



## FURTHER HIGH GRADE INTERCEPTS AT AARNIVALKEA

### Key Points

- **Further assays received for ongoing diamond drilling at the Aarnivalkea (Aarni') prospect with multiple high grade gold intercepts in hole FAVD0071 including:**
  - 18.8 metres at 2.5g/t gold, including 7.9 metres at 5.2g/t gold
  - 8.2 metres at 3.6g/t gold, including 2.5 metres at 11.2g/t gold
  - 2.0 metres at 20.4g/t gold, including 1.2 metres at 32.3g/t gold
- **FAVD0071 mineralisation located 112 metres south of the previously reported high grade intercept of 6.8 metres at 11.8g/t gold in hole FAVD0062**
- **The intercept of 8.2 metres at 3.6g/t gold sits within a very broad, 48 metre zone averaging 1.0g/t gold**
- **Aarni' mineralisation remains open and unconstrained with only 11 deeper holes completed over a 1.3 kilometre strike. Diamond drilling is ongoing with hole FAVD0074 currently being drilled 40 metres southeast of hole FAVD0062.**

S2 Resources Ltd ("S2" or the "Company") has received further assay results for ongoing diamond drilling at its 100% owned Aarnivalkea ("Aarni") prospect in the Central Lapland Greenstone Belt ("CLGB") in northern Finland. The current program comprises very broad spaced scout drilling beneath a 1.3 kilometre gold anomaly identified in previous shallow diamond drilling (Figure 1). Three intervals or sub-intervals of high grade mineralisation (using a nominal 1.0g/t gold cut-off) were intercepted in hole FAVD0071 (see Figure 2), which include:

- 18.8 metres at 2.5g/t gold from 173.4 metres, including 7.9 metres at 5.2g/t gold from 173.4 metres, including 1.4 metres at 14.0g/t gold from 175.6 metres, and
- 8.2 metres at 3.6g/t gold from 253.9 metres, including 2.5 metres at 11.2g/t gold from 255.8 metres, including 0.8 metres at 32.2g/t gold from 255.8 metres, and
- 2.0 metres at 20.4g/t gold from 323.0 metres, including 1.2 metres at 32.3g/t gold from 323 metres

Mineralisation in hole FAVD0071 is located 112 metres south of an intercept of 6.8 metres at 11.8g/t gold in hole FAVD0062 (Figure 3) and 125m north of hole FAVD0065 with intercepts of 5.8 metres at 2.7g/t gold and 5.6 metres at 3.1g/t gold (Figure 4). The 8.2 metres at 3.6g/t gold in hole FAVD0071 sits at the base of a broad, 48 metres zone of lower grade mineralisation averaging 1.0g/t gold.

Assay results were also received for holes FAVD0067 to FAVD0070 with better intercepts listed below. No significant intercepts were recorded in hole FAVD0072 located at the southernmost end of the target area and assays are awaited for hole FAVD0073.

#### Hole FAVD0067

- 1.0 metre at 1.9g/t gold from 242.0 metres

#### Hole FAVD0068

- 0.5 metre at 4.0g/t gold from 70.6 metres

#### Hole FAVD0069 (see Figure 3)

- 2.7 metres at 1.2g/t gold from 257.5 metres, and
- 0.3 metre at 17.0g/t gold from 335.3 metres, and
- 1.5 metres at 1.1g/t gold from 437.0 metres, and
- 2.2 metres at 2.7g/t gold from 478.0 metres, including 1.2 metres at 4.3g/t gold

#### Hole FAVD0070

- 1.0 metre at 2.8g/t gold from 128.0 metres, and
- 1.0 metre at 1.6g/t gold from 253.5 metres

#### Aarni' mineralisation open in all directions

In broad spaced scout drilling, based on roughly 100 metre spaced lines over a 1.3 kilometre strike, Aarni' mineralisation remains unconstrained and open in every direction. A zone of higher grade mineralisation is clearly emerging in and around holes FAVD0062, FAVD0065 and FAVD0071, which currently extends over a 200 metre strike and is open to the north and south. While S2's understanding of the controls on gold mineralisation is evolving, the higher grade zone may represent a moderate southerly plunging body. What the current program of deeper drilling is defining is very wide lenses of stacked gold anomalism (grading 0.2g/t to 1.0g/t gold), which in several areas has concentrated into zones grading over 10g/t gold.

