



DIAMOND DRILLING UNDERWAY EAST OF AARNIVALKEA, FINLAND

Key points

- **First ever diamond drilling has started at S2's new Aarni' East gold target, on the large Paana tenement, Finland**
- **First drill test of this new trend, characterised by strong deformation, hydrothermal alteration and gold grades up to 10.7g/t accompanied by pathfinder elements arsenic and bismuth**
- **New detailed aeromagnetic survey defines structures correlating with BOT anomalism that may control the gold mineralisation**

S2 Resources Ltd ("S2" or the "Company") advises that drilling has started at the Company's 100% owned Aarnivalkea East gold prospect, located on the large Paana tenement some 20 kilometres northwest of Agnico Eagle's 9 million ounce Kittila gold mine in northern Finland. Drilling was originally scheduled to start in March but had to be postponed due to logistical and safety constraints created by the Covid-19 pandemic.

This will be the first ever diamond drill test of a new gold mineralised structural trend identified by the Company's base of till (BOT) drilling earlier this year (see S2's ASX announcement of 24th February 2020 and presentation of 19th May 2020).

The prospect is part of the Company's extensive tenement package in the highly prospective Central Lapland Greenstone Belt (see Figure 1). The Aarni' East trend is located 2 kilometres to the east of and parallel to the Company's Aarnivalkea gold prospect, and is defined by a zone of strong deformation and intense hydrothermal alteration (see figure 2). Many of these samples are also characterised by gold grades greater than 0.5g/t and up to 10.7g/t (see Figure 3) and gold pathfinder elements such as arsenic and antimony (see Figure 4).

The mineralised BOT samples coincide with the position of a north-south striking sheared contact identified in a recently flown detailed aeromagnetic survey. This structure remains open along strike beyond the range of BOT drilling completed to date, and may play an important role in localising the gold mineralisation (see Figures 3 to 5).

The initial drilling program comprises approximately ten diamond core holes, to be drilled on three to four traverses across the trend. The program is being managed on the ground by the Company’s European Union-based personnel, with virtual oversight by its Australian personnel until such time as they are able to resume international travel.

The initial drill program is expected to take about three weeks to complete. Unlike the strike extensions of the Aarnivalkea gold prospect, which extend under swampy ground and could not be drilled as originally scheduled last winter due to unseasonably warm weather, the Aarni’ East prospect can be accessed year-round, providing greater flexibility for follow up drilling.

