ASX Announcement
09/09/2022

Summit expands footprint at the Stallion REE Project

Key Highlights

- *Summit Minerals is pleased to advise that it has applied for a large exploration licence which envelops the Stallion REE Project, east of Kalgoorlie*
- *Summit's land holding in the project will increase by ~720% with an additional 142.33km^2 of land staked, expanding the total project area to 162.19km^2*
- *The new application captures the full extents of two confining "hot granites" located adjacent to a rare-earth-enriched palaeochannel with grades up to 2,666ppm pREO (Partial Rare Earth Oxides), which only includes assay results for 4 of 17 REEs; cerium, lanthanum, scandium, and yttrium.*
- *Drill targets at the project have been identified and have been submitted for approval.*
- *Drilling of the palaeochannel and weathered "hot" granite for Rare Earths is scheduled to commence in October 2022*

The Board of Summit Minerals Limited **(ASX: SUM, "Summit"** or **the "Company")** is pleased to announce it has applied for an exploration licence that envelops the existing Stallion prospect. The new application captures the extent of the "hot" granites, interpreted as the source rocks for the observed rare-earth enrichment, and grows the project from 19.86km^2 to 162.19km^2, a change of 142.33km^2 (Figure 1).

The company has acquired a significant archive of historical exploration data, including drilling results, to assist with exploration upon the title being granted.

Managing Director Jonathan King said:

"*Given the fresh interpretation of the rare-earth potential at Stallion, which we presented in our previous announcement, it made sense to expand our land holding in this prospective region. The new application captures the outcropping extents of the same rare-earth enriched granite that underlies the mineralised Stallion palaeochannel. The Company sees the proof-of-concept drilling at Stallion, scheduled for early next month, as an opportunity to validate its views and continue to advance its exploration program at the project when the application is granted."*

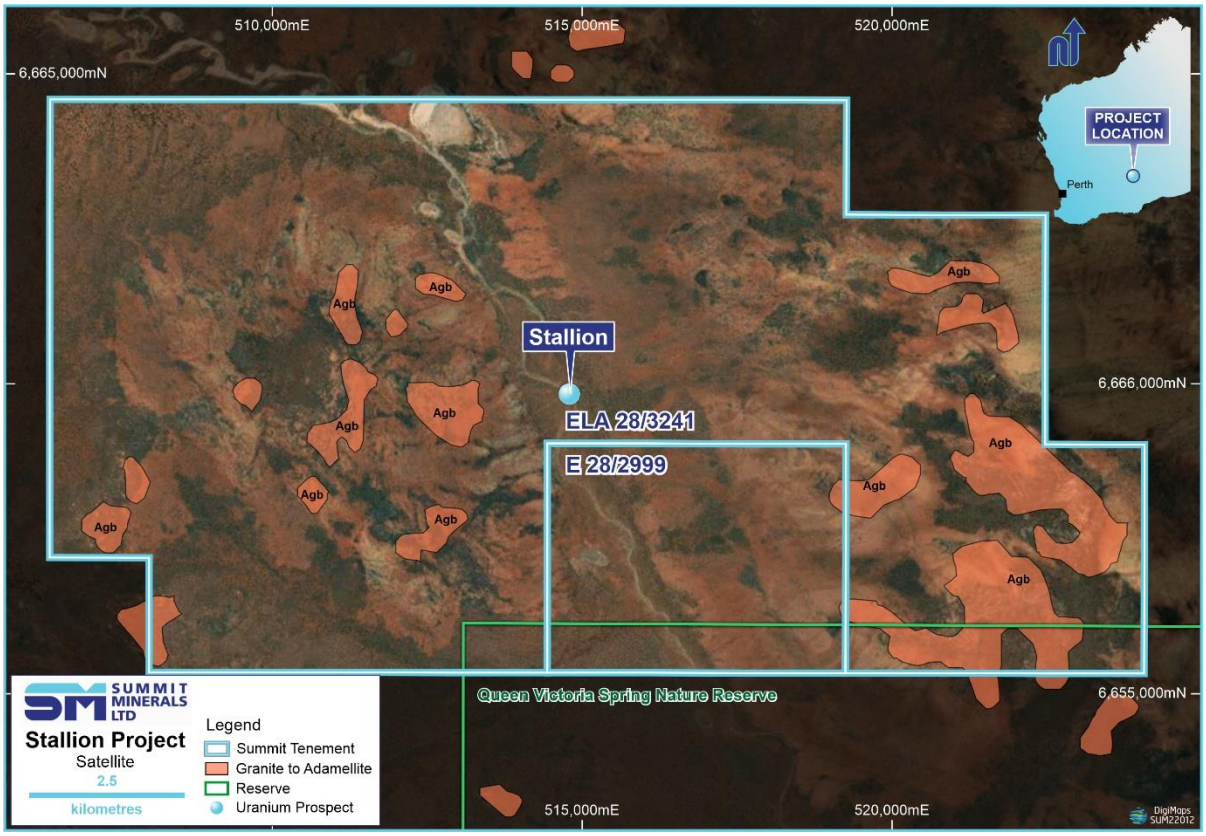

Figure 1: Satellite image outlining the new application (ELA28/3241), its relation to the granted Stallion title (E28/2999) and the Queen Victoria Spring Nature Reserve. It also reveals the extent of the target granite and outcrop distribution mapped by GSWA.

