

## **Strong Basement Conductors Supported by Surface Geochemistry on Stewardson**

In June 2013, a property-wide helicopter-borne electromagnetic (EM) geophysical survey was completed over the Stewardson Lake project (Stewardson project), Athabasca Basin<sup>1</sup>, Northern Saskatchewan [\[map link\]](#). The survey was conducted by Geotech Ltd. (Geotech) using their natural source *Z-Axis Tipper Electromagnetic (ZTEM) system*. The property wide airborne ZTEM survey resulted in the collection of 779 line-kms of geophysical data at 500 m line-spacing.

Geotech's ZTEM system is considered ideal for imaging basement conductors where the unconformity depths are greater than 800 m in the Athabasca Basin. The key features of the ZTEM system, which provided high quality EM data collected over the Stewardson Project, are: (1) its high spatial resolution (8 to 10 m), (2) excellent resistivity discrimination for detection of conductive basement anomalies, and (3) low frequency penetration through the overlying conductive Athabasca Sandstone, resulting in depth resolution greater than 1500 m. The 30 Hz frequency is the lowest frequency used, which provides the greatest depth of investigation.

Three-dimensional (3D) inversion modeling of the ZTEM data was completed by Computational Geosciences Inc. (CGI) from Vancouver, BC, in collaboration with Lawrence Bzdel, an independent geophysical consultant from Saskatoon, SK.

The 3D inversion modeling of the ZTEM data resulted in identifying two (2) prominent basement conductive features that transect the Stewardson project [\[map link\]](#). These conductive features are interpreted to be the northern extension of the C- and E-conductors identified on Cameco's Virgin River project, which adjoins the Stewardson Project to the south. Among other features, the 3D modeling identified three (3) significant target areas associated with these conductors, identified as A, B and C. These prominent target areas are considered major basement conductive features that warrant further ground geochemical and geophysical follow-up to vector drilling.

Conductive areas 'A' and 'B' are closely associated with positive surface geochemical anomalies identified in Uravan's 2011 multifaceted surface geochemical sampling program complete over the Stewardson Lake project [\[web link\]](#). Area 'A' outlines the most conductive portion of the E-conductor and is supported by significant geochemical anomalies and interpreted structural lineaments. The coincident surface geochemical anomalies include radiogenic lead (Pb) isotopic ratios (<sup>207</sup>Pb/<sup>206</sup>Pb) in tree-cores and the clay-size fraction of soil samples, and uranium anomalies in the clay-size fraction of soil samples [\[map link\]](#).

Area 'B', located along trend the C-conductor also correlates with a prominent northeast-trending group of radiogenic <sup>207</sup>Pb/<sup>206</sup>Pb samples in clay-size fraction of soils and some coincident radiogenic lead anomalies in tree-cores. Area 'C', also located along trend the C-conductor near the northern property boundary, and coincides with a broad boron anomaly (>99 ppm) defined by surface boulder sampling in 1994-1995. Area 'C' also coincides with a tipper anomaly identified in a 2004 AMT survey.

The interpreted strength of the E-conductor in area 'A' combined with the strong correlation with the anomalous surface geochemical signatures and associated structural lineaments; highlight this area as extremely prospective and the focus for Uravan's 2014 exploration program.

At the time of this writing, a proposed program and budget for the Stewardson project for 2014 is currently under review by Cameco Corporation. Cameco has an exclusive option to earn a 51% interest in Uravan's 100% owned Stewardson Lake projects [\[press release link\]](#). Uravan is currently the operator with the responsibility to plan and implement the exploration programs on the Stewardson project in consultation with, and on behalf of, Cameco. Details of the approved 2014 program and budget will be announced 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. 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.



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<sup>1</sup>*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<sub>3</sub>O<sub>8</sub>*

#### **About 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 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. 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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