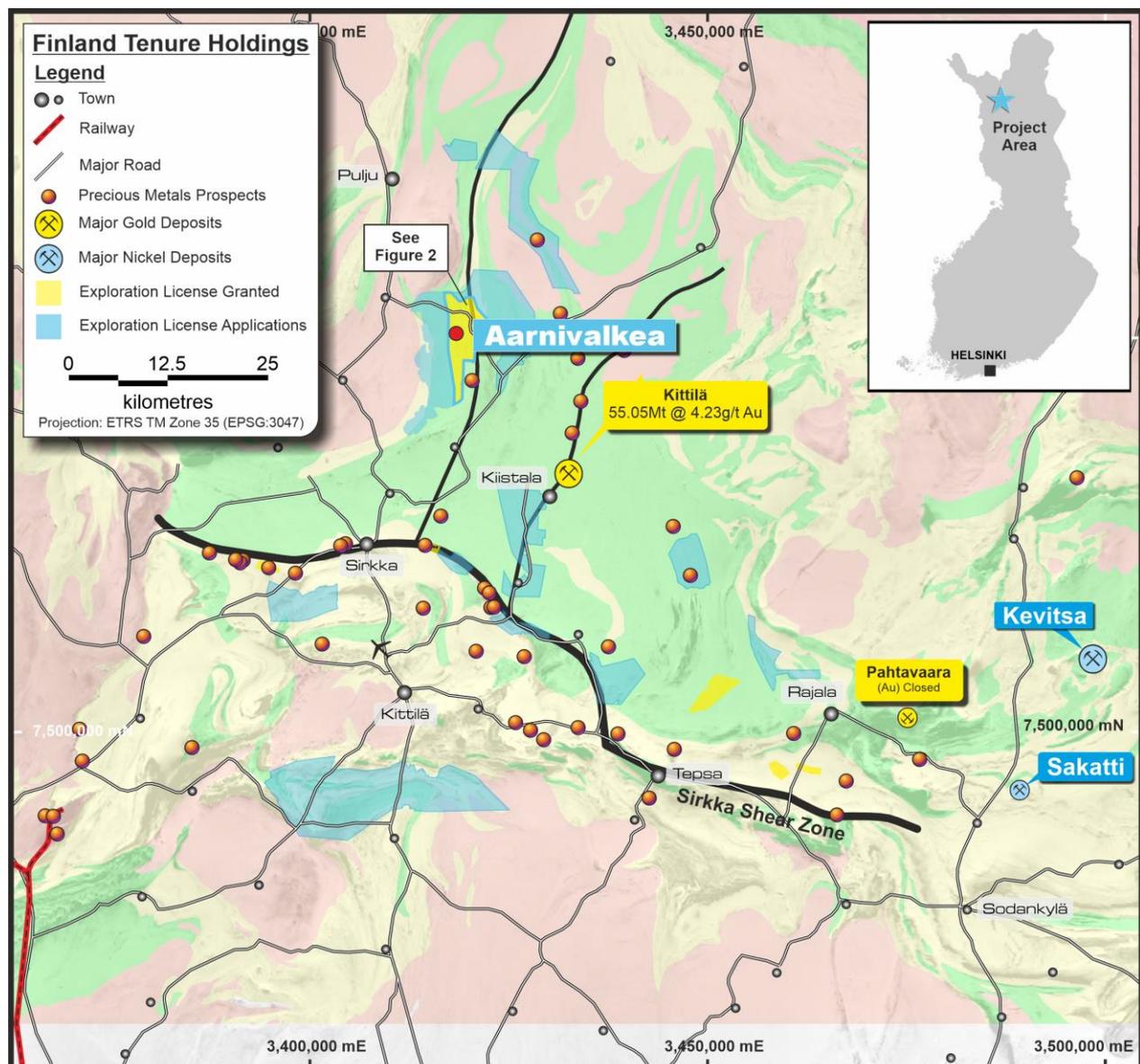


Figure 1: Overview of the geology of the Central Lapland Greenstone Belt showing S2’s tenure and the location of Aarnivalkea within the Paana exploration licence.



Figure 2: End of hole rock chip samples from the BOT drilling at Aarni' East, showing (left) silica and arsenopyrite alteration, (centre) carbonate and oxidised sulphide alteration, and (right) strong shearing and hydrothermal dolomitisation and silicification.

