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## **Uravan Athabasca Project Update and 2012 Drilling**

In 2011, Uravan Minerals Inc (Uravan) completed 5834 meters of drilling in seven (7) diamond drill holes on its Outer Ring-Mathison (OR-MATH) projects and conducted four (4) multifaceted surface geochemical sampling programs on the Halliday, MATH, OR Extension, and Stewardson projects in the Athabasca Basin<sup>1</sup>, Northern Saskatchewan [[map link](#)].

The 2011 OR-MATH drill programs were reconnaissance in nature, targeting selected surface geochemical signatures identified from a multifaceted sampling program completed over the OR-MATH projects in 2010 and 2011. Based on down-hole Natural Gamma survey results, all drill holes intersected zones of high radioactivity (levels >7.5 times background) averaging 350 – 707 API(cps) occurring over significant intervals (10 to 13 meters) in the Athabasca Sandstone at the basal unconformity and over broad zones (>20 metres) below the unconformity in the underlying crystalline basement rocks. All zones having high radioactivity were systematically sampled and assayed. Analytical results indicated that drill-hole OR11-03 intersected the most significant section of uranium mineralization, assaying returned 89.9 ppm U<sub>3</sub>O<sub>8</sub> (~0.01% U<sub>3</sub>O<sub>8</sub>) over 0.5 meter at the unconformity at a depth of 781 meters. All other intervals of high radioactivity suggest substantial uranium mineralization in the area. Coincident with the zone of elevated uranium mineralization in OR11-03, at the unconformity is an 18 meter sandstone section showing illite (clay) alteration and secondary hematite. This favourable section of clay-hematite alteration is overlain by a broad zone of sandstone bleaching. The occurrence of these alteration features are key indicators that there is potential uranium mineralization and hydrothermal activity in the area.

In 2012 several drill holes are planned on the OR-MATH project to further test the favourable mineralization intersected in OR11-03 and coincident alteration features. This drilling will target selected surface geochemical signatures within a northeast-southwest trending magnetic low corridor [[map link](#)].

The surface geochemical programs completed in 2011 on the Halliday, MATH, OR Extension, and Stewardson projects capitalized on new surface geochemical technologies developed from a pilot study conducted at the Cigar West Uranium deposit (Cigar Lake Study)<sup>2</sup>. These sampling programs resulted in the collection of 3305 samples from all media (soils, vegetation and tree-cores)<sup>3</sup> over approximately 40,140 hectares.

Data analysis and interpretation of the surface geochemical data from the Halliday<sup>4</sup> project identified a significant east-west oriented highly anomalous geochemical signature that is coincident with an EM (electromagnetic) geophysical conductor and magnetic low corridor [[map link](#)]. The east-west geochemical signatures consist of anomalous radiogenic Pb isotope ratios occurring in tree cores and in clay minerals extracted from the soils. These radiogenic Pb isotopic anomalies also correlate strongly with other anomalous uranium pathfinder elements occurring in the same sampling media.

Based on the extremely positive results from the Halliday surface geochemical program, a five (5) hole diamond drill-hole program is planned and anticipated to commence in June 2012. In preparation to finalize drill targets, additional ground geophysics (Horizontal Loop TDEM survey) and structural mapping (RADARSAT imagery) are anticipated to be completed over the anomalous east-west geochemical trend. More details on these surveys and the subsequent drill program will be announced in future press releases.

Mr. Larry Lahusen, CEO of Uravan states: “Although it is early times in the development of our new surface geochemical techniques, there is strong evidence, based on our recent drilling at OR-MATH, that the geochemical indicators measured from the surface environment are mapping basement mineralization at depths >800 meters. Going forward,

the interpretation and refinement of these new surface geochemical techniques by Uravan's technical group working in collaboration with the team at QFIR<sup>5</sup> clearly has the potential to be a 'game changer' with respect to vectoring drilling to the most probable location of uranium deposits at depth in under-explored areas of the Athabasca Basin".

The data analysis and interpretation of the surface geochemical results from samples previously collected on the OR Extension, Stewardson and Johannson projects are pending and will be announced as this work is completed. Funding for the planned drill programs on the OR-MATH and Halliday projects is anticipated to be in place in the near future.

Dr. Colin Dunn<sup>6</sup>, P. Geo., technical advisor for Uravan, is the Qualified Person for the purposes of NI 43-101 with respect to the technical information in this press release.

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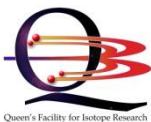
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<sup>1</sup>The Athabasca Basin is an ancient (Paleoproterozoic) sandstone basin located in northern Saskatchewan, Canada. The Athabasca Basin hosts high-grade unconformity-type uranium deposits that account for about 28 percent of the world's primary uranium production. These unconformity-type uranium deposits occur in sandstones at the basement-sandstone unconformity (sandstone-hosted mineralization) and within the underlying structurally disrupted crystalline basement (basement-hosted mineralization). The ore grades are high, typically grading 5% to 20% U<sub>3</sub>O<sub>8</sub>.

<sup>2</sup>The Cigar West Study was a collaborative applied research program conducted by Uravan and QFIR (Queen's Facility for Isotope Research) in 2009 over a known high-grade uranium deposit in the Athabasca Basin. The study was designed to develop new surface geochemical techniques that can better identify bedrock sources of uranium mineralization at depth. This research clearly identified distinctive elements and isotopic compositions that have been mobilized from the deposit (geosphere) to the surface media (plants and soils) from depths >450 meters. The Cigar Lake deposit is on the Waterbury/Cigar uranium property; a joint venture partnership between Cameco Corporation, AREVA, Idemitsu Kosan Co. Ltd., and Tokyo Electric Power Co. [TEPCO] located in the Athabasca Basin, Saskatchewan. Uravan thanks both AREVA and Cameco for their collaboration and gracious support for the Cigar West Study; and the support provided by the Cigar Lake facility during our field operations.

