of vanadium was limited to 4%-6% and phosphate to <0.1%. Additional testwork will be done to determine whether the small amounts of metals that are made soluble by the acetic acid can be extracted from that solution.

An additional benefit of the acetic acid leach removing the calcite before the ferric iron leach step prevents the accumulation of calcium in the re-circulating pregnant solution, thereby simplifying the subsequent extraction of the metals.

Table 1 – Summary Results on the Acetic Acid Test on the Berlin Project

Summary results from the four acetic acid leach tests undertaken on the composite sample derived from seven bore holes from the Berlin Project are detailed below.

	Test Conditions			% Dissolved by Acetic Acid					
	Acid Strength (mole/l)	Leach Time (min)	Pulp Density (%)	Uranium (U)	Phosphate (P)	Vanadium (V)	Yttrium (Y)	Zinc (Zn)	Nickel (Ni)
Test 1	0.89	30	7	5.0	0.0	3.6	3.4	7.5	13.0
Test 2	1.44	30	7	7.5	<0.1	6.1	3.7	11.6	18.0
Test 3	1.44	30	10	5.4	<0.1	4.5	3.1	8.4	14.0
Test 4	1.44	60	7	7.1	<0.1	6.3	3.2	10.0	18.0
Range				5-7%	<0.1%	4-6%	3%	8-11%	13-18%

Alternative Beneficiation Technique – Flotation

Floatation is also being examined as an alternative beneficiation method to acetic acid leach as a means of selective removal of the carbonate from the mineralized material at Berlin. An advantage of using flotation is that the technique uses fewer reagents, although it would not result in a gypsum by-product credit for the project. Current flotation results show promise with 32% of the calcite being rejected to leave a concentrate containing 96% of the uranium and phosphate within 79% of the original sample mass. More calcite can be rejected if some sacrifice is made in uranium and phosphate recovery. For example, tests to date have shown that 50% of the calcite can be rejected while concentrating 86% of the uranium and 83% of the phosphate in 65% of the original mass. Tests are continuing in an effort to increase the selective rejection of calcite from the mineralized material while maximizing the metal and phosphate content of the low-calcite concentrate.

Gypsum Market

Over 90% of gypsum produced worldwide is used in the construction industry, principally in drywall or plasterboard and cement. Consequently, gypsum prices correlate with construction activity (Figure 3). Potential markets for gypsum are the fast-growing local Colombian building industry as well as international markets. The Rio Magdalena, which is navigable by barge from the Berlin Project area, is likely to constitute the principal transport route to Baranquilla, the largest port in Colombia that lies on the Caribbean coast, providing access to the export destinations of the Caribbean, Central America, the southern USA and northern South America. The adoption of drywall instead of concrete for interior walls in construction has reduced building costs by approximately 25% in Brazil.

Qualified Persons and Accreditation

The metallurgical testwork reported above was done at SGS Lakefield OreTest Pty Ltd in Perth, Australia. SGS Lakefield OreTest was established as a metallurgical services company in 1993 as Lakefield OreTest Pty Limited and is now a subsidiary of the SGS Lakefield group, which has been offering mineral processing services to the mining industry since 1948.

Dr. Paul Miller, a qualified person ("QP") within the definition of that term in National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101"), has overseen the metallurgical testwork carried out by SGS Lakefield OreTest, and verified the technical information relating to the tests from which results are reported in this press release. Dr. Miller is a metallurgist who has specialized in hydrometallurgy and has over 30 years' experience in the commercial application of processes for the treatment of sulphide-bearing ore. Dr. Miller has a doctorate in Chemical Engineering, is a member of the Institute of Mining and Metallurgy, London, and is a Chartered Engineer. He is Managing Director of Sulphide Resource Processing Pty Ltd.

Dr. Richard Spencer, P. Geo., President & CEO of U3O8 Corp., a QP within the definition of that term in NI 43-101, has supervised the preparation of, and verified the technical information relating to the Berlin Project provided above.

About U3O8 Corp.