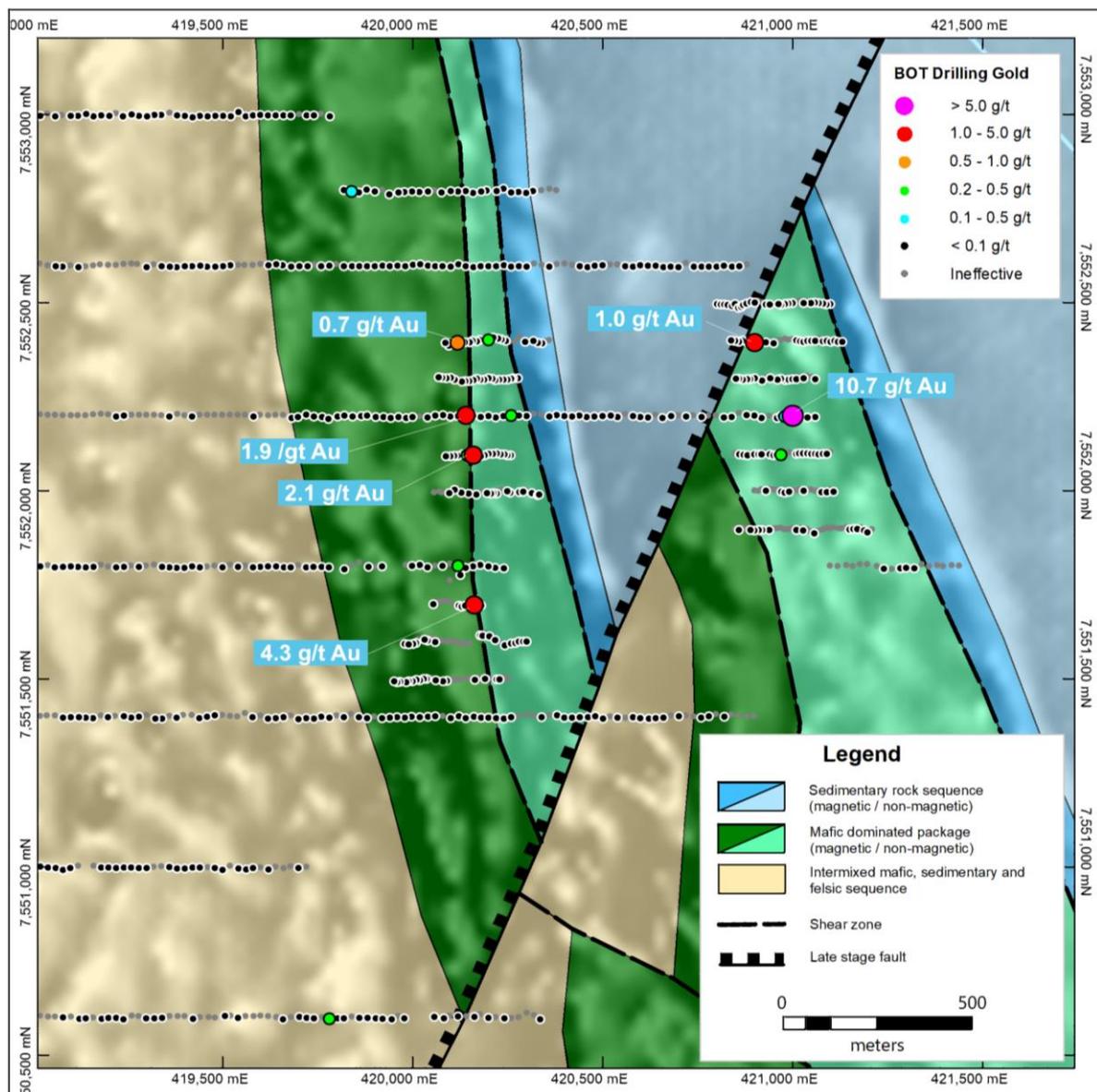


Figure 3: Gold in BOT samples at Aarni' East over magnetics and interpreted geology.

