ASX Announcement

Monday 19th August 2019

POTENTIAL GOLD DISCOVERY AT AAKENUSVAARA PROSPECT, FINLAND

Key points

- **Wide zones of sulphide, alteration and brecciation from 5 to 15 metres thick intersected in all 7 holes of S2's maiden drill program at Aakenusvaara, Finland - assays awaited.**
- **These holes define a zone over some 200 metres dip and 200 metres strike extent, open east, west and down dip**
- **Outokumpu drilled the near surface part of this prospect in the 1980's and intersected up to 11m @ 9.6g.t gold in shallow holes but most drilling was ineffective**
- **Gold is associated with zones of sulphide, alteration and brecciation in the historic holes at Aakenusvaara**
- **Aakenusvaara is located in the district containing the 9Moz Kittila gold mine and is 3 kilometres along strike from the former Saattopora copper-gold mine**

Potential gold discovery at Aakenusvaara, Finland

S2 Resources Ltd ("S2" or the "Company") advises that it has intersected numerous zones of sulphides, alteration and brecciation in its first seven diamond holes drilled down dip and along strike from historic gold intercepts at the Aakenusvaara gold prospect. Assays are awaited for these intercepts, which are visually similar to those in limited historic near surface drilling undertaken by Outokumpu.

Aakenusvaara is located three kilometres along strike from the Outokumpu's former Saattopora mine, where copper-gold mineralisation was also associated with visually similar breccia zones and veins of pyrrhotite, pyrite, chalcopyrite, quartz, carbonate and strong albite alteration.

Historical Work

Very limited and largely ineffective diamond drilling by Outokumpu in the 1980's intersected gold mineralisation associated with sulphides, breccias and strong hydrothermal alteration at Aakenusvaara.

The historical holes are shallow, with several drilled in the wrong direction and parallel to the lode. The best historic intercept of 11 metres @ 9.6g/t gold in hole AAV003 is in one of the deepest holes drilled, at a vertical depth of 85 metres which is still very shallow by modern Australian standards.

The core from the three surviving Outokumpu holes has been relogged and reassayed. In holes AAV010 and AAV011 this has confirmed the quoted gold grades and has also confirmed that these are associated with similar zones of sulphide, alteration and brecciation:

- The historic intercept of 4.8 metres @ 10.0g/t gold in AAV010 repeated as 5.2 metres @ 8.4g/t gold*
- The historic intercept of 3.2 metres @ 3.9g/t gold in AAV011 repeated as 3.2 metres @ 3.1g/t gold*
- Resampling of AAV027, with no historic assays, has also identified an intercept of 6.1 metres @ 1.8g/t gold and 1.3% copper in a footwall zone to the main lode.

** Note the historic core is very small (BQ), original samples were hand split, and S2's resampling was cut, so any variance in these calculated intercepts is well within the range of error of the sample size and sampling method used.*

S2's drill program at Aakenusvaara

Seven initial diamond holes have recently been drilled by the Company at the Aakenusvaara prospect.

The first of these holes, drilled as a twin of hole AAV003, visually replicated the original intercept. Six further holes, drilled down dip and along strike from this in 40 metre increments, have all intersected similar zones of sulphides, breccias and strong alteration over downhole widths of 5 to 15 metres, considered to be close to true width. Whilst these intercepts are visually similar to the gold intercepts in the historic drilling, assays are still awaited, so their gold content is unknown.

The zone of sulphides, breccias and alteration strikes east-west, dips steeply north and appears to plunge to the east, which is similar to the orientation of the mineralisation mined at the Saattopora mine. S2's drilling has so far defined this zone over a dip extent of 200 metres and a strike extent of 200 metres, and it remains open down dip and along strike to the east and west (see Figures 1 and 2).

The zone comprises a chaotic variety of features, including jigsaw breccias, milled breccias; clasts of quartz and/or unaltered to completely albitised and/or dolomitised wallrocks within a matrix of varying degrees of carbonate, silica and sulphides (pyrrhotite, pyrite and minor chalcopyrite); locally massive sulphides; and laminated albitic rocks and albitites with varying degrees of brecciation and veining (see Figures 3 to 9). These features are similar to those documented at the Saattopora copper-gold mine located three kilometres along strike to the west of Aakenusvaara.

