

18 July 2024

Multiple highly prospective targets identified at the PSB Project, Finland

Highlights

- Exploration assessment of the PSB Project has been concluded, with over 20 targets identified for follow up testing.
- Prospect areas identified from Lat66 geophysics, geological mapping including structural analyses and boulder & rock chip sampling.
- Analysis of boulder samples from the PSB Project is imminent.
- The P12 & P13 prospects within the PSB Project are showing potential for similar scale to K North, which has a defined JORC-2012 mineral resource¹ of 650koz Au and 5,800 t Co.
- Lat66 is analysing previous work undertaken in the area by the Geological Survey of Finland including base of till, diamond drilling and geophysical data.
- Exploration field work continues with ongoing boulder sampling and geophysical electromagnetic surveys to be undertaken.

Latitude 66 Limited (ASX: LAT) (“**Lat66**” or “**the Company**”) is pleased to provide an update to the ongoing exploration activities within the Company’s Finland assets, including a strategic exploration review of the Perapohja Schist Belt Project (“**PSB Project**”) in Northern Finland.

The PSB Project² is a Lat66 exploration project in Northern Finland with extensive gold, copper and cobalt mineralisation identified through historical exploration work by the Geological Survey of Finland (“**GTK**”). Lat66 holds a dominant land position of 412km² in the eastern basin of the PSB region.

Latitude 66’s Managing Director, Grant Coyle, commented:

“Exciting developments are underway at the PSB Project, where we’ve identified over 20 targets for further testing, through a combination of geophysics, geological mapping, and sampling.

“We are looking forward to receiving the analysis of the boulder samples, which were taken from the prior seasons field exploration activities.

“We are continuing exploration work at the PSB Project, with a review of prior work by the GTK, including base of till and diamond drilling data. Ongoing fieldwork includes continued boulder sampling and electromagnetic surveys.”

¹ K North MRE comprises 5.9Mt at 2.9g/t Au & 0.08% Co for 554koz Au and 5,150t Co (Indicated) and 1.4Mt at 2.0g/t Au & 0.08% Co for 93koz Au and 690t Co (Inferred) – refer Bidder’s Statement dated 24 April 2024

² For details on the PSB Project, including previous boulder results released to ASX by DCX, please refer to the Prospectus dated 16 April 2024 and Supplementary Prospectus dated 22 May 2024

Geological Background – PSB Project

The Perapohja Schist Belt (“**PSB**”) is a Paleoproterozoic rift-related basin in northern Finland, which is a direct analogue to the Company’s flagship project, the Kuusamo Schist Belt Project (“**KSB Project**”) and has significant potential for gold, sediment-hosted copper & cobalt mineralisation. Historically, two types of gold occurrences have been discovered in the PSB region, one occurs as gold and copper rich quartz vein deposits hosted by 2.3-2.1 Ga metadolerites. The second includes nuggety gold in multiple veined and altered supracrustal rocks of both clastic sedimentary and volcanic origin (Maier, 2015). Examples of the two mineralisation styles include the historically mined Kivimaa deposit (Au + Cu) and the Rompas/Rajapalot Resource (Nuggety Au) (**Figure 1**).