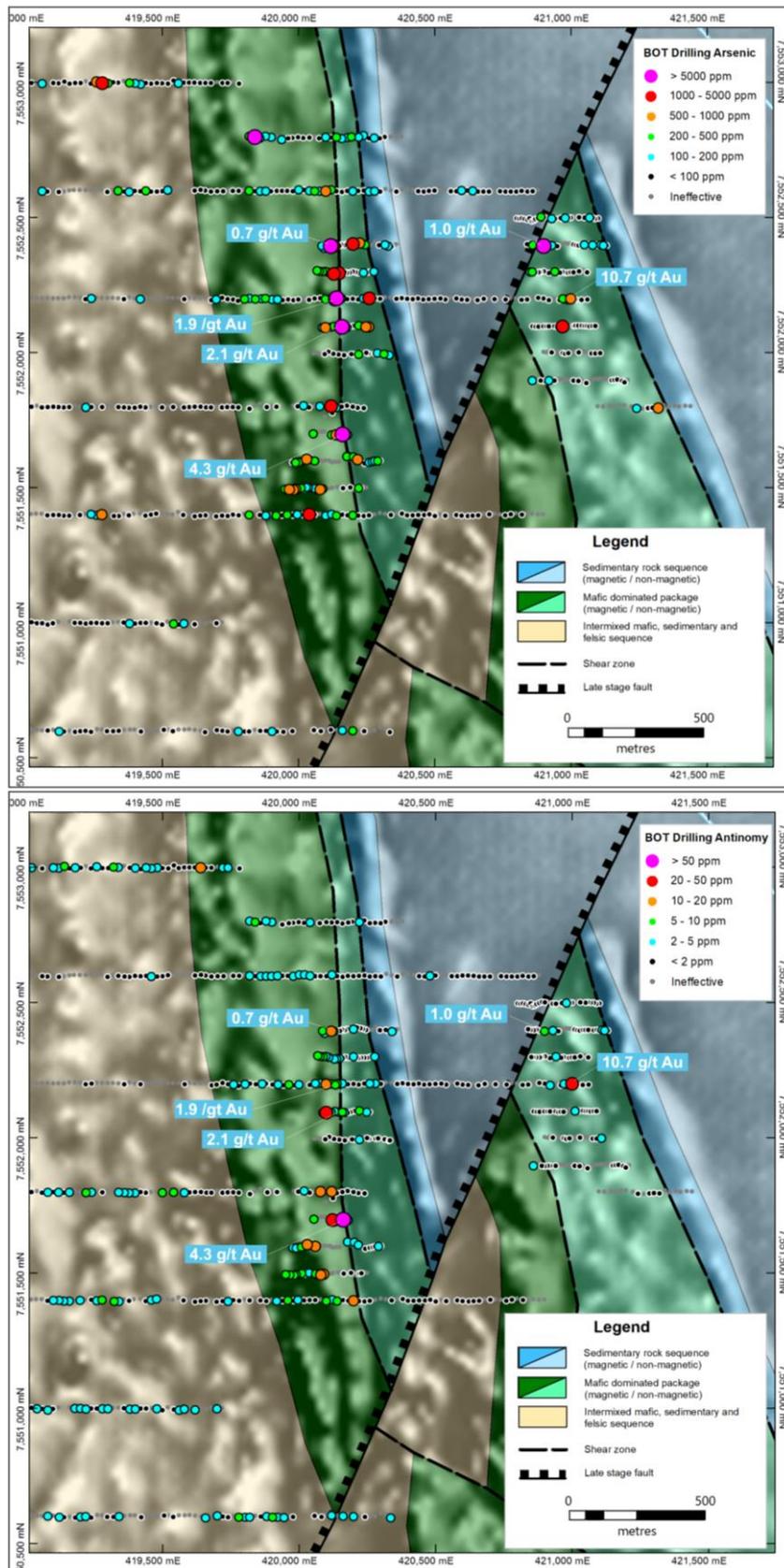


Figure 4: Arsenic (top), antimony (bottom) in BOT samples at Aarni' East over magnetics with interpreted geology. These pathfinder elements correlate with gold and emphasise the continuity of the trend.