Diamond drilling is ongoing with the current hole (FAVD0074) being drilling roughly 40 metres southeast of hole FAVD0062 (see Figure 3).

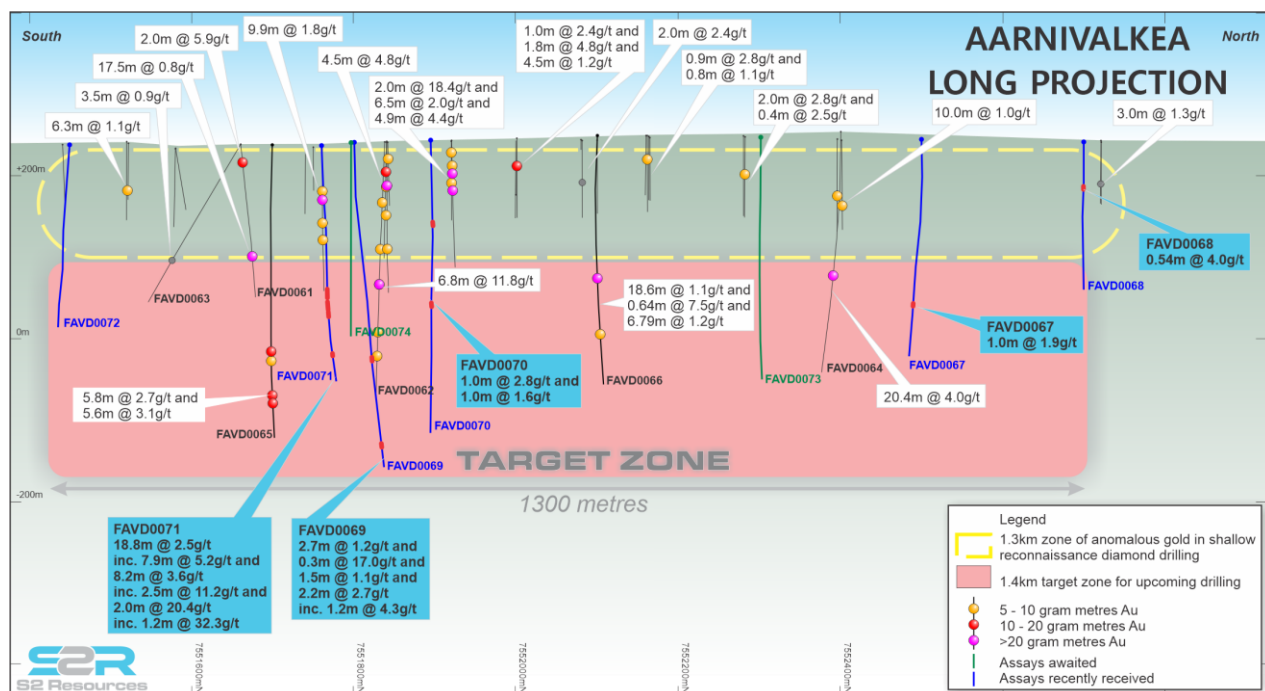


Figure 1. Long projection of the Aarnivalkea prospect showing recently assayed holes (blue), the target zone for the ongoing drilling program (pink) and selected intercepts from previous diamond drilling (white labels). Intercept grades are quoted as g/t Au.