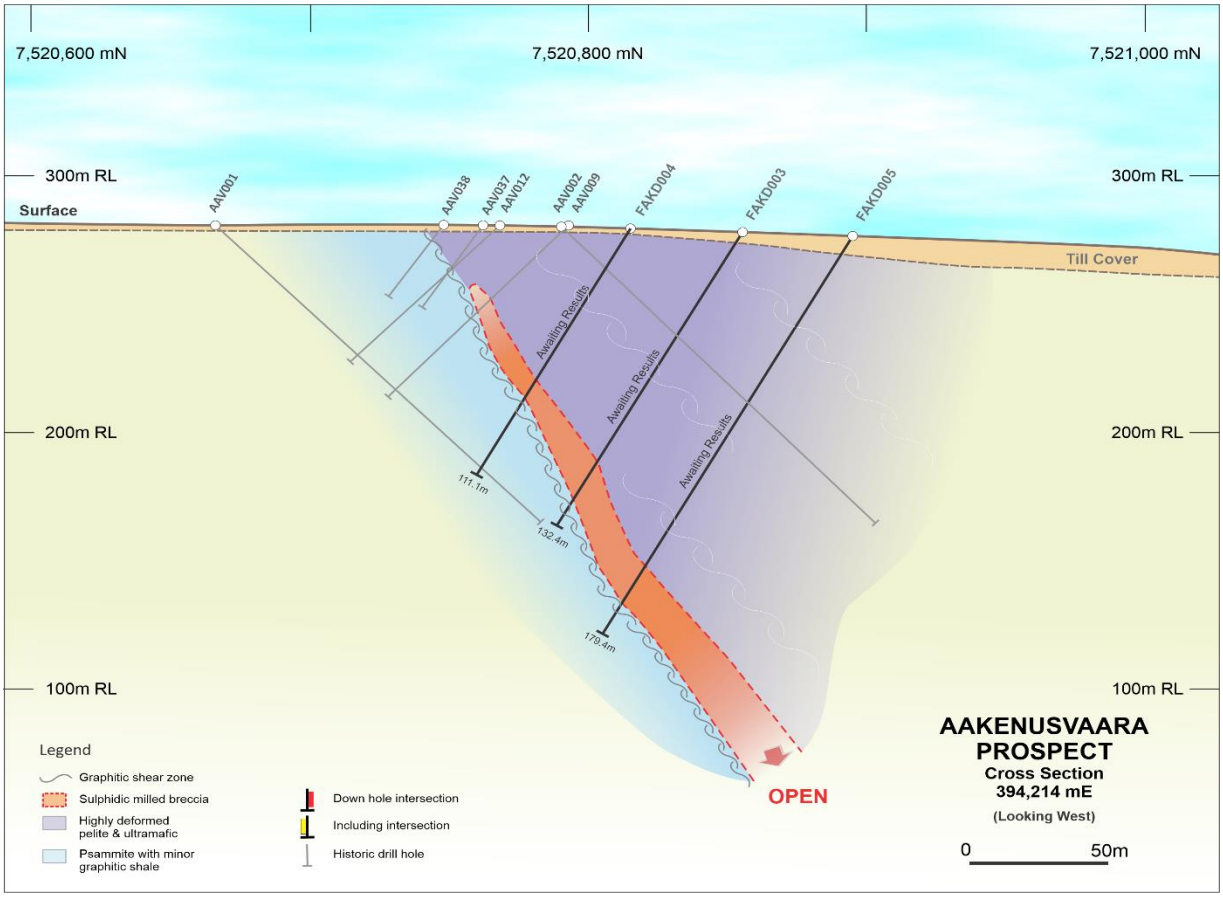

Figure 1. Cross section showing historic Outokumpu and new S2 drilling at Aakenusvaara with geology and zone of sulphide and strong alteration and brecciation. Note the old holes were either very shallow or drilled parallel to the lode.

Next steps

The rig is in the process of switching back to start the phase 2 reconnaissance program at Aarnivalkea until assay results are received for the Aakenusvaara holes, which are expected throughout the next six weeks.

Meanwhile, the phase 2 reconnaissance program at Aarnivalkea will tighten the current broad (320 metre) line spacing, follow up better intercepts from phase 1, and test some of the new base of till gold anomalies identified along strike and to the west of the main trend at Aarnivalkea.