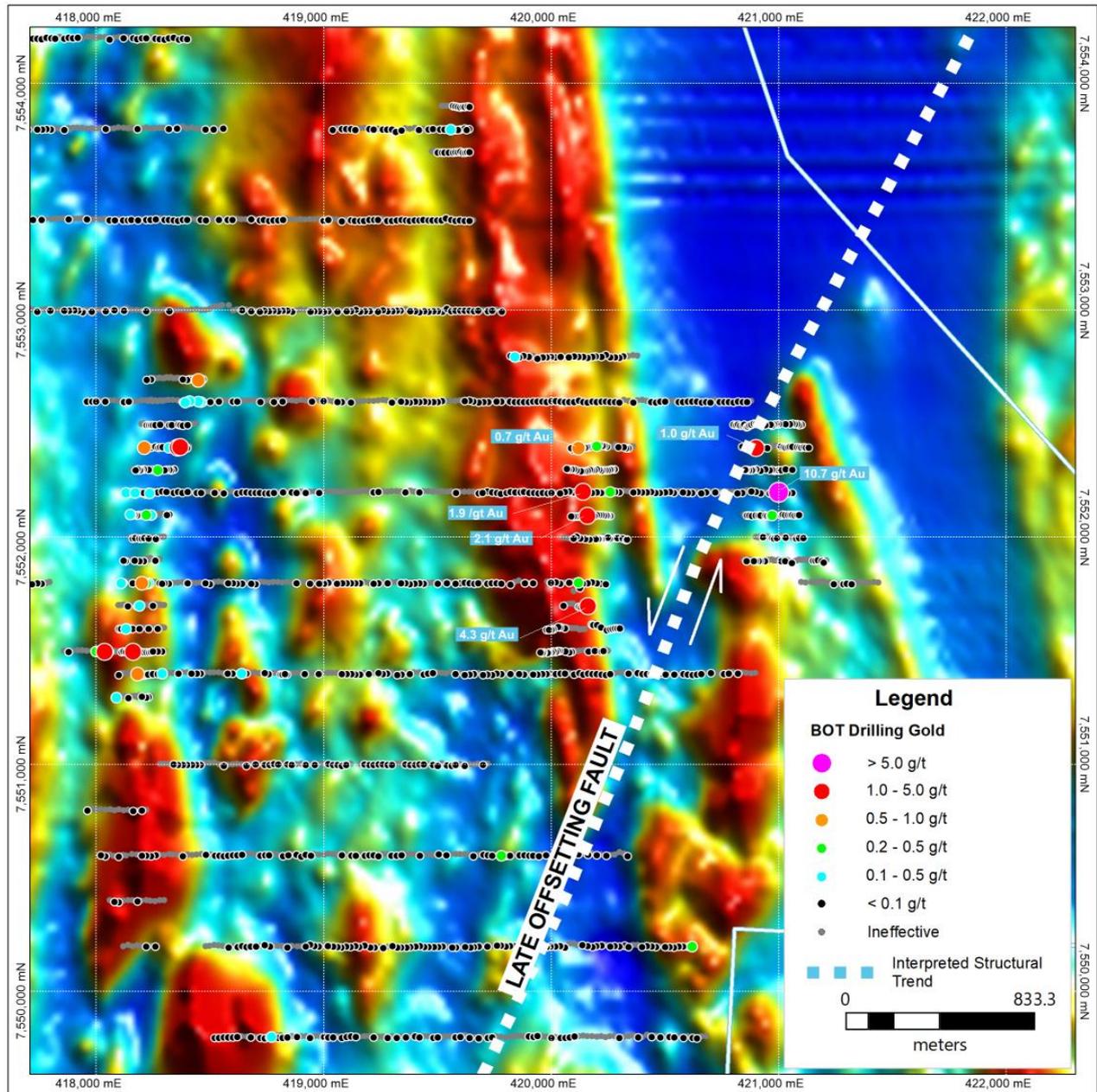


Figure 5: Gold in BOT samples at Aarnivalkea (LHS) and Aarni' East (RHS) over reduced to the pole magnetics. The late northeast striking fault offsets the earlier north-south striking gold mineralised shear zones. The mineralised Aarni' East BOT samples line up along a distinct magnetic contact, interpreted to represent a mineralised structure, the offset continuation of which is located on the southeastern side of the late fault.

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

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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.

The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results.

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	Base of Till (BoT) drilling is undertaken by Moreenityo Macklin Oy of Sattanen, Finland. Holes are drilled to bedrock or blade refusal and a 20cm sample is collected at the end of hole for geochemical analysis and lithological logging. All are forwarded for analyses by ALS Laboratories.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	Sampling and QAQC procedures are carried out using S2 protocols as per industry best practice.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</i>	The BoT samples are sent to ALS Laboratories in Sodankyla, Finland for preparation that includes weighing and then screening to produce a sieved fraction <180 micron for analyses for gold and base metals.
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	Base of Till drilling is by a percussion flow through sample bit that can collect a 20cm sample of bedrock material at the base of glacial deposits up to 20m thick.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	BoT samples are visually inspected and photographed to assess if they are likely to be a basement sample or whether the hole has failed to reach basement due to boulders or excessive cover thickness.

