Positive Beneficiation Test Results from the Channel Sands in U3O8 Corp.'s Laguna Salada Uranium-Vanadium Deposit

written by Raj Shah | June 27, 2018

June 27, 2018 (Source) – **U3O8 Corp. (TSX: UWE) (OTCQB: UWEFF)** ("U3O8 Corp." or the "Company") reports that beneficiation test work on soft, channel-fill sands discovered adjacent to the Laguna Salada Deposit ("Deposit" or "Project", see press release dated January 19, 2017), proved highly successful on two fronts. Firstly, the test work confirmed that uranium and vanadium can be significantly pre-concentrated through scrubbing and screening. Secondly, this simple and cost-effective process is also effective at rejecting minerals that consume the reagents used to leach the metals.

Dr. Richard Spencer, U3O8 Corp.'s President & CEO commented, "Today's results underline the economic potential of the channel sands: in comparison with the gravel on which the preliminary economic assessment ("PEA") was based, a higher proportion of the sands' uranium, and a substantially higher proportion of their vanadium, is captured in the fine-grained material that would then be leached to extract these metals. The fundamentals of the vanadium market are good with strong demand from the construction steel industry and rapidly growing demand for vanadium as a battery metal."

These results represent the second step in a three-step plan to

evaluate the economic potential of the sands:

- the first was to ensure that channels containing the sands can be detected through electrical tomography – and results of that test work, reported last month (see press release dated May 31, 2018), confirm that this geophysical technique works very well at Laguna Salada;
- the second, to which today's results relate, was to confirm that uranium and vanadium could be pre-concentrated to increase grade and potentially reduce operational costs, and these positive results confirm this; and
- the final step is for uranium and vanadium to be leached from the beneficiated sand in the lab – which simulates the metal extraction process and provides detailed data that are critical to production cost estimates.

Beneficiation Test

The aim of this test work was to retain the maximum amount of uranium and vanadium while minimizing estimated operating costs by reducing the mass of material that needs to be processed, and by excluding as much gypsum as possible. Gypsum (calcium sulphate) competes for, and consumes, the reagents that are used to extract uranium and vanadium.

The sand used for the test was extracted from beneath a gravel layer exposed in trenches at a depth of 2- to 3-metres below surface. The channels that contain the sand are 100 metres to 400 metres wide and therefore represent a target of significant size for further exploration. The grade of the raw sand was 1,085 parts per million ("ppm") uranium (in comparison to the resource grade of 60 ppm) and 610 ppm vanadium. The sample was shipped to Australia where the sand was scrubbed in a rotating drum for two minutes to break up any aggregated material and was run through a set of vibrating stacked screens. The size

fractions were analysed for uranium, vanadium and sulphur (gypsum) content.

Discussion of Results

The results show that 50% of the uranium and 38% of its vanadium is concentrated into the finest component of the sand (less than 0.01mm diameter grains), constituting 19% of the original mass. Although this result partially achieves the aim of the test – to minimize the volume of sand that would be processed further while maximizing its uranium and vanadium content – the high proportion of metals rejected along with the coarser component of the sand would severely reduce potential revenue. Consequently, selecting a coarser grain size would maximize estimated revenue and minimize estimated processing costs. For example, screening the sand at 0.5mm eliminates 94% of the sand's gypsum while capturing 88% of the sand's uranium and 76% of its vanadium in only 67% of its original mass.

The results of this test work show that the sand has a very different beneficiation profile from the gravel on which the Project's positive PEA was based, as follows:

- 76% of the sand's vanadium content is captured by screening at 0.5mm ("-0.5mm"), that would be further processed to extract its vanadium. This compares with only 33% of the gravel's vanadium being captured in the fine component of the gravel as modelled in the PEA;
- The -0.5mm fraction contains 88% of the original sand's uranium content that would undergo further processing for uranium extraction. This compares with 82% of the gravel's uranium content being captured for extraction in material modelled in the PEA; and
- The -0.5mm fraction contains 6% of the raw sand's gypsum. This compares with 20% of the raw gravel's gypsum content

remaining in the fine material that would be leached to extract uranium and vanadium as per the PEA. A lower gypsum content would reduce the amount of reagent required to effectively leach uranium and vanadium.

