Aero Energy Ltd. Reports on Recent Exploration Insights for the Murmac Uranium Project

09.04.2024 | Newsfile

Upside Highlighted by Proven High-Grade Uranium Endowment

Vancouver, April 9, 2024 - Aero Energy Ltd. (TSXV: AERO) (OTC Pink: AAUGF) (FSE: UU3) ("Aero" or the "Company") is pleased to provide a comprehensive summary of exploration insights gathered at the Murmac Uranium Project ("Murmac" or the "Project") by operating partners Fortune Bay Corp. (TSXV: FOR) ("Fortune Bay"), as well as additional historical data generated by previous owners of Murmac which include the predecessor company to Cameco Corp.

Highlights

- Untested Exploration Model: Historical exploration at Murmac focused overwhelmingly on surface prospecting of exposed outcrop. However, the current target graphitic shear zones are not visible at surface as they preferentially weather to form valleys filled with cover sediments. Therefore, the most prospective targets at Murmac remain untested.
- Significant Uranium Endowment: Numerous historical high-grade uranium showings exceeding 1% U3O8 are known to exist on Murmac. These showings dominantly occur as fault-hosted uranium in outcrop, or as uranium-bearing boulders, the latter of which have been verified by Fortune Bay to contain grades as high as 8.82% U3O8[1].
- Favorable Host Rocks: Exploration is currently focussing on three corridors of favorable graphitic host rocks covering a combined strike length of over 30 km. Additional corridors will be evaluated and prioritized for follow-up exploration.
- Proof-of-Concept: Drilling completed by Fortune Bay in 2022 intersected uranium mineralization in 6 of 15 first-pass holes within the favored host rocks, highly prospective hydrothermal alteration and anomalous concentrations of "pathfinder" elements[1].
- Shallow Target Development & Drilling: A preliminary 45 drill targets have been identified which range in depth from only 20 to 150 m below surface. The targets are currently being refined for drilling expected to begin in early June.

Galen McNamara, CEO of Aero, commented: "We are working closely with our operating partners to combine historical geological evidence with modern on-the-ground science. This will guide us to picking the best set of targets to be drilled for discovery in the upcoming drill program as we drive towards unlocking the full potential of the Murmac Uranium Project to maximize value for our stakeholders."

Murmac Project Overview and Historical Exploration

Pursuant to a recently signed option agreement, Aero can earn up to a 70% interest in the Murmac and Strike Uranium Projects, both owned by Fortune Bay, by funding C$6 million in exploration expenditures, making cash payments totalling C$1.35 million, and issuing C$2.15 million in common shares, over a three-and-a-half-year period.

The Murmac Project covers an area of 25,607 acres in seventeen mining claims located 15 km from Uranium City on the northern margin of the Athabasca Basin. The area is estimated to have produced approximately 70 million pounds of U3O8 at grades ranging from 0.18 to 0.43% U3O8 between 1950 and 1982[2]. Murmac is host to multiple historical surface uranium showings exceeding 1% U3O8 and grading as high as 8.82% U3O8.

Historical exploration efforts primarily focused on the "Beaverlodge-style" deposit model, targeting lower-grade, fault-hosted mineralization visible at the surface. This approach did not target, and would not have been effective for, the high-grade "Unconformity-related" basement-hosted deposits associated with graphitic rocks more recently discovered near the Athabasca Basin's edge (e.g. Arrow, Triple R).

Figure 1. Schematic cross-section of basement-hosted uranium deposits

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https://images.newsfilecorp.com/files/8126/204775_48c674d88459299d_002full.jpg

Basement-hosted deposits are associated with graphite-rich rocks, which are softer than surrounding quartzite and granitoid lithologies, and are therefore not exposed at the surface (Figure 1). Instead, they are found in deeply weathered valleys, concealed by glacial till, soil, and small lakes. The exploration methods applied historically included airborne radiometric and surface prospecting, identifying radiometric anomalies and trenching or drill testing their extents. This approach is not effective for the exploration of basement-hosted mineralization, which requires detection of the covered graphite-rich rocks with electromagnetic ("EM") surveying to identify conductors, followed by target prioritization and drill testing. Three extensive conductor "corridors" have been identified to date, namely Pitchvein, Armbruster and Howland (Figure 2), covering over 30 km of strike length. These corridors have been subject to limited previous drilling and remain largely unexplored, offering significant potential for future discovery.

Figure 2. Uranium mineralization in Fortune Bay drill holes and preliminary additional targets on the Murmac Project

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Preliminary Modern Exploration

Recent exploration efforts by Fortune Bay have focused on exploring for basement-hosted deposits in the older basement rocks that occur immediately below the sub-Athabasca unconformity (now eroded away).

