ASX Announcement

Released 20 August 2025



Further Priority Targets Identified at Reynolds Lake Uranium Project

Comprehensive desktop study completed, integrating historical lake sediment geochemistry, regional airborne radiometric data and results from the recently flown TDEM survey.

Geophysical interpretation highlights significant shear zones and a potential network of cross-cutting N-S trending faults considered to be important structural controls for uranium mineralisation.

Multiple large-scale electrical conductors (largest >10 km long) coincident with radiometric anomalies and geochemical anomalism along key structural corridors, collectively highlighting compelling targets for potential shallow unconformitystyle uranium mineralisation on the outboard edge of the Athabasca Basin.

Field program commencing September 2025, to include systematic soil sampling of anomaly zones, rock chip sampling of outcrop and detailed geological mapping.

Timing of the Reynolds Lake field program highly complementary to Infini's upcoming Phase 2 drilling campaign at the Portland Creek Uranium Project, with mobilisation planned to commence in the first week of September 2025.

Program designed to advance the highest-priority targets to drill-ready status for a potential Phase 1 drill program at Reynolds Lake in early 2026.

Infini Resources Limited (ASX:188) ("Infini" or the "Company") is pleased to announce the results of a recently completed study at the Reynolds Lake Uranium Project ("Reynolds Lake" or the "Project"), which has successfully identified multiple exploration target areas for follow-up fieldwork. A program consisting of soil and rock sampling, together with geological mapping, is scheduled to commence in September 2025.

Study Results

The integrated review of available datasets has highlighted 14 high-priority target areas and several secondary zones across the Reynolds Lake project, illustrated in Figure 1 below. Key findings include:

- Lake sediment geochemistry: historic data reveal numerous anomalous uranium values, many of which coincide with favourable structural corridors.
- Radiometrics: regional airborne surveys highlight distinct uranium-channel responses associated with interpreted fault structures.
- TDEM geophysics: multiple EM conductors have been mapped, several of which overlap with geochemical and radiometric anomalies, suggesting potential zones of structurally controlled mineralisation.
- Structural interpretation: has identified broad shear zones and cross-cutting N-S trending faults throughout the project area. These structures are interpreted as potential conduits for mineralising fluids and represent high-priority zones for on-ground exploration.

Together, these datasets provide a compelling, multi-layered exploration model for Reynolds Lake.



Infini's Chief Executive Officer, Rohan Bone, said: "The Reynolds Lake study has delivered exactly what we hoped – clear, coincident anomalies across multiple datasets that provide us with strong vectors to uranium mineralisation. With structural interpretation further highlighting key shear zones and fault corridors, we now have a robust framework to guide targeted fieldwork. By commencing fieldwork in September, we are well placed to advance these targets rapidly towards drilling and deliver the next stage of growth for Infini."

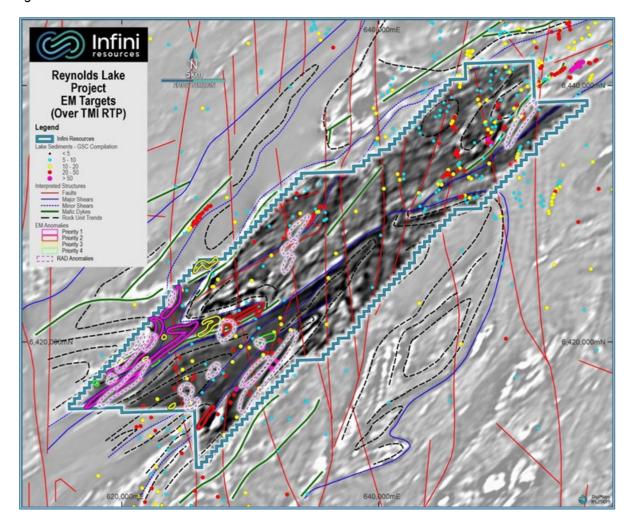


Figure 1: Reynolds Lake magnetic image overlaid with interpreted structures, lake sediment geochemistry, radiometric anomalism and EM targets. Note coincidence of EM targets with interpreted shears, N-S faults and radiometric anomalism.

Upcoming Field Program

To advance the newly defined targets, Infini has scheduled a focused field campaign to include:

- Soil sampling on systematic grids across anomaly zones;
- Rock chip sampling of outcropping uranium-bearing lithologies;
- Geological mapping to refine interpretations of shear zones and fault structures;
- Using pXRF in the field to guide the fieldwork programs; and
- Submitting samples for laboratory analysis using industry-standard methods for uranium and pathfinder elements.

The program is expected to be completed in Q3 2025, with assay results anticipated in Q4 2025.