Technical Information & Cautionary Note

The two technical reports to with this press release makes reference are:
May 20, 2011 technical report: "Laguna Salada Project, Chubut Province, Argentina, NI 43-101 Technical Report on Laguna Salada: Initial Resource Estimate"; and
September 18, 2014 technical report: "Preliminary Economic Assessment of the Laguna Salada Uranium Vanadium Deposit, Chubut Province, Argentina."

A PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the results of the PEA assessment will be realized.

Dr. Richard Spencer, P.Geo., CGeol., President and CEO of U3O8 Corp. and a Qualified Person as defined by National Instrument 43-101, has approved the technical information in this news release relating to the Laguna Salada Deposit and the related PEA.

About U3O8 Corp.

U3O8 Corp. is focused on exploration and development of deposits of uranium and battery commodities in South America. Battery commodities that occur with uranium resources include vanadium, nickel, zinc and phosphate. The Company's mineral resources estimates were made in accordance with National Instrument

43-101, and are contained in three deposits:

- **Laguna Salada Deposit, Argentina** – a PEA shows this near surface, free-digging uranium – vanadium deposit has low production-cost potential; and
- **Berlin Deposit, Colombia** – a PEA shows that Berlin also has low-cost uranium production potential due to revenue that would be generated from by-products of phosphate, vanadium, nickel, rare earths (yttrium and neodymium) and other metals that occur within the deposit.

Further details on U3O8 Corp.'s Laguna Salada Deposit and Argentina's electricity generation from large nuclear reactors, as well as its prototype small modular reactor that represents a prime export opportunity, are available in the Company's Corporate Presentation accessible on the homepage of our website http://www.u3o8corp.com.

Forward-Looking Statements

This news release includes certain "forward looking statements" related with the development plans, economic potential and growth targets of U3O8 Corp's projects. Forward-looking statements consist of statements that are not purely historical, including statements regarding beliefs, plans, expectations or intensions for the future, and include, but not limited to, statements with respect to: (a) the low-cost and near-term development of Laguna Salada, (b) the Laguna Salada and Berlin PEAs, and (c) the price and market for uranium. These statements are based on assumptions, including that: (i) actual results of our exploration, resource goals, metallurgical testing, economic studies and development activities will continue to be positive and proceed as planned, and assumptions in the Laguna Salada and Berlin PEAs prove to be accurate, (ii) a joint venture will be formed with the provincial petroleum and mining company on the Argentina project, (iii) requisite regulatory and governmental

approvals will be received on a timely basis on terms acceptable to U3O8 Corp., (iv) economic, political and industry market conditions will be favourable, and (v) financial markets and the market for uranium will improve for junior resource companies in the short-term. Such statements are subject to risks and uncertainties that may cause actual results, performance or developments to differ materially from those contained in such statements, including, but not limited to: (1) changes in general economic and financial market conditions, (2) changes in demand and prices for minerals, (3) the Company's ability to establish appropriate joint venture partnerships, (4) litigation, regulatory, and legislative developments, dependence on regulatory approvals, and changes in environmental compliance requirements, community support and the political and economic climate, (5) the inherent uncertainties and speculative nature associated with exploration results, resource estimates, potential resource growth, future metallurgical test results, changes in project parameters as plans evolve, (6) competitive developments, (7) availability of future financing, (8) exploration risks, and other factors beyond the control of U3O8 Corp. including those factors set out in the "Risk Factors" in our Annual Information Form available on SEDAR at www.sedar.com. 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. U3O8 Corp. assumes no obligation to update such information, except as may be required by law. For more information on the above-noted PEAs, refer to the September 18, 2014 technical report titled "Preliminary Economic Assessment of the Laguna Salada Uranium-Vanadium Deposit, Chubut Province, Argentina" and the January 18, 2013 technical report titled "U3O8 Corp. Preliminary Economic Assessment on the Berlin Deposit, Colombia."