The optionality afforded by having these two drill-stage prospects in a district otherwise unexplored by Australian standards enables logistical flexibility and continuing momentum. Both prospects are accessible all year round with the exception of some swampy areas at Aarnivalkea (best drilled in winter) and a seasonal environmental exclusion zone covering part of the Aakenusvaara prospect (with restricted access in spring/early summer).

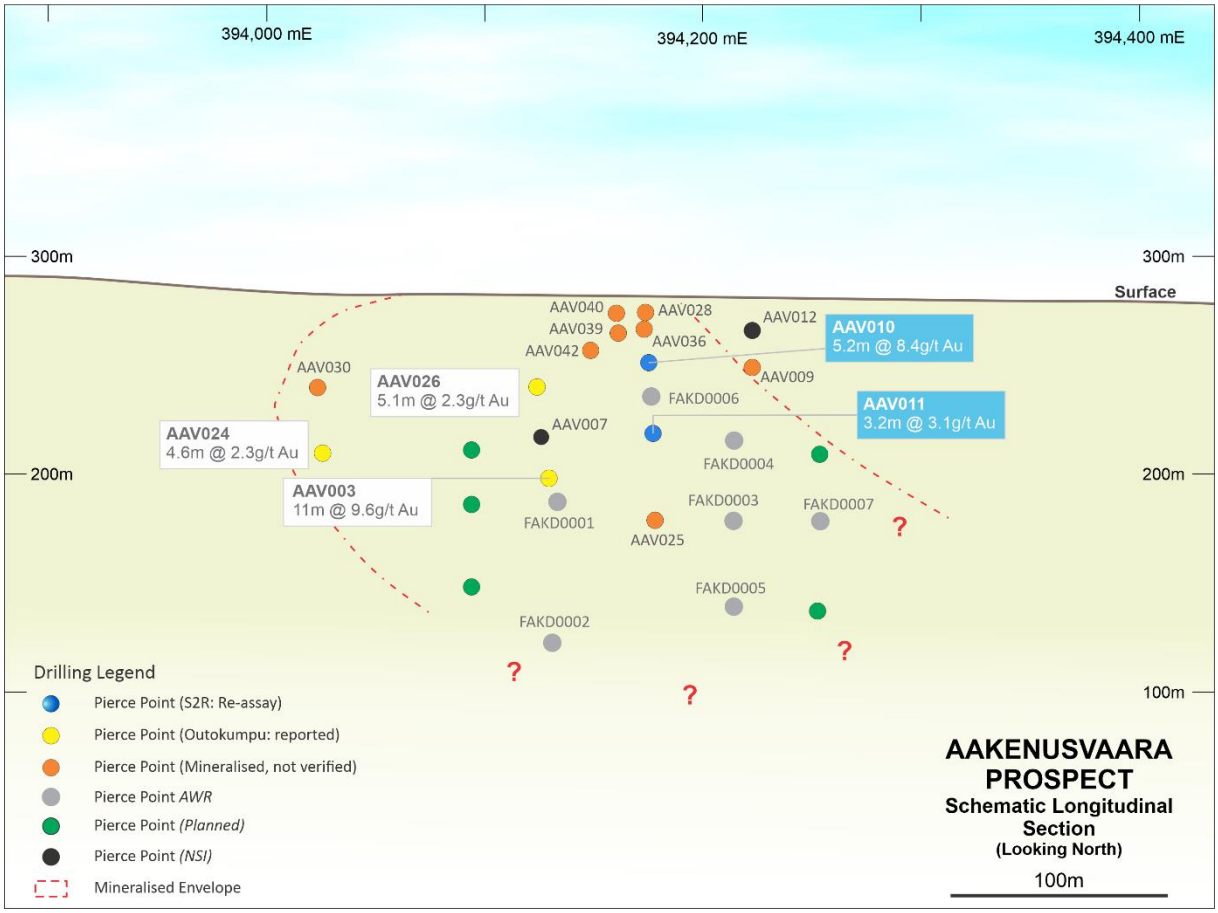

Figure 2. Long projection showing historic and S2 drilling at Aakenusvaara with pierce points of completed and planned drilling (assays awaited).

Figure 3. Semi-massive and breccia sulphide (mainly pyrrhotite) from FAKD0003.