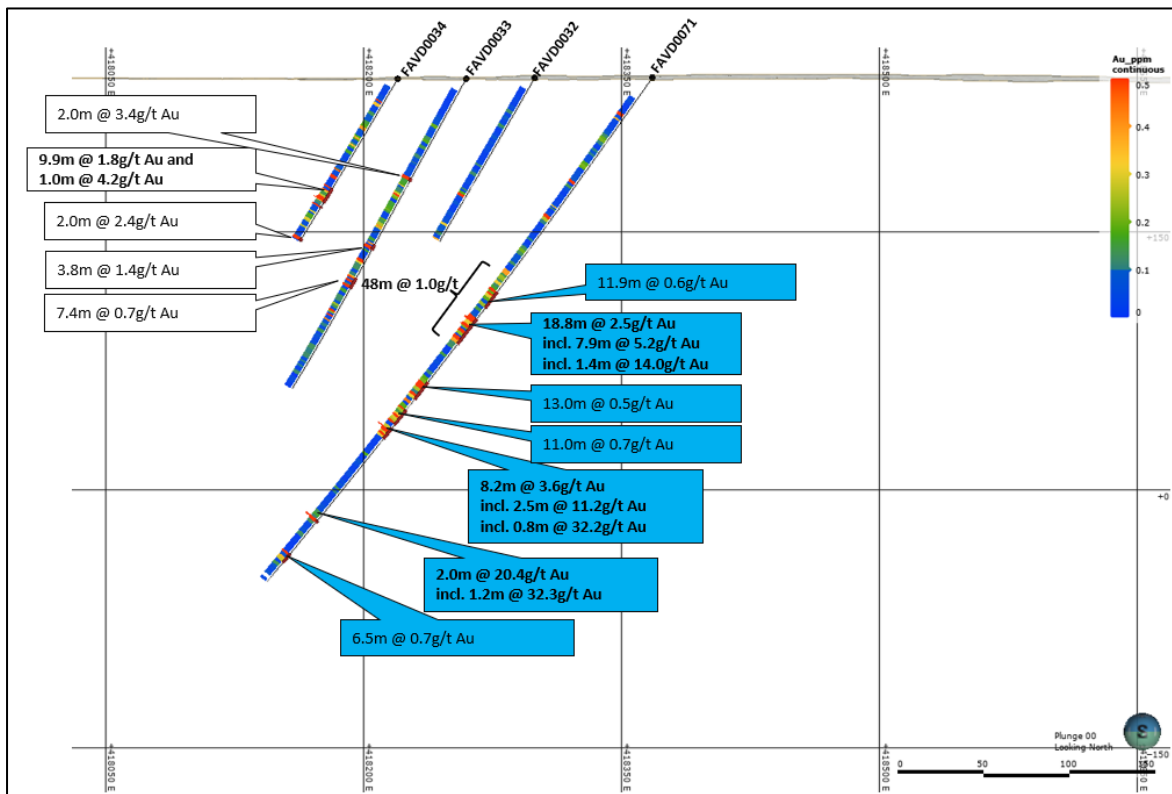


Figure 2. Cross section through 7551760Mn showing multiple zones of high grade mineralisation in hole FAVD0071 (blue labels) and previously reported intercepts (white).