Criteria	JORC Code explanation	Commentary
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Sample quality is qualitatively logged recording sample condition, with quantity of fines versus coarse chips.
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	No relationship has been seen to exist
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	The logging uses a standard legend developed by S2 which is suitable for wireframing of the basement interface. Exploration holes are not geotechnically logged but resource holes are.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	All chips have been photographed wet.
	<i>The total length and percentage of the relevant intersections logged</i>	All drillholes were logged in full.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No core was drilled or sampled
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Bot samples are dried and sieved. A representative portion of the coarse fraction is retained and logged
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples were delivered by S2 personnel to ALS Minerals laboratory in Sodankyla, Finland for preparation that includes weighing and then screening to produce a sieved fraction <180 micron for analyses for gold and base metals. The prepared samples are forwarded to ALS Minerals Loughrea, Ireland, for analysis.
	<i>Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.</i>	Full QAQC system in place to determine accuracy and precision of assays
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	No core was drilled or sampled
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Samples are of appropriate size for geochemical reconnaissance
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	All samples were analysed by ALS Minerals Loughrea, Ireland. Samples analysed using a 25g aqua regia digestion with a combination of ICP-AES and ICP-MS finish (code AuME-TL43) for Au as well as a multi-element suite (Ag, As, Bi, Ca, Cd, Cu, Fe, Hg, Mg, Mn, Mo, Ni, P, Pb, S, Sb, Tl & Zn).
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	No geophysical tools were used to determine any element concentrations.

Criteria	JORC Code explanation	Commentary
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Full QAQC system in place including Certified Standards and blanks of appropriate matrix and levels
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	A company representative has personally inspected all sample chips with a photographic record kept for all chips. The Exploration Manager has inspected all photographs.
	<i>The use of twinned holes.</i>	No twinned holes were drilled within the main infilled anomaly.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary sampling data is collected in a set of standard Excel templates. The information is managed by S2's database manager for validation and compilation into S2's central database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments made
Location of data points	<i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	BoT collars were located with a handheld GPS with an accuracy of within 3 metres.
	<i>Specification of the grid system used.</i>	The grid system used is the Standard Finnish National Grid ETRS-TM35FIN
	<i>Quality and adequacy of topographic control.</i>	Excellent quality topographic maps produced by the Finnish Authority – National Land Survey of Finland (NLS).

SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The exploration work is located within the Paana Central Exploration License. ML2018:0081 The exploration licenses are 100% owned by Sakumpu Exploration Oy, a Finnish registered 100% owned subsidiary of S2
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	All of the Exploration Licenses are in good standing and no known impediments exist on the tenements being actively explored.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The area is a virgin greenfields discovery. Outokumpu completed limited regional BoT drilling in the area, but were not assayed for gold.
Geology	Deposit type, geological setting and style of mineralisation.	The prospect style is a shear zone hosted orogenic gold deposit within the Central Lapland Greenstone belt.

Criteria	JORC Code explanation	Commentary
Drill hole Information	<p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. 	Refer to sample plans in text.
Data aggregation methods	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</p>	Results are single point geochemical samples at the end of the BoT hole.
	<p>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p>	None used.
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	None used.
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</p>	<p>The trend of mineralisation at the prospects described is broadly north-south. Other orientation such as dip or dip direction are not known at present. Diamond drilling will be used to determine this.</p> <p>Refer to figures in body of text.</p>
Diagram	<p>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</p>	Refer to Figures in body of text.
Balanced reporting	<p>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</p>	All results considered significant are reported.

Criteria	JORC Code explanation	Commentary
<p>Other substantive exploration data</p>	<p>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</p>	<p>No other exploration data present.</p>
<p>Further work</p>	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive</p>	<p>Initial diamond drilling of the prospect has commenced. This area is able to be drilled in either winter or summer.</p>