Figure 4. Milled breccia with quartz and wallrock clasts in a sulphide matrix from FAKD0003.

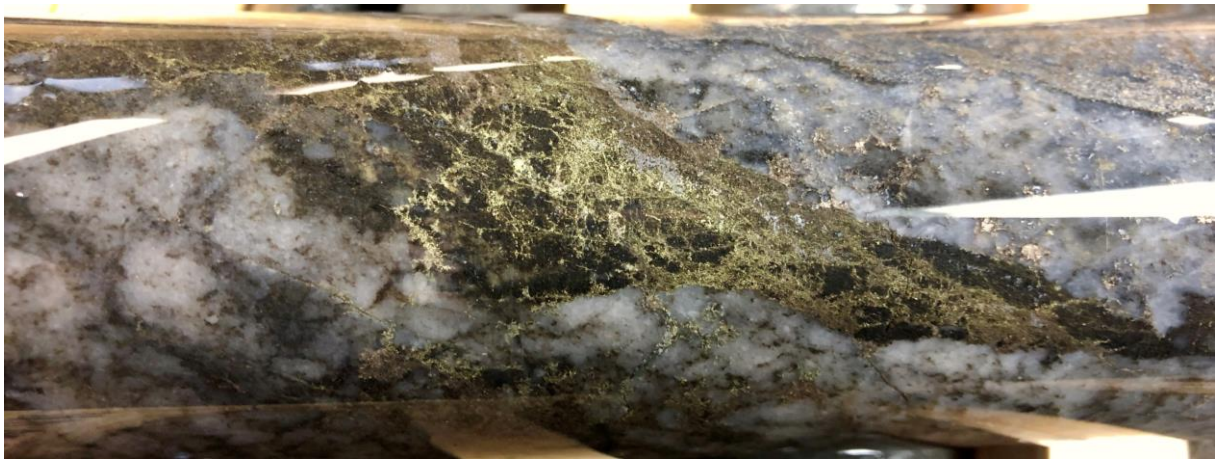

Figure 5. Re-brecciated quartz veins with pyrrhotite and chalcopyrite from FAKD0003.

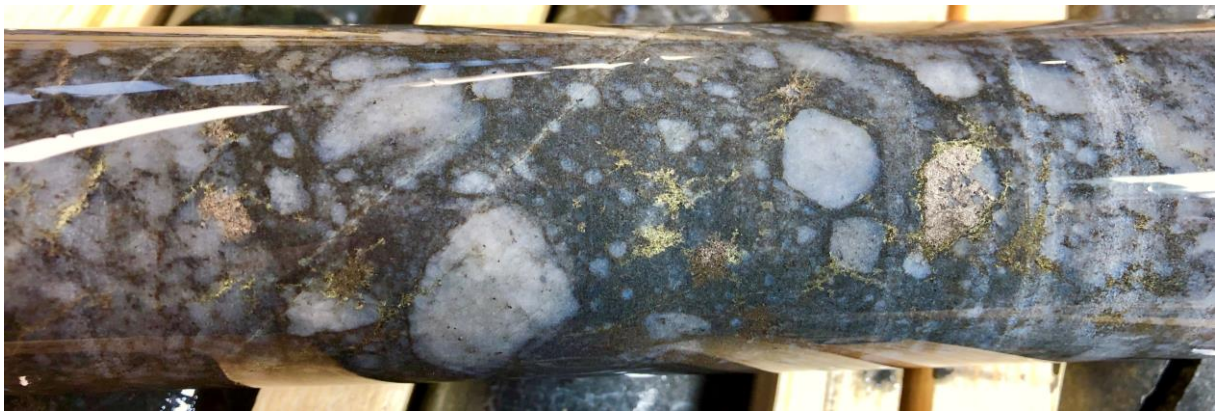

Figure 6. Milled breccia with variable sized rounded clasts of quartz and stringers of chalcopyrite and pyrrhotite from FAKD0003.

Figure 7. Multiple generations of albitisation, veining, and brecciation in FAKD0004.

Figure 8. Folded, veined and brecciated albitite in FAKD0004.

Figure 9. Quartz-carbonate-sulphide veined breccia, with quartz-carbonate-sulphide veined albitites in background from FAKD0006.