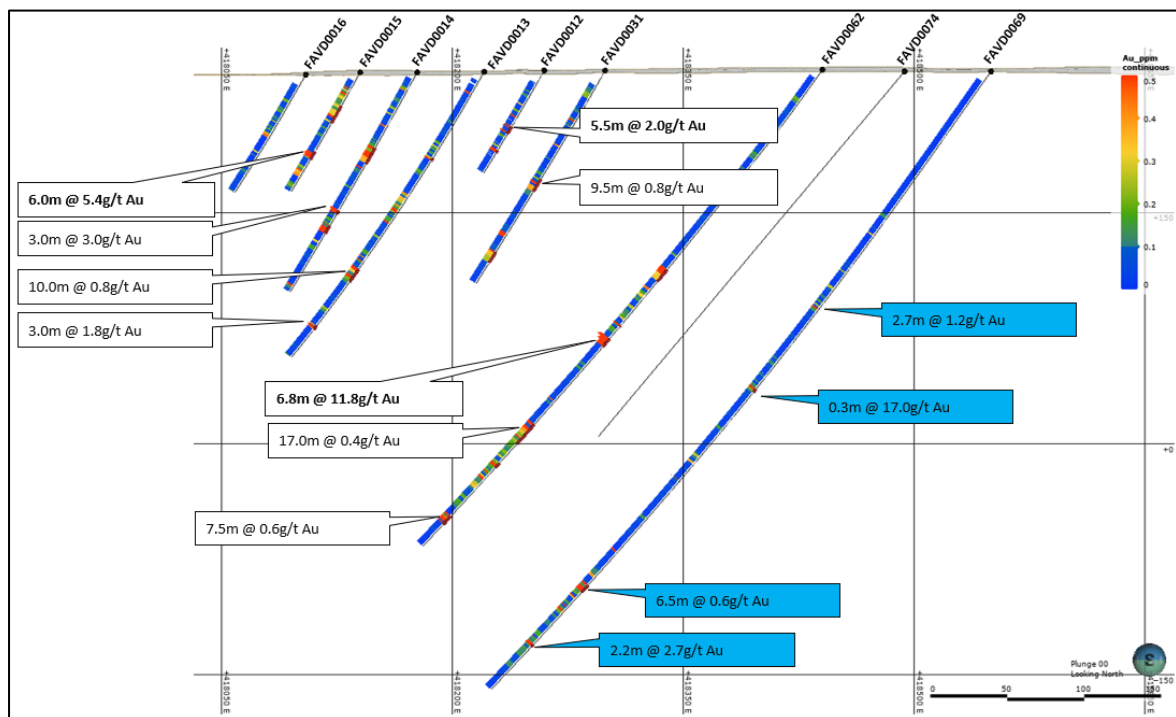


Figure 3. Cross section through 7551840Mn showing high grade gold mineralisation in previously reported drill hole FAVD0062 (see S2 ASX announcement date 8<sup>th</sup> December 2020) and newly reported hole FAVD0069, including recent intercepts (blue labels) and the planned trace for hole FAVD0074, currently in progress.