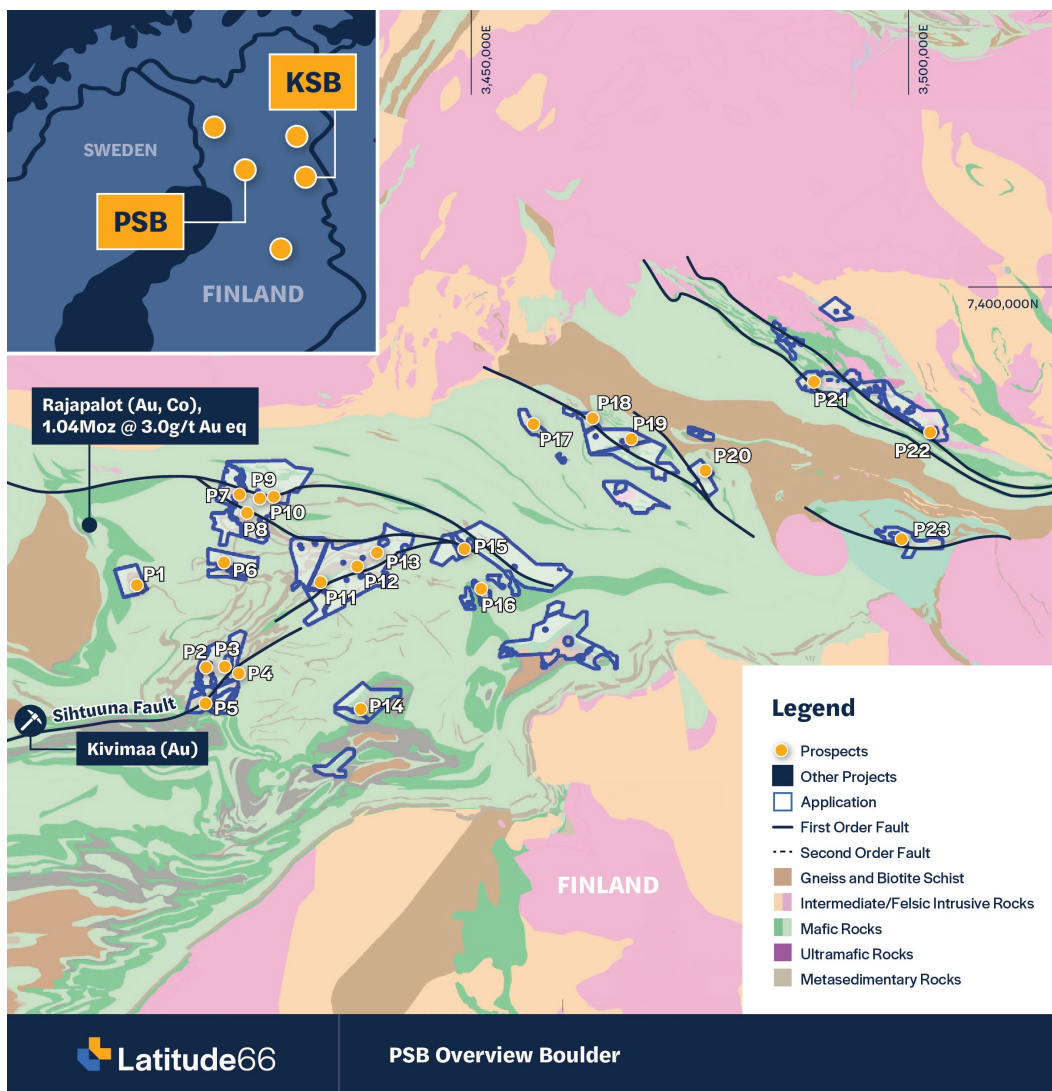


Figure 1: PSB Project Boulder Locations

Lat66 identified the PSB as being a project-scale exploration opportunity, using in-house regional fertility indicators, such as the presence of deep tapping or transcrustal fault zones together with interpreted favourable host lithologies. Identified target areas were then subject to on-ground exploration to confirm the prospectivity of the regions selected. Results from this work, largely boulder/rock chip sampling, prospecting and mapping have now been compiled and added to the structural interpretation and mineralisation model. This has resulted in the development of a strategic exploration pipeline that will complement the existing mineral resource pipeline defined at the KSB.

A total of 23 exploration prospects have been defined and will be subject to an internal ranking exercise to be completed in the coming weeks. The ranking exercise will make full use of all geophysical and geochemical datasets accumulated both in-house and from the GTK. Targets will be ranked regarding prospectivity, potential scale and exploration stage within the targeting pipeline.

In addition, assays from a boulder sampling program completed last field season that have only recently been submitted for analysis should be returned from the laboratories in the coming weeks. Results should provide additional information and may provide further weight to many of the 23 exploration prospects identified.

P12 and P13 Prospect

Significant targets that exist within the PSB include the P12 and P13 prospects, which have been defined from SKYTEM (electromagnetics) and are analogous to those defined within the mineral resource areas of K1, 2 and 3.

K12, in particular, represents a prospect area that has a larger scale to that observed at K1, where the Company has defined an Indicated and Inferred Mineral Resource³ of 5.8Mt @ 2.7g/t Au & 0.089% Co for 501,000oz Au, which indicates the potential of K12.

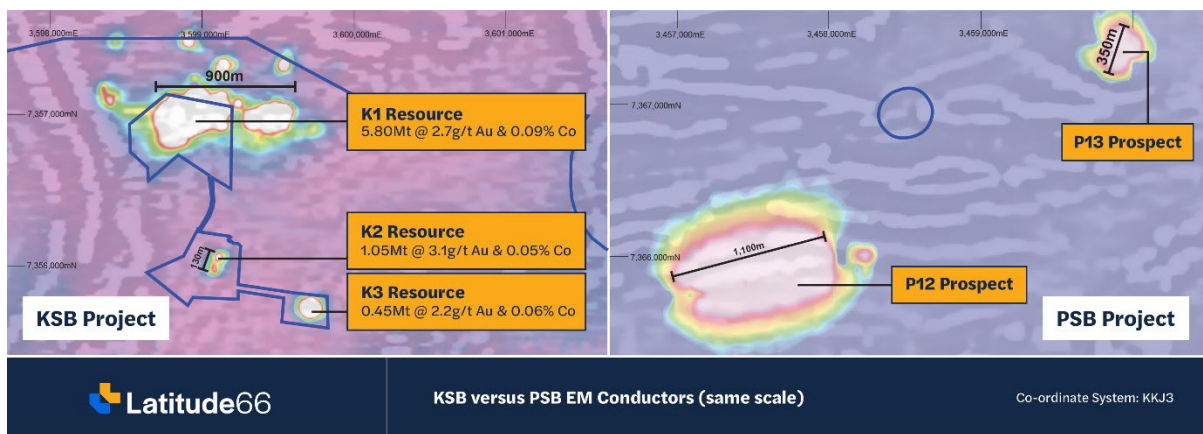


Figure 2: Comparison of Prospects P12 and P13 compared to the mineral resource areas of K1, 2 & 3

