# **ASX Announcement**

19th July 2021





# DRILLING UNDERWAY AT THE AARNIVALKEA GOLD PROSPECT IN FINLAND

### **Key Points**

- Diamond drilling has commenced at S2's 100% owned Aarnivalkea (Aarni') gold prospect in Finland
- Program will comprise 13 widely spaced diamond holes to follow up on previous high grade reconnaissance intercepts, including 6.8 metres at 8.6g/t gold from 223.0m and 20.4 metres at 4.0g/t gold from 193.1m
- Diamond drilling of the Ruopas Isovaara nickel-copper-PGE target to commence during the course of the Aarni' drilling program
- Exploration on the Kinross farm-in areas also underway following the recent signing of the Kinross Option Agreement

# Aarnivalkea diamond drilling

S2 Resources Ltd ("S2" or the "Company") advises that drilling is underway at the Company's 100% owned Aarnivalkea gold prospect in the Central Lapland Greenstone Belt ("CLGB") in northern Finland (Figure 1). The initial program will include thirteen 250 to 400 metre deep, broad spaced holes designed as a first pass systematic test of approximately 1.1 kilometres of strike below the gold anomalism identified in previous shallow scout diamond drilling. (Figure 2).

This program follows recent success at Aarnivalkea, where the first two deep holes drilled under the main zone of gold anomalism both returned high grade intercepts, some 575 metres apart (refer to S2 ASX announcement dated 4th January 2021). Intercepts from these two holes included:

- 6.8 metres at 11.8g/t gold from 223.0 metres, including 4.0 metres at 18.1g/t gold from 223.0 metres in FAVD0062 (Figure 3)
- 20.4 metres at 4.0g/t gold from 193.1 metres, including 8.5 metres at 8.6g/t gold from 198.0 metres in FAVD0064 (Figure 4)

Commenting on the upcoming drilling, S2's Chief Executive Officer Matthew Keane said, "We are excited to be back on the ground at Aarni'. This program is still very much scout drilling and it will incorporate bold, long-distance step-outs from previous high grade intercepts. Securing a diamond rig in Finland has been challenging, leading to a long hiatus between programs. However, the high demand for rigs is a positive reflection of the CLGB's gold and base metal prospectivity and escalating exploration success".



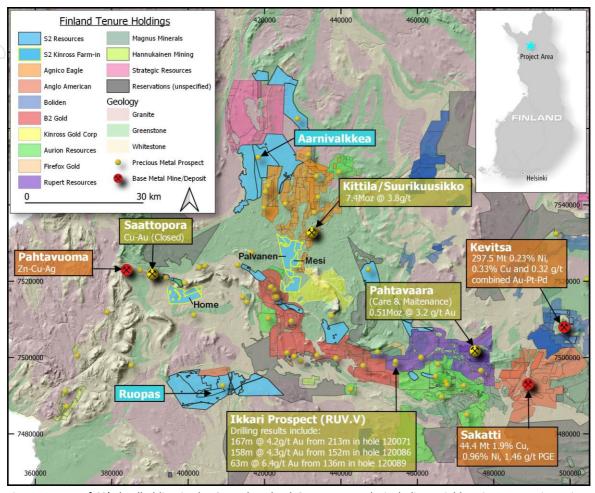


Figure 1. Map of S2's landholding in the Central Lapland Greenstone Belt, including neighbouring companies, mines, defined resources and recent drill intercepts. Resources and drill intercepts are sourced from public company statements.

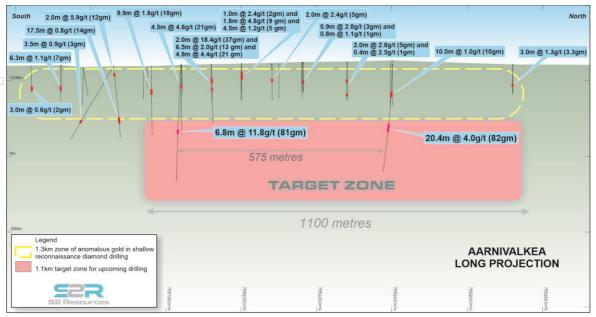


Figure 2. Long projection of the Aarnivalkea prospect showing the target zone for upcoming drilling, high grade intercepts from deeper drilling and selected intercepts from shallow scout diamond drilling.



#### Aarnivalkea mineralisation

S2's is still in the early stages of understanding the controls on and continuity of the Aarnivalkea gold mineralisation. Gold is associated with late-stage veining and alteration overprinting earlier pervasive albite alteration. Mineralisation is broadly more intense where the degree of micro-veining and sulphidation is greater, generally where earlier albitisation of the hostrock has been more intense, making the rock more brittle and amenable to later hydrofracturing.