<sup>3</sup>The sample media collected are B- and C-horizon soils, twigs and foliage from spruce and/or pine and tree-cores from spruce and/or pine. All sample material collected (clay separates from the B- and C-horizons soils and vegetation samples) were analysed using multi-element ICP-MS for 53 elements plus all the REE and Pb isotopes at Acme Labs in Vancouver. Sample preparation on the tree-cores and separation of the clay fraction from the B- and C-horizon soils were completed by the Queen's Facility for Isotope Research<sup>5</sup> (QFIR) at Queen's University. QFIR will also conduct further analytical work on tree-cores and clay separates by a multi-element analysis and selected isotopes by High-Resolution ICP-MS. The analytical data resulting from these geochemical surveys will be the focus of a collaborative research study between Uravan and QFIR, and the Natural Sciences and Engineering Research Council of Canada (NSERC)<sup>7</sup>

<sup>4</sup>The Halliday project is located approximately 18 kilometres northwest of the McArthur River uranium deposit in the eastern Athabasca Basin. The Halliday property is owned 100% by Uravan and was acquired from Cameco Corporation (Cameco) in December 2010 as part of a larger property exchange agreement. Exploration work previously conducted on the Halliday project by Cameco consists of six (6) widely-spaced diamond drill holes amounting to 5167 meters drilled with drill depths averaging 861 meters. This reconnaissance drilling targeted three sub-parallel EM geophysical conductors within an east-west oriented magnetic low. Based on drill core data analysis and interpretation, the conductive zones coincide with an east-west trending graphite structural zone. Drill core analysis identified high boron concentrations within basement samples, strong illite clay alteration in the sandstone and anomalous uranium mineralization occurring at the unconformity, which assayed 0.08% to 0.12% U<sub>3</sub>O<sub>8</sub> over narrow intervals (<1.0 meter).



<sup>5</sup>The Queen's Facility for Isotope Research (QFIR) at Queen's University, Ontario is a state-of-the-art research facility, comprising a group of highly experienced research geochemists. The QFIR lab contains some of the most technologically advanced analytical equipment in Canada. Under the direction of Dr. Kurt Kyser, the QFIR research team is working collaboratively with Uravan's technical group to develop new exploration technologies using applied research.



<sup>6</sup>Dr. Colin Dunn, an independent specialist in biogeochemistry and other surface geochemical exploration methods, is working closely with Uravan's technical group and QFIR to advance the interpretation of the geochemical results. Dr. Kurt Kyser and Dr. Colin Dunn are key technical advisors for Uravan.



<sup>7</sup>The goals of this applied research study, titled ‘Exploration Geochemistry for Deep Uranium Deposits’, are: (1) to apply geochemical technologies recently developed by QFIR and Uravan from a pilot study (the Cigar Lake Study)<sup>2</sup> for remotely sensing deeply-buried deposits on Uravan’s Outer Ring (OR) and other Athabasca Basin projects; and (2) to develop new geochemical technologies using isotope compositions (such as Li, C, N, Pb and U) for more reliable and definitive indicators of mineralization at depth in these highly prospective but under-explored sandstone basin areas.

*NSERC aims to make Canada a country of discoverers and innovators for the benefit of all Canadians. The agency supports university students in their advanced studies, promotes and supports discovery research, and fosters innovation by encouraging Canadian companies to participate and invest in postsecondary research projects. NSERC researchers are on the vanguard of science, building on Canada’s long tradition of scientific excellence.*

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*Uravan is a Calgary Alberta based diversified mineral exploration company that utilizes applied research to develop new innovative exploration technologies to identify buried uranium, rare earth elements (REE) and nickel-copper-platinum group element (Ni-Cu-PGE) deposits in under-explored areas. Our exploration focus in uranium is for potential high-grade unconformity-related uranium deposits in the Athabasca and Thelon Basins in Canada and other basin environments globally. Uravan is expanding its acquisition efforts toward REE geological domains in North America and specific areas globally. The REE and uranium mineralization occur in related geological environments thereby complementing Uravan’s uranium exploration efforts with a strategy to add diversification to its portfolio. Further, Uravan is pursuing the exploration of its advanced- stage Rottenstone Ni-Cu-PGE project supported by the development of new drill targets defined by recent geophysical re-interpretation. Uravan is a publicly listed company on the TSX Venture Exchange under the trading symbol UVN. All of the mineral properties Uravan owns are considered in the exploration stage of development.*

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*This press release may contain forward looking statements including those describing Uravan’s future plans and the expectations of management that a stated result or condition will occur. Any statement addressing future events or conditions necessarily involves inherent risk and uncertainty. Actual results can differ materially from those anticipated by management at the time of writing due to many factors, the majority of which are beyond the control of Uravan and its management. In particular, this news release contains forward-looking statements pertaining, directly or indirectly, to the use of proceeds of the Offering. Readers are cautioned that the foregoing list of risk factors should not be construed as exhaustive. These statements speak only as of the date of this release or as of the date specified in the documents accompanying this release, as the case may be. The Corporation undertakes no obligation to publicly update or revise any forward-looking statements except as expressly required by applicable securities laws.*

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