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Competent Persons statements

The information in this report that relates to Exploration Results from Finland is based on information compiled by Andy Thompson, who is an employee and shareholder of the Company. Mr Thompson 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 Thompson consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Table 1. Details of holes completed at Aakenusvaara by S2 together with re-assayed historic holes drilled by Outokumpu. Holes marked with an asterisk* have preliminary results only.

Hole	Easting	Northing	RL	Dip	Azimuth	Depth	From	To	Width	Grade Au g/t	Grade Cu %
FAKD0001	394134	7520878	278	-62	180	161.2	AWR				
FAKD0002	394132	7520923	277	-60.5	180	191.9	AWR				
FAKD0003	394214	7520855	278	-60	180	132.4	AWR				
FAKD0004	394214	7520815	280	-60	180	111.1	AWR				
FAKD0005	394214	7520895	276	-60	180	179.4	AWR				
FAKD0006	394175	7520807	281	-60	180	91.9	AWR				
FAKD0007	394254	7520855	277	-60	180	In progress	AWR				
AAV-10	394177	7520790	282	-50	183	62.4	35.80	41.00	5.20	8.4	NSI
						including	39.25	41.00	1.75	23.0	NSI
AAV-11	394179	7520845	280	-55	183	82.5	74.50	77.70	3.20	3.1	NSI
AAV-27	394173	7520748	282	-57	183	72.9	22.20	28.30	6.10	1.8	1.3

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	*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.*	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. Drilling is undertaken using MK Drilling of Ranua, Finland drilling NQ2 rod size with a DDH size of 75.7mm and core size of 50.7mm. NQ2 core samples are logged and marked up by S2 personnel. Unbiased core sample intervals were cut in half by diamond saw with half core sent for preparation and analysis at ALS Laboratories. All rock grab and rock float samples are collected from outcrop by S2 personnel and marked into sample books and a representative portion of the sample retained. All are forwarded for analyses by ALS Laboratories.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Sampling and QAQC procedures are carried out using S2 protocols as per industry best practice.
	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	Diamond drilling was used to obtain core samples that have been cut and sampled on intervals that are determined by lithology and mineralisation. The drill core samples are sent to ALS Laboratories for analyses for gold and base metals. Drill core is sampled at S2's facilities in Kittila, Finland.
Drilling techniques	*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).*	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. Diamond drilling with NQ2 wireline bit producing a 50.7mm diameter core.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed*	BoT samples are visually inspected 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. Diamond Drill core recoveries are recorded by the driller and written on core block markers. The exact recovery is then recorded on a metre basis after core mark-up and recorded in the database.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Sample quality is qualitatively logged on a metre basis, recording sample condition.
	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.	No relationship has been seen to exist

Criteria	JORC Code explanation	Commentary
Logging	*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.*	The logging uses a standard legend developed by S2 which is suitable for implicit wireframing. All diamond holes are geotechnically and structurally logged.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	All core has been photographed both dry and wet. Geological logging of the diamond drill holes is into tough books using standardised codes and templates. These logs are then imported into S2's central database
	The total length and percentage of the relevant intersections logged	All drill holes were logged in full.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Core sawn in half and half core taken for assay.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Bot samples are dried and sieved with the fine fraction submitted for assay. The coarse fraction is retained and logged
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were delivered by S2 personnel to ALS Minerals laboratory in Sodankyla, Finland, where they are crushed with >70% <2mm (code CRU-31), split by riffle splitter (code SPL-21), and pulverised 1000grm to 85% <75 um (code PUL-32). Crushers and pulverizers are washed with QAQC tests undertaken (codes CRU-QC, PUL-QC). The prepared samples are forwarded to ALS Minerals Loughrea, Ireland, for analysis.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Full QAQC system in place to determine accuracy and precision of assays
	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.	For DDH's non biased core cutting through using an orientation line marked on core and cut to the line
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Samples of appropriate size
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	All samples were analysed by ALS Minerals Loughrea, Ireland. BoT samples analysed for gold undergo a 25g aqua regia digestion with ICP-MS finish (code Au-TL43). Samples analysed for Ag, As, Bi, Ca, Cd, Cu, Fe, Hg, Mg, Mn, Mo, Ni, P, Pb, S, Sb, Tl & Zn undergo an aqua regia digestion with ICP-AES Finish (code ME-ICP41). Core samples analysed for gold undergo a 50g fire assay with AA finish (code Au-AA26). Selected samples are analysed for Ag, As, Bi, Ca, Cd, Cu, Fe, Hg, Mg, Mn, Mo, Ni, P, Pb, S, Sb, Tl & Zn undergo an oxidising digestion with ICP-AES Finish (code ME-ICPORE).
	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.	No geophysical tools were used to determine any element concentrations.
	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.	Full QAQC system in place including Certified Standards and blanks of appropriate matrix and levels