The importance of uranium, thorium, and radiometric imagery to REE exploration

Hot granites typically carry a robust radiometric signature as they are enriched in the radioactive metal's uranium, thorium, and potassium and are thus readily identifiable through radiometric imagery. Thus, the relative abundance and distribution of the hot granites and that of uranium, thorium and potassium are captured, which can assist with the identification of the target rocks but can also help with the mapping of their distribution. Uranium and thorium are also commonly associated with rare earth deposits via the phosphate minerals, apatite, and monazite. Summit reported[1] that elevated levels of phosphorous coincide with anomalous REEs at Stallion and that the source of phosphorous is thought to be either apatite or monazite. Thorium typically occurs in the resistant mineral monazite and is less mobile than uranium. Thus, thorium forms an excellent and easily recognisable target in REE exploration (Figure 2).

[1] https://www2.asx.com.au/markets/company/SUM: Drilling preparations commence at Stallion REE Project

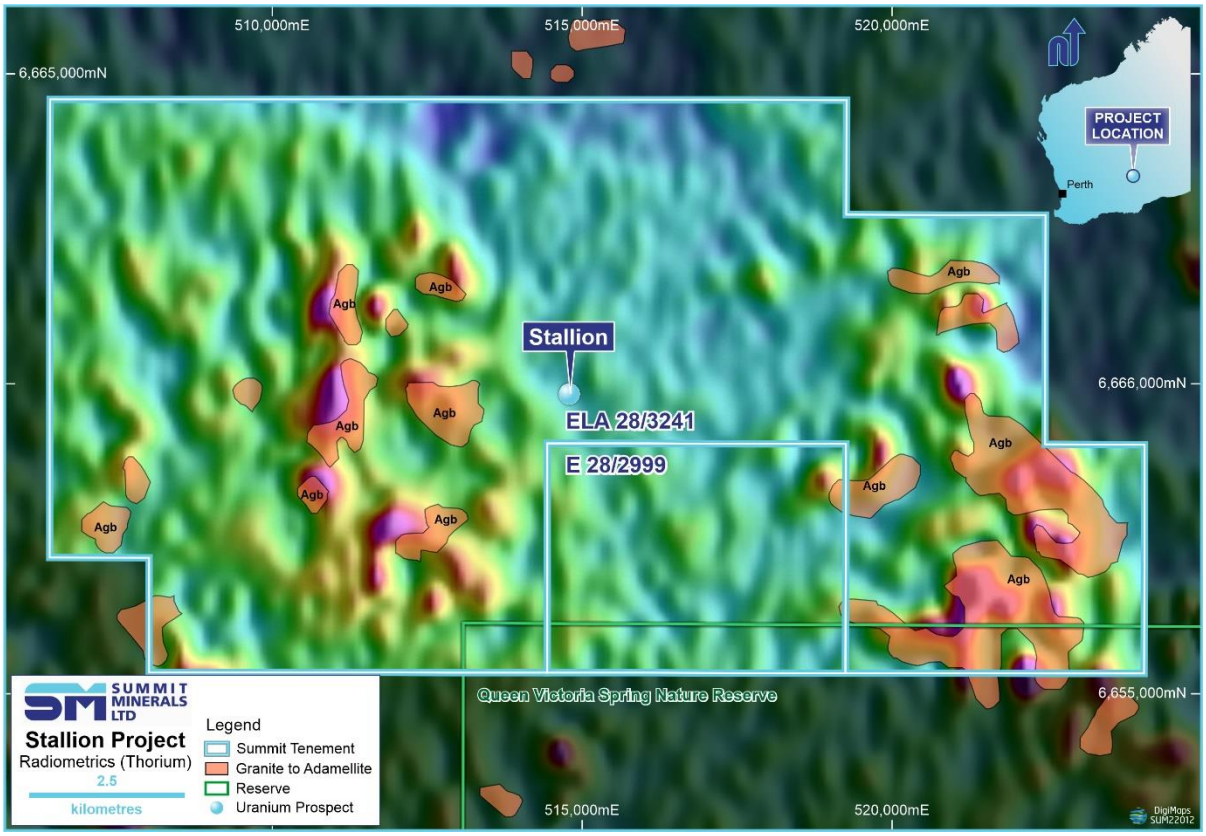

Figure 2: Radiometric image reporting the distribution of thorium and proximity of the western "hot granite" to REE-enriched palaeochannel at Stallion. Thorium also reveals that granite outcrop is more widespread than that established in mapping by GSWA.

Figure 2 illustrates several important features of the Stallion architecture, which promote the Company's view of the larger exploration play at Stallion: Firstly, thorium enrichment occurs on either side of the Stallion palaeochannel; Secondly that the REE enrichment within the Stallion palaeochannel is generally downstream from outcropping "hot" granite; And, lastly, given that radiometrics measure mostly surficial reflectance, outcrop of the potential source rock as reported by Thorium is more widespread than that established by GSWA mapping, increasing the scale of the system significantly within the new application.

Looking ahead, SUM will compile the significant archive of historical exploration data, including drilling results, and look for proof of concept in the results from next month's drill program while awaiting the grant of title.

Figure 3: Summit Minerals' project locations

Approved by the board of Summit Minerals Limited.

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