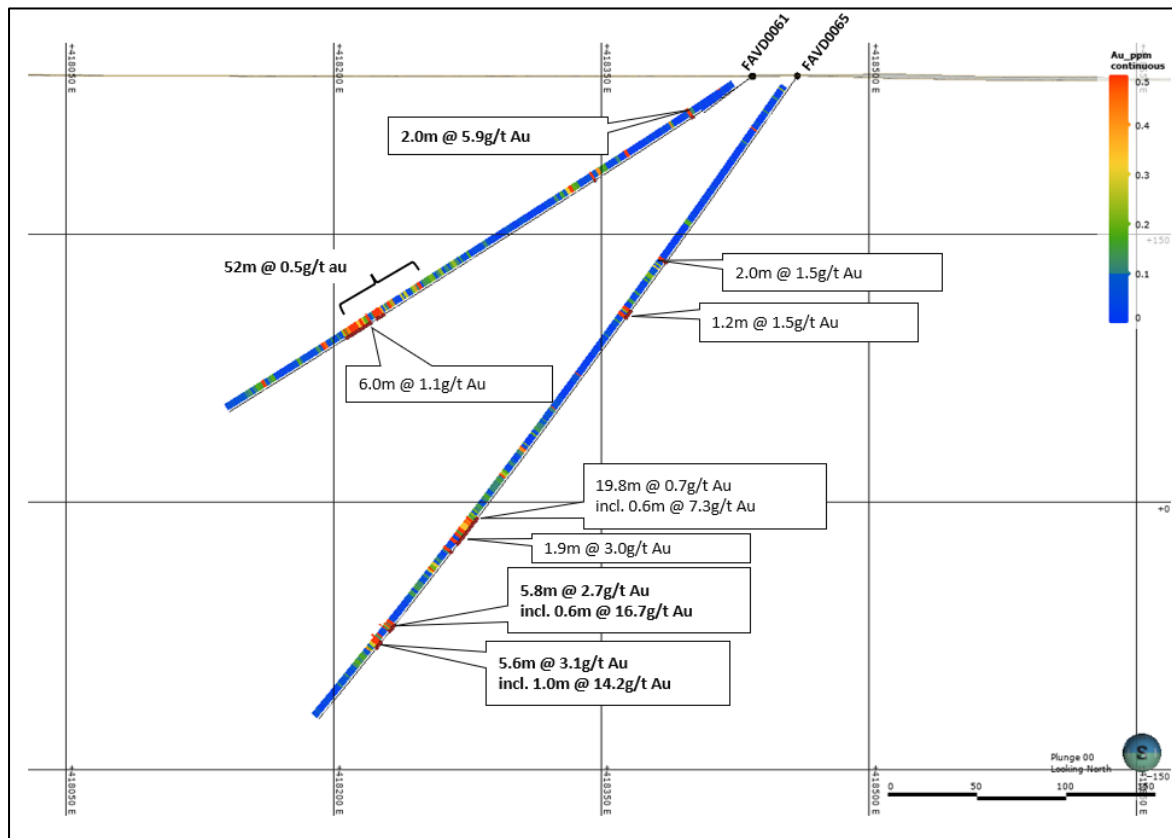


Figure 4. Cross section through 7551660Mn showing gold mineralisation in previously reported drill holes FAVD0061 and FAVD0065 (see S2 ASX announcements date 8<sup>th</sup> December 2020 and 9<sup>th</sup> September 2021). Note there is no shallow drilling above holes FAVD0061 and FAVD0065 due to swampy ground conditions.

This announcement has been provided to the ASX under the authorisation 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](http://www.s2resources.com.au) for details on past exploration results.

**Competent Persons statements**

The information in this report that relates to Exploration Results 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 mineralisation 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.

**Table 1. Summary of drilling:**

**Aarnivalkea** - 2021 diamond drilling by S2, previously unreported results in bold (refer to previous S2 ASX announcements on 8 October 2019 and 12 November 2019 for all 2019 drill results and previous S2 ASX announcements on 8 December 2020 and 4 January 2021 for all 2020 drill results).

Hole	Easting	Northing	RL	Dip	Azimuth	Depth	From	To	Width	Grade Au g/t
FAVD0065	418460	7551700	238.8	-55	270	449.7	127	129	2	1.5
And							161	167.2	6.2	0.6
And							207.39	208	0.61	1.5
And							258.9	261.15	2.25	0.7
And							278.16	279.28	1.12	1.1
And							305.2	325	19.8	0.7
including							308.58	309.16	0.58	7.3
And							329.13	331	1.87	3.0
And							340.24	346.2	5.96	0.4
And							381.09	386.9	5.81	2.7
including							386.28	386.9	0.62	16.7
And							393.36	399	5.64	3.1
including							393.36	394.4	1.04	14.2
FAVD0066	418420	7552100	249.7	-50	270	419.7	172	261.66	89.66	0.4
including							228	246.6	18.6	1.1
And including							244.8	246.6	1.8	7.6
And							301	305	4	0.4
And							314.2	314.84	0.64	7.5
And							326.8	329.25	2.45	0.4
And							334.5	337.25	6.79	1.2
including							335.51	336.4	0.89	5.2
And							414.47	415.5	1.03	1.0
FAVD0067	418570	7552500	244.5	-55	270	323.8	35.71	36.4	0.69	1.5
And							138.6	142.08	3.48	0.3
And							156.5	161.9	5.4	0.8
And							165.4	167.3	1.9	0.6
And							242	243	1	1.9
FAVD0068	418480	7552700	242.1	-50	270	240.6	34	37.17	3.17	0.3
And							70.6	73.78	3.18	0.8
including							70.6	71.14	0.54	4.0
And							175.11	182.07	6.96	0.3
FAVD0069	418550	7551800	241.8	-55	270	518.7	189.13	192.4	3.27	0.5
And							257.5	260.2	2.7	1.2
And							335.28	335.56	0.28	17.0
And							425.5	432	6.5	0.6
And							437	438.5	1.5	1.1

