URANIUM EXPLORATION COMPANY

EXPLORATION FOR HIGH-GRADE URANIUM DEPOSITS IN SANDSTONE BASINS

GETTING TO DISCOVERY QUICKER AND MORE COST EFFECTIVELY USING APPLIED RESEARCH – SUCCESSFUL EXPLORATION THROUGH SCIENCE

INNOVATE  EXPLORÉ  DISCOVER
Uranium explorer focused in the Athabasca Basin, Canada
Develops surface geochemical technologies to identify high-grade uranium deposits at depth.
A small group of highly experienced mineral explorers and technical specialists
Seasoned upper management.
A Learning Company

Capital Structure

Shares Issued: 42,329,012
Warrants Issued: 2,555,000 @ $0.26
Insider holdings: 8,201,113
Options Granted: 1,070,000 @ $0.13
Working Capital: $200,000

TSX Venture Exchange: Symbol UVN
The Athabasca Basin is an ancient (Paleoproterozoic) sandstone basin located in northern Saskatchewan, Canada.

The Athabasca Basin hosts high-grade uranium deposits at and below the unconformity between the Athabasca Group Sandstone and the older underlying crystalline basement rocks.

Unconformity-type uranium deposits occur in sandstones at the sandstone-basement unconformity contact and within the underlying structurally disrupted crystalline basement lithologies.

Unconformity-type uranium deposits account for about 20% of the world’s primary uranium production.

The ore grades are high, typically grading 2% to 20% U₃O₈.
• Innovative remote-sensing exploration techniques are required to identify uranium mineralization in under-explored terrain in sandstone basins.

• Uranium exploration in the Athabasca Basin is heavily skewed using geophysical surveys.

• To vector drilling to meaningful geophysical targets, Uravan has developed surface geochemical techniques to differentiate potential mineralized geophysical signals from barren or “blind” targets.

• Since 2008 Uravan’s technical group in collaboration with our Research Partners have developed surface geochemical techniques that map the migration of elements from a deposit at depth to the surface environment (soils and trees).

• The combination of these techniques gives rise to a surface geochemical “foot-print” of the underlying mineralized geophysical signature at depth.

• The objective – rapidly evaluate underexplored terrain to get to discovery quicker with fewer drill holes.

URAVAN’S RESEARCH PARTNERS

Dr. Kurt Kyser
PhD Geology
Specialist in isotope geochemistry
Director of the Queen’s Facility for Isotope Research (QFIR) at Queen’s University

Dr. Colin Dunn
PhD Geology
Independent specialist in Exploration Biogeochemistry
**Exploration Using Surface Geochemistry – The Model**

- Structural reactivation, basement hydrothermal fluid flow mixing with basin fluids produced reducing conditions for U formation ($U^{6+}$ to $U^{4+}$).
- Microbial activity plus other unique chemical changes within the redox environment of U deposit promote the vertical migration of distinctive isotopic compositions, gaseous compounds and mobilized metals, through post-sandstone fractures, to the surface environment (soils and trees).
- This process gives rise to a surface geochemical signature or “foot-print” of the deposit at depth.

**Why We Use U-Pb Isotope Systems For Uranium Exploration**

- Lead (Pb) is the natural decay end product of natural uranium (U):
  - $^{238}U \rightarrow ^{206}Pb$  
  - $^{235}U \rightarrow ^{207}Pb$
- We use the ratio ($^{207}Pb/^{206}Pb$) of radiogenic Pb isotopes to identify possible U deposits because this ratio (<0.60) is distinct for a uranium-rich source relative to any other geological source.
Uravan and QFIR conducted surface geochemical studies over 2 high-grade uranium deposits, Cigar Lake and Centennial.

These studies determined that unique isotopes and metal ions migrate from a deposit below to surface environment.

These new surface geochemical techniques were applied to all of Uravan’s active projects.

Objectives - Rapidly evaluate underexplored terrain.

Goal - Get to discovery more quickly and cost effectively.....fewer drill holes to discovery.
Athabasca Projects

The Stewardson is an Advanced Drill-ready Project

Mineral discovery made in 2015 with drill hole SL15-003 intersecting 6.3 meters of 0.025% U₃O₈

85% Probability of Economic Mineral Intersection in the Next 3 drill holes
2015 Drill Program - Area B Anomaly

- 2015 drill program tested the C-conductor supported by highly anomalous surface geochemistry in Area B – L1330

- Drill-holes SL15-003 and SL15-004 confirming the right hydrothermal and structural components are present.

- Discovery drill-hole SL15-003 intersected mineralization grading 0.025% eU₃O₈ over 6.3 m in sandstone at the unconformity.

- Intense chlorite + kaolinite + dravite clay alteration, coincident with secondary hematite alteration in core.

- The presence of smoky-quartz in sandstone fractures and veins suggestive of radiation-induced defects from uranium-bearing fluids.

- Substantial radiogenic ²⁰⁷Pb/²⁰⁶Pb ratios measuring <0.41 identified coincident with U >1 ppm throughout the lower sandstone (>240m).

- More drilling is required to move to economic mineral discovery.
1. 3 drill holes to test Area B surface geochemical and EM 30Hz TPR geophysical target.

2. Depths to unconformity approximately 1150 m

3. Total depth per drill-hole approximately 1300 m.

4. Estimated total meters to test Area B amounts to 3900 m

5. All in cost amounting to $400/m resulting in a total budget of $1,560,000

Cross Section L1375
STEWARDSO PROJECT

AREA B – Focused Drill Target

CROSS SECTION L1375
ZTEM 2D INVERSION

30Hz EM conductive surface

30Hz IP conductive axis

Low Resistivity Alteration Chimney

unconformity

30Hz IP conductive axis
Reverse Fault

Surface Geochemistry (2014)
Clay Pb/0.07/Ph.006 = 0.020
2011 sample 2014 sample
Clay U Results
2011 - U > 4.5 ppm
2014 - U > 2.5 ppm
NET > 1.0
Background samples
Boulder WAL Pb 07/06
< 0.50
> 0.65
> 0.66

Conductors
30Hz IP conductors
Exploration for mineral deposits is a profitable and necessary function of the mining industry.

The global basket of mineable mineral deposits is the result of exploration success.

With increased mineral consumption and lack of exploration financing, this basket is shrinking.

An economic mineral discovery = instant investment returns

STRATEGIC FINANCING PARTNERS NEEDED

- Uravan’s Surface Geochemical Technologies and Sampling Protocols = “Game Changer”
- Exploration Funding Requires Patient Financing Partners to Reach “Proof Of Concept”
- A Strategy for Joining Technical Innovation With Patient Financing Partners
FOR MORE INFORMATION CONTACT

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