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Andy Thompson, Country Geology Manager for S2 has personally inspected all drill cores and rock samples.
	The use of twinned holes.	No twinned diamond holes have been drilled at Arnievalkea
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	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.
	Discuss any adjustment to assay data.	No adjustments made
Location of data points	*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.*	BoT collars were located with a handheld GPS with an accuracy of within 3 metres. Diamond drill collars are pegged using a Trimble DGPS to +/- 1m accuracy. Drill rigs are aligned to Grid west using Standard Finnish National Grid ETRS-TM35FIN. The holes are downhole surveyed using a Deviflex tool.
	Specification of the grid system used.	The grid system used is the Standard Finnish National Grid ETRS-TM35FIN.
	Quality and adequacy of topographic control.	Elevation data for all collars is determined by a digital elevation model derived from public domain 2m Lidar data. Topographic control and map data is excellent.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	BoT geochemical samples are drilled at 400m by 20m for initial reconnaissance and 100m by 10m for detailed infill. Diamond drilling is currently being drilled on 320m x 40m spacing's over the geochemical anomaly to scope out the basement stratigraphy and structure and will be progressively infilled to 80m x 40m with deeper holes as deemed appropriate.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Data spacing and distribution is not sufficient at this stage to allow the estimation of mineral resources.
	Whether sample compositing has been applied.	No sample compositing has been applied
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Drillhole orientation is designed to intersect the mineralised package of rocks and be perpendicular to shearing and mineralisation. Structural measurements from orientated core indicate that the main fabric and contacts are dipping steeply to the east and hence holes collared at -60dip 270deg azimuth are appropriate.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The drilling at this stage is preliminary and exploratory. It is not possible to assess if any sample bias has occurred due to drillhole orientation at this stage.
Sample security	*The measures taken to ensure sample security.*	Chain of custody is managed by S2 personnel. Drill samples and core is visually checked at the drill rig and then transported to S2's logging and cutting facilities by S2 personnel for logging, cutting and sampling. Bagged samples are transferred to ALS Laboratories in Sodankyla, Finland by S2 personnel.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or reviews have been conducted at this stage.

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 Aakenusvaara prospect is located within the Aakenusvaara Exploration Licence. ML2018:0105-01 The exploration licences 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 Licences 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 Aakenusvaara is a historic prospect discovered by Outokumpu Oy using BoT drilling along the Sirkka Shear zone in 1984. The multiple high grade (up to 50g/t) till anomalies were tested by predominantly shallow diamond holes with several gold bearing zones intersected. Drilling was relatively limited in what appears to be the main plane of continuity and better intersections were not followed up. Follow up drilling was restricted to shallow RC drilling to "test" the method on a known occurrence.
Geology	Deposit type, geological setting and style of mineralisation.	The prospect is a shear zone hosted orogenic gold deposit within the Sirkka shear zone of the Paleoproterozoic Central Lapland Greenstone belt. Alteration assemblages include albite, sericite, carbonate, chlorite with disseminated pyrite, pyrrhotite and arsenopyrite.
Drill hole Information	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: • 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	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.	All reported intersections of drilling undertaken by S2 have been length weighted. A nominal 0.2g/t lower cut-off is used for diamond drill intersections. No top cut has been applied.
	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.	High grade intervals internal to broader zones of mineralisation are reported as included intervals.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	None used.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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').	The trend of mineralisation at the targets/prospects described is estimated to be dipping to the north at approximately 50 deg. Refer to figures in body of text.
Diagram	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.	Refer to Figures in body of text.
Balanced reporting	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.	All results considered significant are reported.
Other substantive exploration data	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.	None at present
Further work	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	Diamond drilling is currently being drilled on 80m x 40m spacing's along strike and down dip of historic drilling.