HALLIDAY EXPLORATION REVIEW

In September 2012 Uravan Minerals Inc. ("Uravan ") completed an exploration program on its Halliday project, Athabasca Basin[1], Northern Saskatchewan [map link]. The technical program consisted of five (5) diamond drill-holes (HL-01, -02, -03, -05 and -06)[2] totaling 4,836 meters drilled and an infill-surface geochemical sampling program [press release September 6, 2012].

Drill-holes were positioned to test the potential occurrence of uranium mineralization at depth along a prominent 5 kilometre long, east-west trending corridor. This corridor was defined by an electromagnetic (EM) geophysical conductor (Conductor A), which cross-cuts a prominent linear magnetic low, and was supported by a concordant distribution of anomalous surface geochemical signatures[3] [map link].

All drill-holes were surveyed for anomalous radioactivity (suggesting potential uranium mineralization) using a Mount Sopris Triple Gamma (2GHF-1000) down-hole geophysical probe. The results from these down-hole radiometric surveys disclosed anomalous radioactivity (400cps to 1200cps) in most drill-holes, occurring predominantly in the underlying structurally disrupted and hydrothermally altered basement rocks (granites and metasediments). Based on the triple-gamma probe data, no economic uranium mineralization was encountered during this drill program. All zones of anomalous radioactivity were systematically sampled and analyzed for total uranium content. The most significant intersections are indicated in the table below.

HoleID	Unconformity	From (m)	To (m)	Thkness (m)	U (ppm)	Rock Type
HL-003	801.83	845.90	846.55	0.65	486.6	Basement
HL-003	801.83	816.40	816.70	0.30	177.1	Basement
HL-003	801.83	829.20	829.49	0.29	198.4	Basement
HL-003	801.83	832.64	832.80	0.16	199.1	Basement
HL-005	808.90	816.35	816.57	0.22	732.6	Basement

To help relate the geochemical signals coming from the basement, through the unconformity, and then vertically through the Athabasca sandstone (MF) to the surface environment (soils and trees), all drill-cores were systematically sampled. A total of 629 core samples (sandstone, fractures and basement rocks) were collected and then analyzed at Acme Labs in Vancouver, BC using whole-rock (Aqua-Regia) geochemical techniques and at the Queen's Facility for Isotope Research[5] (QFIR) at Queen's University using WAL (weak acid leach). These samples were analyzed using multi-element ICP-MS for 52 elements, REEs (Rare Earth Elements), and isotopes of lead (Pb), carbon (C) and nitrogen (N). Additional test work completed on each drill-hole consisted of systematically scanning the core using ASD Terraspec instrumentation (spectral analysis) to map the change/spatial distribution of clay minerals through the cored sandstone intervals. The ASD data provide a means for determining the extent of clay alteration in the sandstone section above the unconformity as a result of basement-sourced hydrothermal activity.

The geochemical data obtained from core samples (sandstone, fractures and basement rocks) strongly suggest that certain mobile uranium pathfinder elements, hosted in basement lithologies, have migrated vertically along fractures/fault systems occurring in the sandstone as a result of basement structural reactivation and coincident hydrothermal activity. The ASD clay spectral data indicate a significant east to west increase in illite clay alteration through the sandstone section, suggesting an increase in hydrothermal activity west of drill-holes HL-01 and EL-10 [map link$_1$].

The 2012 infill-surface geochemical sampling program (soils and tree-cores) was completed over the central and eastern portions of the Halliday project [map link$_2$]. This sampling program was designed to infill areas from which samples were collected in 2011. The infill program was designed to test data quality, sample reproducibility and to add surface geochemical detail to the survey area. The combined infill area sampled (2011/12) was 1250 hectares, resulting in the collection of 290 B- and C-horizon soils (clay separates) and 267 tree-cores on a 185 meter (average) sample grid. Clay separations from B- and C-horizon soils were prepared at QFIR and submitted to Acme Labs in Vancouver where they were analysed using multi-element ICP-MS for 52 elements, REE and Pb isotopes. The tree-cores were prepared and analyzed at QFIR for 50 elements and Pb isotopes using HR ICP-SFMS. In conjunction

with the infill sampling program, a Gamma-Ray Spectrometer (GRS) survey was conducted at each soil sample site (in-hole) to record the total CPS of gamma radiation present.

The combined 2011/12 analytical results (clays and tree-cores) indicated good overall data quality and reproducibility (radiogenic $^{207}Pb/^{206}Pb$ isotopic ratios and other pathfinder elements) for the clay separates. The combined 2011/12 tree-core analytical data revealed poor reproducibility between the two surveys, which was recently determined to be the result of errors during the preparation of some of the tree-cores at QFIR. This resulted in a number of errors in the analytical results and a loss of a number of radiogenic Pb anomalies previously reported in the 2011 survey.