Figure 3. Example of mineralised core from hole FAVD0062 (from 225 metres downhole grading 8.8g/t gold), highlighting a zone of pervasive albite alteration with polyphase quartz and quartz-carbonate (Qtz/Cb) veining and associated arsenopyrite (Apy) and subordinate pyrite (Py)

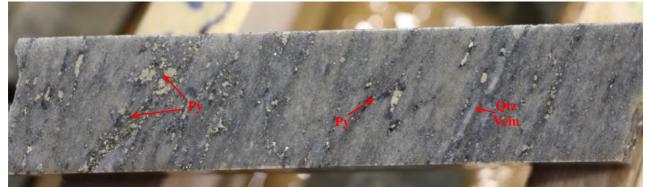


Figure 4. Example of mineralised core from hole FAVD0064 (from 200.8m downhole grading 73.6g/t gold), highlighting a zone of intense foliation and textural destruction with strong sericite-silica alteration, thin wispy quartz (Qtz) micro-veinlets and strongly disseminated pyrite (Py)

# Ruopas Isovaara diamond drilling

During the course of the Aarni' program, S2 also plans to drill test the compelling Rupoas Isovaara target which contains a previously identified 280 metre by 240 metre electromagnetic (EM) plate with coincident anomalous nickel and copper in base of till (BoT) drilling (Figure 5). Isovaara is considered prospective for magmatic style nickel-copper-PGE mineralisation and is located in the same belt as Anglo American's (AAL.LSE) giant Sakatti deposit (44.4Mt at 1.9% Cu, 0.96% Ni 1.46g/t PGEs).



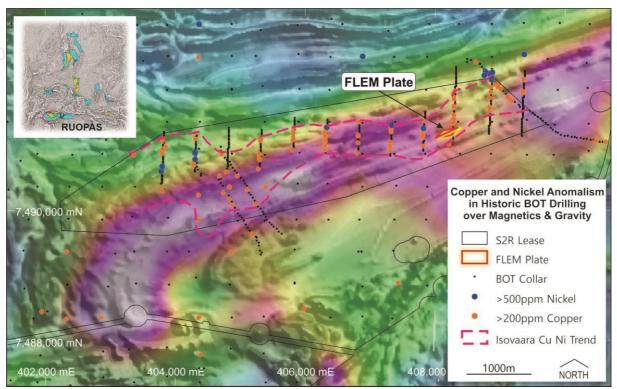


Figure 5. Location of the EM conductor on a gravity ridge (colour) with a coincident BoT copper-nickel anomaly at Ruopas Isovaara. The conductor plunges to the northeast so any eroded up-plunge component would have been located to the west where the main BoT anomalism occurs. Magnetics, gravity and BoT drilling were sourced from the Finnish Geological Survey (GTK).

## **Exploration commencing on Kinross farm-in blocks**

Following the recent signing of a farm-in agreement, Canadian gold miner Kinross Gold ("Kinross") has commenced exploration of the Palvanen/Mesi and Home blocks (Figure 1). Under the terms of the agreement, Kinross can earn up to 70% of one or both of these blocks by spending up to US\$9.5 million over a six-year period (refer to S2's ASX release dated 3<sup>rd</sup> June 2021). Initial works will include airborne geophysics, mapping and surface sampling over broad areas, along with base of till (BoT) drilling on the granted Palvanen licence. The Palvanen/Mesi block is located just 4.2 kilometres southwest of Agnico Eagle's (AEM.NYSE) 7.4Moz Kittilä gold mine. This block straddles the northeast-southwest orientated shear zone controlling Kittilä mineralisation and contains southern extensions of the Porkonen Formation which hosts the main gold deposits (Figure 6).



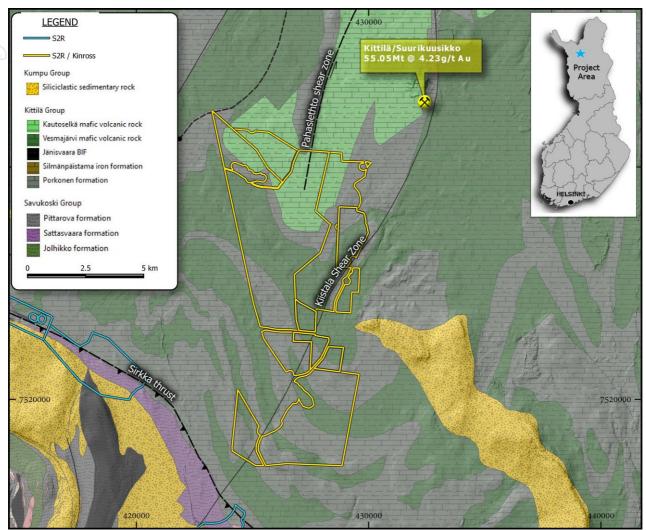


Figure 6. Finnish Geological Survey (GTK) regional geology map covering the Palvanen/Mesi farm-in block and Agnico Eagle's Kittilä gold mine. The map shows key controlling features of Kittilä mineralisation, such as the Kiistala Shear and the Porkonen Formation, propagating south into the Palvanen/Mesi block

This announcement has been provided to the ASX under the authorisation of Mark Bennett, Executive Chairman.

# For further information, please contact:

Matthew Keane Chief Executive Officer +61 8 6166 0240 Mark Bennett Executive Chairman +61 8 6166 0240

Past Exploration results reported in this announcement have been previously prepared and disclosed by S2 Resources Ltd in accordance with JORC 2012. The Company confirms that it is not aware of any new information or data that materially affects the information included in these market announcements. The Company confirms that the form and content in which the Competent Person's findings are presented here have not been materially modified from the original market announcement. Refer to www.s2resources.com.au for details on past exploration results.



#### **Competent Persons statements**

The information in this report that relates to Exploration Results from Australia is based on information compiled by John Bartlett, who is an employee and shareholder of the Company. Mr Bartlett is a member of the Australian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience of relevance to the style of mineralization and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bartlett consents to the inclusion in this report of the matters based on information in the form and context in which it appears.