U3O8 Corp. is an advanced exploration company focused on exploration and resource expansion of uranium and associated commodities in South America – a promising new frontier for uranium exploration and development. In just one year, U3O8 Corp's uranium resources have grown 7-fold with deposits now in Colombia, Argentina and Guyana comprising of:

- Berlin Project, Colombia – its flagship property contains a uranium deposit with a high-value suite of by-products including phosphate, vanadium, rare earths (yttrium and neodymium) and other metals;
- Laguna Salada Project, Argentina – a near surface, free-digging uranium, vanadium deposit that is potentially amenable to low-cost mining and processing methods; and
- Kurupung Project, Guyana – an initial uranium deposit in a large emerging uranium district.

Positive metallurgical results have been achieved on all three projects. U3O8 Corp's near-term focus is ongoing scout drilling in Colombia to drive resource growth and completion of a preliminary economic assessment by the end of 2012 to broadly estimate capital and operating costs on the initial multi-commodity resource defined at Berlin. Additional information on U3O8 Corp. and its mineral resources are available at 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 future results of metallurgical testwork, whether results of metallurgical testwork on a smaller scale to date can be duplicated on a larger scale, the impact of general economic conditions, industry conditions, the timing of laboratory results and preparation of technical reports, the actual results of independent scoping studies and subsequent metallurgical testing, volatility of commodity prices, risks associated with the uncertainty of exploration results and estimates and that the resource potential will be achieved on the Berlin Project and other exploration projects, currency fluctuations, legislative change, dependence upon regulatory approvals, and 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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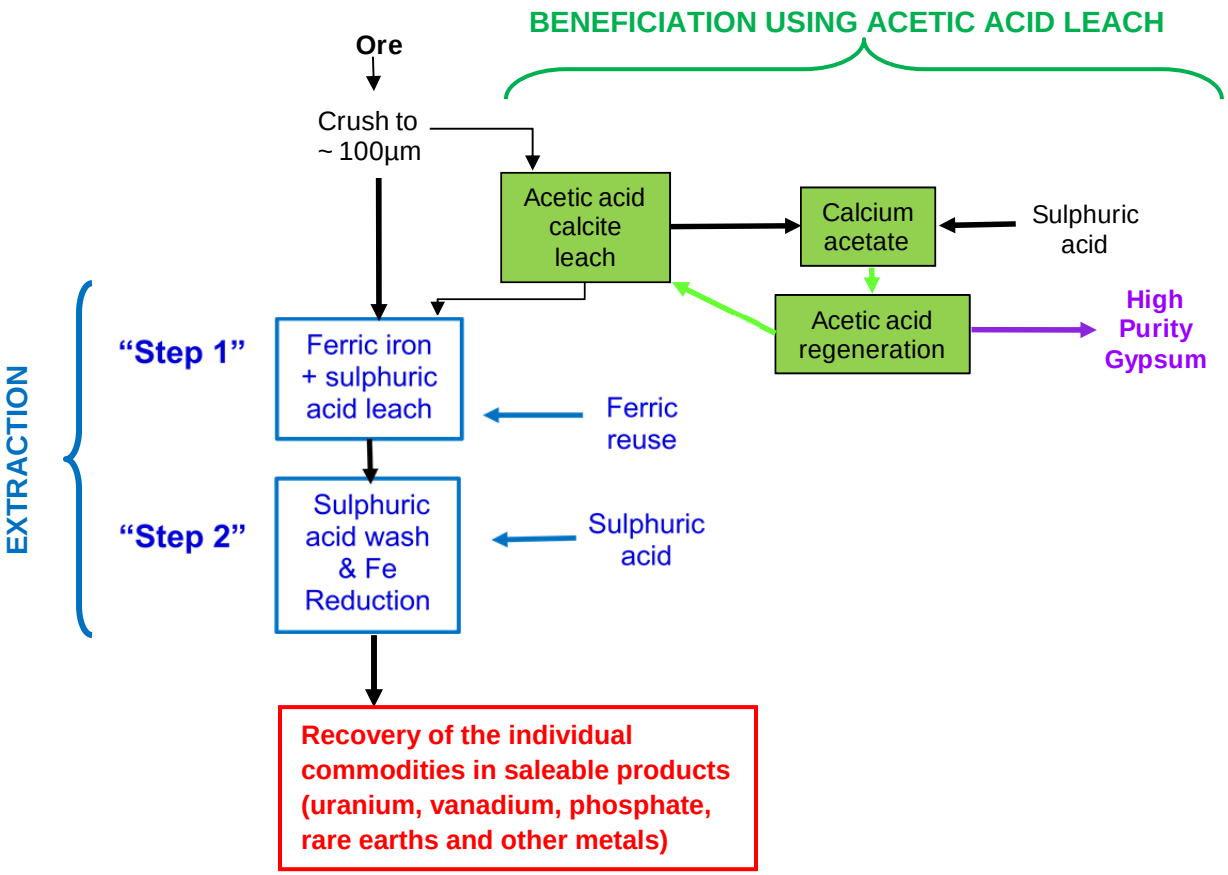
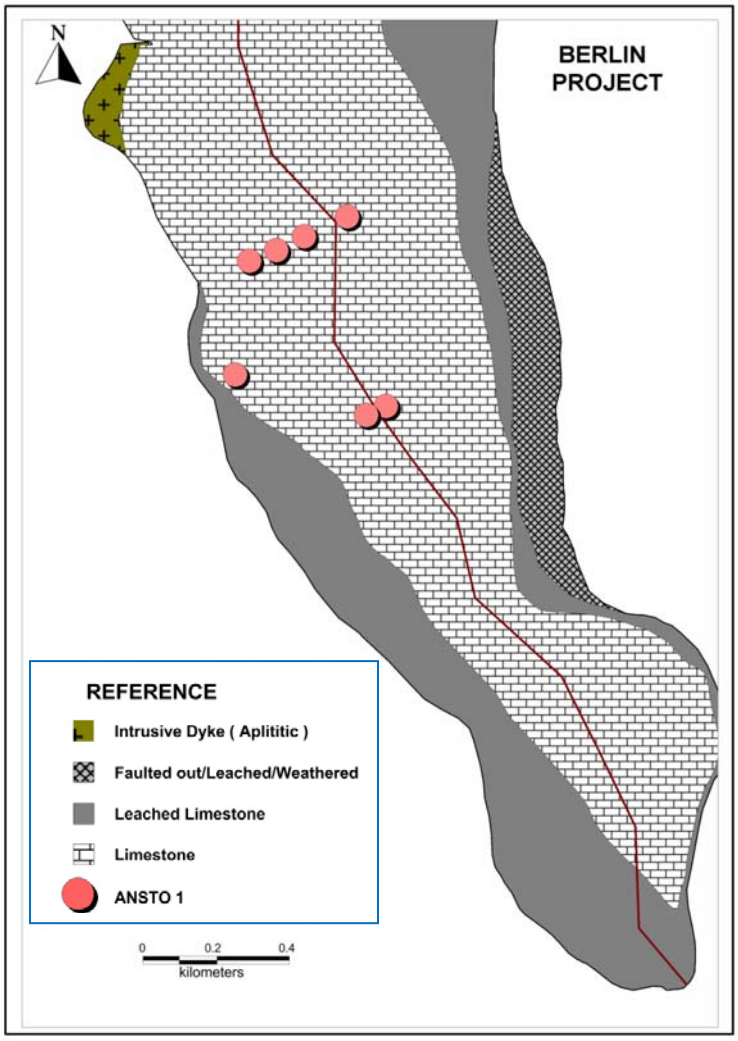
Figure 1 – First Part of a Conceptual Flow Sheet of the Metallurgical Process for the Berlin Project