The combined 2011/12 surface clay anomalies, which are supported by the 2012 tree-core data, also vector toward a potential target west of drill-hole HL-01 and EL-10 (as suggested by the illite clay alteration described above) along Conductor A [map link$_3$]. The analytical results of the 2012 infill surface geochemical program (clays and tree-cores) provided Uravan's technical group significant insight into the advances and limitations that this technology may provide for targeting uranium mineralization at depth. More interpretive work is required to fully understand the positive geochemical signals coming from depth, as expressed in the clay separates, versus what may be potentially masking these signatures based on the endogenous geochemistry of the surficial environment (glacial till). Uravan considers its current level of understanding and knowledge of its surface geochemical approach proprietary, which supports our on-going applied research and future development of this technology.

Summary of key technical details from the Halliday drilling and surface sampling program:

- EM conductor targets (Conductor A) were explained by drill-hole intersections (EL-10, HL-005, HL-002, and locally in EL-09) of favourable graphitic pelitic basement lithologies which are well defined by the magnetic low and are characterized by steeply northeast-dipping foliations and structures.
- The central magnetic low defines favourable graphitic basement units; however, even moderate departure towards the magnetic high, results in intersecting unfavourable pegmatite-dominated basement (HL-001, HL-003, EL-11, HL-006, and to a lesser extent EL-09).
- The occurrence of major basement faulting has resulted in extensive fracturing radiating upward into the Athabasca sandstone, suggesting major structural reactivation along the Conductor A corridor.
- Pathfinder elements enriched in sandstone fractures radiating from the basement are also elevated in pelitic basement lithologies suggesting mobile element migration from depth to the surface environment.
- The alteration and mineralogy of the basement units suggest a dominantly reduced environment due to hydrothermal activity that has had limited interaction with oxidized fluids, a missing key ingredient for uranium mineralization at the unconformity in the area tested.
- Uranium mineralization occurring in the basement of drill-holes HL-003, HL-005 and EL-09 are positive indicators of uranium in a system having a favourable geological/structural setting; however, the lack of supportive elevated uranium mineralization in the lower sandstone (MFa) above unconformity is another missing key component in the area drilled.
- Pervasive illite clay mineral alteration occurring over significant thicknesses in the Athabasca sandstone and well-developed chlorite clay alteration above the unconformity (HL-001 and EL-10), along with pervasive sandstone bleaching, elevated pathfinder elements and REEs suggest that a more advanced hydrothermal and structural system exists toward the untested western end of the Conductor A corridor
- Positive surface geochemical anomalies (more interpretive work required) also highlight an area west of drill-holes HL-01 and EL-10 along Conductor A.

The 2012 drill program and surface sampling program on the Halliday project was a joint exploration effort by Uravan and Cameco Corporation (Cameco) [press release April 25, 2012]. Uravan is currently the operator with the responsibility to plan and implement the exploration program on behalf of Cameco. In a recent technical meeting with Cameco, Uravan's technical group did not present a 2013 exploration program on the Halliday project but deferred this proposal until January 2013. Uravan believes the cumulative results (geochemical and structural interpretation) of the 2012 technical program is vectoring toward an untested area west of drill-holes HL-01 and EL-10 [map link$_3$]. Further drilling in this area will be the basis of Uravan's proposal to Cameco once Uravan's technical group has fully evaluated and understands the 2012 data.

Uravan has presented Cameco with a 2013 program and budget on the Stewardson project. Details of this proposal will be announced in a separate press release in the near future.

Dr. Colin Dunn, 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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[1]The Athabasca Basin is an ancient (Paleoproterozoic) sandstone basin located in northern Saskatchewan, Canada. The Athabasca sandstone (Manitou Falls (MF) Formation) hosts high-grade uranium deposits at and below the unconformity between the sandstone and the older crystalline basement rocks. These unconformity-type uranium deposits occur in sandstones at the sandstone-basement unconformity contact (sandstone-hosted mineralization) and within the underlying structurally disrupted crystalline basement (basement-hosted mineralization). These unconformity-type uranium deposits account for about 28 percent of the world's primary uranium production. The ore grades are high, typically grading 2% to 20% U_3O_8.

[2]Drill-hole HL-04 was abandoned in the upper Athabasca sandstone section (250 meters) due to highly broken core as a result of fracturing and faulting.

[3]The Halliday surface anomalies were identified by a multifaceted geochemical sampling program completed by Uravan in the summer of 2011. This surface program capitalized on new geochemical technologies developed from a geochemical remote sensing study conducted over the Cigar West Uranium deposit (Cigar Lake Study)[4], which focused on the detection of buried unconformity-related uranium mineralization in under-explored areas in the Athabasca Basin

[4]The Cigar West Study was a collaborative applied research program conducted by Uravan and QFIR (Queen's Facility for Isotope Research[5]) 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 located in the Athabasca Basin, Saskatchewan, and is a joint venture partnership between Cameco Corporation, AREVA, Idemitsu Kosan Co. Ltd., and Tokyo Electric Power Co. [TEPCO]). 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.

Queen's Facility for Isotope Research

[5]The Queen's Facility for Isotope Research (QFIR) at Queens'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.

Dr. Colin Dunn, an independent specialist in biogeochemistry, is working closely with Uravan's technical group and QFIR to advance the interpretation of biogeochemical results. Dr. Kurt Kyser and Dr. Colin Dunn are key technical advisors for Uravan.

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 (REEs) 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-type uranium deposits in the Athabasca and Thelon Basins in Canada and other basin environments globally. 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.

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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