About Reynolds Lake Uranium Project

The Reynolds Lake Uranium Project, as shown in Figure 2, comprises 12 claims covering 386 km², located on the eastern outboard edge of the Athabasca Basin in northern Saskatchewan — a benchmark region globally renowned for high-grade uranium. The property lies approximately 40 km east of the community of Wollaston Lake. It is flanked by the Keeping Lake Project to the north and the Jewison Lake Project to the south.

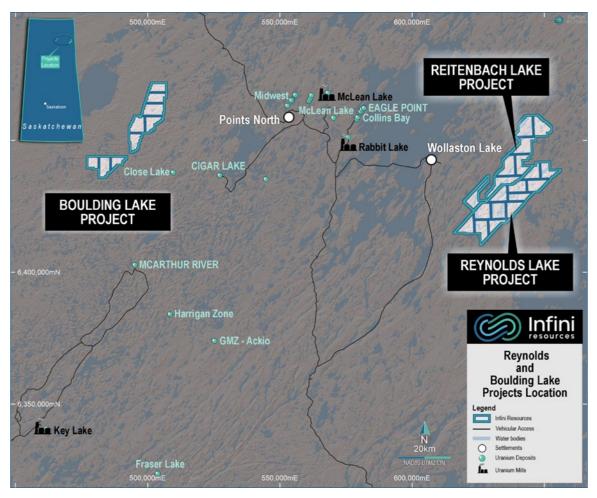


Figure 2: Location of the Reynolds Lake Uranium Project relative to the world-renowned Athabasca Basin, synonymous with high-grade uranium deposits, and in close proximity to existing operations, access and infrastructure.

Exploration outside the basin margin is driven by evidence that the geological conditions necessary for unconformity-type deposit formation — namely, reactivated basement structures, graphitic metasedimentary rocks, and the presence of hydrothermal fluids — extend beyond the current limits of Athabasca sandstone cover and are related to the paleo conditions when the Thelon and Athabasca basins were joined in the Paleoproterozoic era, (1.7 to 1.6 Ga).

The Reynolds Lake Project is underlain by Archean felsic gneisses, which are overlain by a sequence of Lower Proterozoic metamorphic rocks of the Wollaston Domain. This sequence includes quartzite, mafic gneiss, meta-arkose, and calc-silicate units. The structural fabric of the area is dominated by northeasttrending isoclinal folding. A major structural feature, the Needle Falls Shear Zone, transects the project area with a northeast-southwest orientation. Graphitic schists and gneisses — critical host rocks for unconformity-type uranium mineralisation — have been identified at several locations across the property.

Further Priority Targets Identified at Reynolds Lake Uranium Project



References

- ASX Release, Infini Resources, Major Bedrock Conductors Identified at Reynolds Lake Uranium Project, 24 July 2025.
- 2. ASX Release, Infini Resources, Infini to Acquire Major Footprint in Athabasca Basin, 25 February 2025.

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Release authorised by the Board of Infini Resources Ltd.

Contacts

Rohan Bone Chief Executive Officer E: info@infiniresources.com.au

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About Infini Resources Ltd (ASX: 188)

Infini Resources Ltd is an Australian energy metals company focused on mineral exploration in Canada and Western Australia for uranium and lithium. The company has a diversified and highly prospective portfolio of assets that includes greenfield and more advanced brownfield projects. The company's mission is to increase shareholder wealth through exploration growth and mine development.

JOR 2012 Mineral Resource Deposit	JORC 2012 Classification	Tonnes and Grade
Des Herbiers (U)	Inferred Combined Resource	162 Mt @ 123ppm U ₃ O ₈ (43.95mlb)



Competent Person & Compliance Statement

The information in this announcement that relates to exploration results for the Reynold Lake Project is based on, and fairly represents, information and supporting documentation compiled and evaluated by Mark Couzens, Principal Geologist employed by the Company who is a Member of the AusIMM. Mr. Couzens has sufficient experience relevant to the style of mineralisation, type of deposit under consideration, and the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr. Couzens consents to the inclusion of the information in the form and context in which it appears. The information in the market announcement is an accurate representation of the available data and studies for the Reynolds Lake Project.

This announcement contains information on the Reynolds Lake Uranium Project extracted from ASX market announcements dated 25 February 2025, 31 March 2025 and 24 July 2025 reported in accordance with the 2012 edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). The original market announcements are available to view on www.infiniresources.com.au and www.asx.com.au. The Company is not aware of any new information or data that materially affects the information included in the original market announcement.

This announcement contains information regarding the Des Herbiers Mineral Resources Estimate extracted from the Company's Prospectus dated 30 November 2023 and released to the ASX market announcements platform on 10 January 2024, reported in accordance with the 2012 edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). The Company confirms that it is not aware of any new information or data that materially affects the information included in any original announcement and that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed. The original market announcements are available to view on www.infiniresources.com.au and www.asx.com.au.

Forward Looking Statements

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