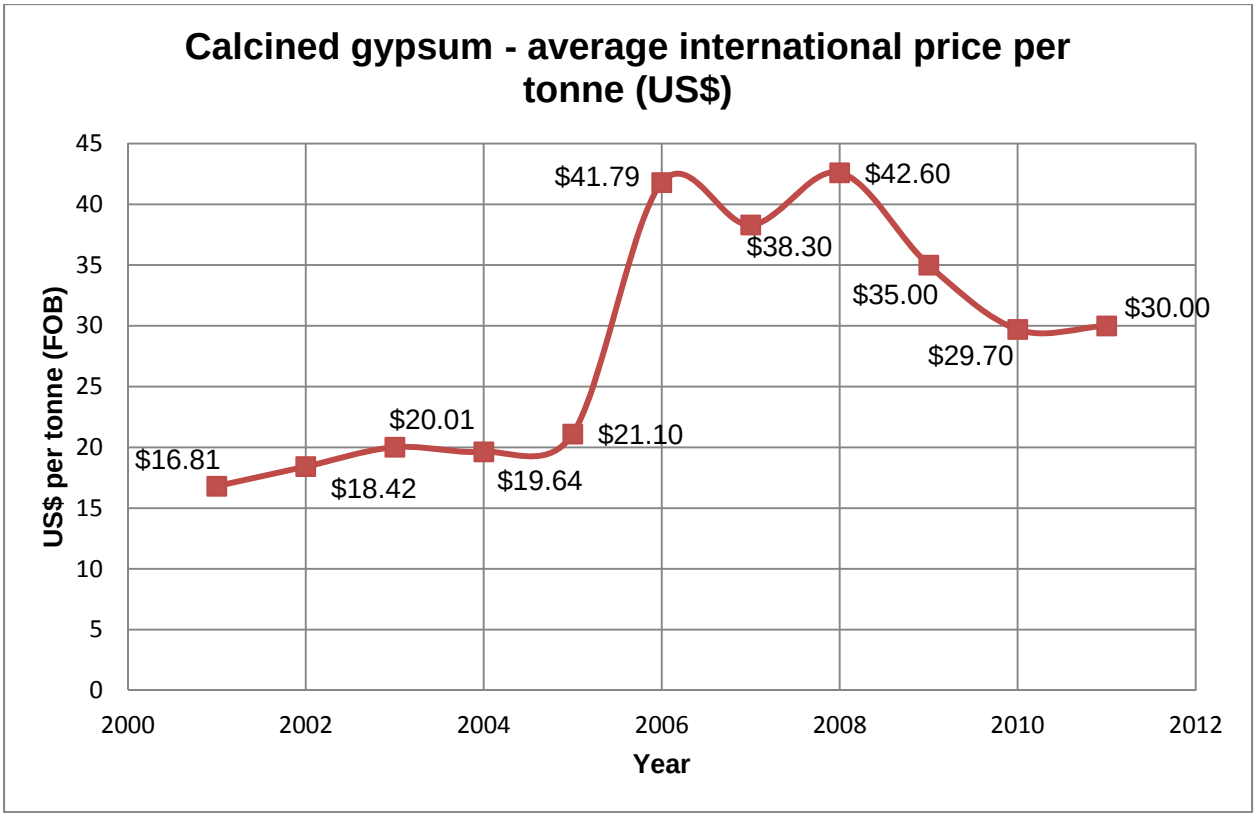
A flow sheet based on extensive metallurgical test work that defines the process by which metals and phosphate are proposed to be extracted from mineralized material from the Berlin Project incorporates three components: (1) beneficiation – the means of concentrating the commodities of value into as small a mass as possible for further processing (boxes highlighted in green with results reported in this press release); (2) extraction of the various commodities into a "pregnant" solution using the acidic ferric iron method; and (3) recovery of the individual commodities from the pregnant solution.

Figure 2 – Map of the "Unfolded" Mineralized Layer in the Southern Part of the Berlin Project



Map depicts the mineralized layer in the southern part of the Berlin Project "unfolded" into a flat sheet. Each pink circle marks the pierce point at which a bore hole intersected the mineralized sheet from which samples were used in the metallurgical testing using acetic acid leach reported in this press release.

Figure 3 – Average Annual International Price of Calcined Gypsum (Drywall)



Source: US Department of the Interior, US Geological Survey Mineral Commodity Summaries 2005 and 2012.