Prospecting

In the fall of 2022, Fortune Bay executed a prospecting and sampling program at Murmac[1]. A total of 179 samples were collected for uranium analysis and multi-element characterization. Investigation of historical uranium occurrences validated the historical data compiled from assessment reports, and all significant surface showings that were flagged for field investigation were reliably located[1].

The verified surface historical uranium occurrences dominantly comprised high-grade fault-hosted mineralization, typically associated with large-scale faults that cross-cut untested conductors (graphite-rich rocks) located in adjacent valleys and covered by sediments.

In addition, a mineralized boulder (15 cm in diameter) was discovered in thin till cover at the edge of a conductor valley which exceeded the upper detection limit for radioactivity (65,535 counts-per-second) on the handheld super-spec RS-125 handheld spectrometer. This pitchblende boulder assayed 8.82% U3O8.

These occurrences provide compelling support for high-grade basement-hosted uranium mineralization at Murmac.

Figure 3. Locations of prospecting samples, EM conductors, and uranium mineralized first-pass drill holes on the Murmac Project.

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Airborne VTEM™ Plus Survey

In the spring of 2022, a 430-line kilometer VTEM™ survey was carried out by Geotech Ltd. to cover the majority of Murmac on behalf of Fortune Bay[1]. Lines were flown at 200 m spacing and oriented at an azimuth of 120°/300°. Three prominent conductor corridors were identified and, from west to east, have been named the Pitchvein, Armbruster and Howland conductor corridors respectively. The survey identified a number of high-priority electromagnetic anomalies. This previous survey is currently being infilled and expanded upon at higher resolution (100 m spacing) to allow for refinement and reprioritization of existing targets, and selection of new targets, for drill testing. See the Company's news release dated March 26, 2024 for more information.

Gravity Survey

In the spring of 2022, Fortune Bay contracted MWH Geo-Surveys Ltd. to complete a ground gravity survey at Murmac[1]. The objective of the survey was to obtain gravity measurements over the Armbruster, Howland and Pitchvein conductor corridors to assist in drill targeting. A total of 2,752 survey stations were completed at a station spacing of 50 m along lines at a 200 m spacing, oriented on an azimuth of 300°. The survey identified a number of high-priority gravity anomalies.

First-Pass Drilling

A helicopter-supported drilling program was completed at Murmac during the summer of 2022. This program targeted electromagnetic, gravity and structural targets in areas near historical uranium endowment. A total of 15 holes comprising 3,168 m were completed[1].

The most encouraging results were from holes M22-013 and M22-014. Numerous shallow intercepts of anomalous uranium (defined here as >100 ppm) were encountered in these holes, with additional encouraging pathfinder element enrichment in graphitic pelites associated with hematite, sericite and chlorite alteration, plus quartz flooding. These holes targeted a geophysical anomaly approximately 225 m southwest from historical drill results that include 1.01% U_3O_8 over 2.0 m (56.0 to 58.0 m in drill hole CKI-9) and 2.19% U_3O_8 over 0.5 m (68.0 to 68.5 m in drill hole CKI-10)[3]. These historical holes were drilled by the Saskatchewan Mining Development Corporation, a predecessor of Cameco Corp. Additional along-strike drill testing is warranted and testing of the major NE/SW thrust fault located 100 m to the SE may also be warranted.

A summary of the 2022 results is shown in Table 1, highlighting intersections with anomalous uranium and describing the favorable pathfinder associations.

Table 1. Murmac First-Pass Drilling: Summary of anomalous uranium results and favorable pathfinder associations1.

To view an enhanced version of this graphic, please visit:
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Qualified Person

The technical content of this news release has been reviewed and approved by Galen McNamara, P. Geo., CEO of the Company and a qualified person as defined by National Instrument 43-101.

About Aero Energy Limited

Aero Energy is a mineral exploration and development company advancing a district-scale 250,000-acre land package in the historic Uranium City district within Saskatchewan's Athabasca Basin. Aero Energy is focused on uncovering high-grade uranium deposits across its flagship optioned properties - Sun Dog, Strike, and Murmac - in addition to its fully owned properties. With the application of modern exploration techniques, the Company has identified over 50 shallow drill-ready targets and 125 kilometres of target horizon on the frontier north rim of the Athabasca Basin. Aero Energy is tapping into the Athabasca Basin's emerging potential for high-grade, unconformity-style mineralization.

On Behalf of the Board of Directors

"Galen McNamara"

Galen McNamara, Interim Chief Executive Officer

Further information on the Company can be found on the Company's website at aeroenergy.ca and at www.sedarplus.ca, or by contacting the Company by email at info@aeroenergy.ca.

References

[1.] Murmac Uranium Project: Exploration Report 2022, Fortune Bay Corp. Internal Report. 2023.
[2.] Geology and Genesis of Major World Hardrock Uranium Deposits, United States Geological Survey, Open-File Report 81-166, 1981.
[3.] Information obtained from Saskatchewan Mineral Assessment Database files 74N07-0310 and 74N07-0311

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