³ K1 MRE comprises 4.6Mt at 2.9g/t Au & 0.1% Co for 430koz Au and 4,400t Co (Indicated) and 1.2Mt at 2.1g/t Au & 0.05% Co for 80koz Au and 570t Co (Inferred) – refer Bidder’s Statement dated 24 April 2024

Next Steps

Exploration activities within the PSB will continue through the summer months when exposure to bedrock and boulder sampling is optimal. Results will be used to complement the already existing highly prospective target areas within the PSB.

Table 1: PSB Project Next Steps

Target	Region	Next Steps
P1	Vinsa	IP--> DD
P2	Petaja	Boulder sampling --> EM--> BoT--> DD
P3	Petaja	Boulder sampling --> EM--> BoT--> DD
P4	Petaja	Boulder sampling --> EM--> BoT--> DD
P5	Petaja	Boulder sampling --> EM--> BoT--> DD
P6	Muurola	Boulder sampling --> BoT--> FLEM --> DD
P7	Muurola	Boulder sampling --> BoT--> FLEM --> DD
P8	Muurola	Boulder sampling --> BoT--> FLEM --> DD
P9	Muurola	Boulder sampling --> BoT--> FLEM --> DD
P10	Muurola	Boulder sampling --> BoT--> FLEM --> DD
P11	Reutu	Boulder sampling --> BoT--> FLEM --> DD
P12	Reutu	Boulder sampling --> BoT--> FLEM --> DD
P13	Reutu	Boulder sampling --> BoT--> FLEM --> DD
P14	Aapa	Boulder sampling --> BoT--> FLEM --> DD
P15	Kivi	Boulder sampling --> BoT--> FLEM --> DD
P16	Kivi	Boulder sampling --> EM--> BoT--> DD
P17	Jankka	Boulder sampling --> EM--> BoT--> DD
P18	Oikarainen	Boulder sampling --> EM--> BoT--> DD
P19	Oikarainen	Boulder sampling --> EM--> BoT--> DD
P20	Oikarainen	Boulder sampling --> EM--> BoT--> DD
P21	Misi	Boulder sampling --> EM--> BoT--> DD
P22	Misi	Boulder sampling --> EM--> BoT--> DD
P23	Palo	Boulder sampling --> EM--> BoT--> DD

N.B. IP = Induced Polarisation, EM = Electromagnetics, BoT = Base of Till Drilling, DD = Diamond Drilling



Figure 3: Latitude 66 PSB and KSB Project locations

References

W. D. Maier, R. Lantinen, H. O'Brien, Mineral Deposits of Finland (Oxford: Elsevier, 2015), p. 394.

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This announcement has been authorised for release by the Board of Latitude 66 Limited.

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About Latitude 66

Latitude 66 is a Finnish and Australian based company, focusing on the exploration and development of gold and critical minerals. The Company's primary focus lies in the Kuusamo Schist Belt Project (KSB Project) situated in Northern Finland. This flagship project boasts a substantial high-grade gold-cobalt mineral resource, with over 85% categorised as Indicated, totalling 650,000 ounces of gold at 2.7 grams per tonne (g/t) and 5,800 tonnes of cobalt at 0.08%.

Beyond the KSB, Latitude 66 is conducting regional exploration activities in Finland at the highly prospective Peräpohja Schist Belts (PSB), Kainuu Schist Belts (Kainuu) and Central Lapland Greenstone Belt (Kola and Kolari).

Latitude 66 holds a 17.5% free-carried interest in Carnaby Resources' Greater Duchess Project, strategically located in the Mt Isa Copper district in Australia. Furthermore, Latitude 66 is actively engaged in the exploration of two promising gold projects in Western Australia: the Sylvania and Ejudina Projects.

Forward Looking Statement

The forward-looking statements in this announcement are based on the Company's current expectations about future events. They are, however, subject to known and unknown risks, uncertainties and assumptions, many of which are outside the control of the Company and its Directors, which could cause actual results, performance or achievements to differ materially from future results, performance or achievements expressed or implied by the forward looking.

Competent Persons Statement

The information in this announcement that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Toby Wellman, a competent person who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Wellman has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Wellman is the Technical Director of Latitude 66 Limited and consents to the inclusion in this announcement of the Exploration Results in the form and context in which they appear.