Hole	Easting	Northing	RL	Dip	Azimuth	Depth	From	To	Width	Grade Au g/t
And							445.06	445.76	0.7	1.3
And							448.5	451.7	3.2	0.4
And							478	480.2	2.2	2.7
including							479	480.2	1.2	4.3
FAVD0070	418470	7551895	245.3	-55	270	470	57	60	3	1.0
And							122	124	2	0.6
And							128	129	1	2.8
And							253.5	254.5	1	1.6
And							351.6	358	6.4	0.4
And							361.69	368.58	6.89	0.4
And							374	378	4	0.3
FAVD0071	418368.504	7551760	239.7	-55	270	370	27	29	2	1.3
And							75.63	77.4	1.77	0.6
And							100.4	104.3	3.9	0.7
And							140	150.32	10.32	0.3
And							153.8	165.75	11.95	0.6
And							173.4	192.2	18.8	2.5
including							173.4	181.26	7.86	5.2
And including							175.6	177	1.4	14.0
And including							179.3	181.26	1.96	7.2
And							220	232.99	12.99	0.5
And							240.57	251.6	11.03	0.7
And							253.85	262	8.15	3.6
including							255.75	258.2	2.45	11.2
And including							255.75	256.5	0.75	32.2
And							323	325	2	20.4
including							323	324.15	1.15	32.3
And							348.52	355	6.48	0.7
FAVD0072	418324.154	7551450	239.1	-50	270	295.6	129	134	5	0.2
FAVD0073	418560	7552300	246.9	-50	270	419.4	AWR			
FAVD0074	418493.86	7551796.45	241.8	-50	270	IP	AWR			

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
<b>Sampling techniques</b>	<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>	The reported drilling was 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.
	<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>	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. Drill core is sampled at S2's facilities in Kittila, Finland.
<b>Drilling techniques</b>	<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>	Diamond drilling with NQ2 wireline bit producing a 50.7mm diameter core.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	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.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Sample quality is qualitatively logged on a metre basis, recording sample condition.
	<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
<b>Logging</b>	<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 implicit wireframing. All diamond holes are geotechnically and structurally logged.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	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



Criteria	JORC Code explanation	Commentary
	<i>The total length and percentage of the relevant intersections logged</i>	All drill holes were logged in full.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Core sawn in half and half core taken for assay.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Not applicable
	<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, where they are crushed with >70% <2mm (code CRU-31), split by riffle splitter (code SPL-21), and pulverised 1000g 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.
	<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>	For DDH's non-biased core cutting through using an orientation line marked on core and cut to the line
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Samples of appropriate size
<b>Quality of assay data and laboratory tests</b>	<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.  Core samples from Aarnivalkea are analysed for gold undergo a 50g fire assay with AA finish (code Au-AA26).
	<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.
	<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
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	all significant intercepts have been verified by senior S2 exploration personnel, including verifying against drill logging, core photos and/or direct visual inspection of drill core.
	<i>The use of twinned holes.</i>	No twinned diamond holes have been drilled at Aarnivalkea
	<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
<b>Location of data points</b>	<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>	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.



Criteria	JORC Code explanation	Commentary
	<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>	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.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Recent drilling was not completed on a regular grid. Previous diamond drilling at Aarnivalkea has been completed on 40m drill spacings on lines between 80 – 240 metres apart.
	<i>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.</i>	Data spacing and distribution is not sufficient at this stage to allow the estimation of mineral resources.
	<i>Whether sample compositing has been applied.</i>	No sample compositing has been applied
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	At Aarnivalkea, 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 between – 50° and -60° dip 270° azimuth are appropriate. S2 have drilled two holes (FAVD0061 and FAVD0063) obliquely due to the local terrain, but the hole orientations are still considered appropriate.
	<i>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.</i>	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.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	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.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews have been conducted at this stage.

## SECTION 2: REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	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 Aarnivalkea prospect is located within the Paana Central Exploration Licence (ML2018:0081).  The exploration licence is 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.
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	The Aarnivalkea prospect is a greenfield discovery with historic BoT holes drilled in the region by Outukumpu not having been assayed for gold.

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	Aarnivalkea is a shear zone hosted orogenic gold deposit within the Kittila Group of the Paleoproterozoic Central Lapland Greenstone belt. The primary host rocks include altered and sheared basalt, dacites and sediments Alteration assemblages include albite, sericite, carbonate, chlorite with disseminated pyrite, pyrrhotite and arsenopyrite.
<b>Drill hole Information</b>	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: <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul>	Refer to sample plans in text.
<b>Data aggregation methods</b>	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 the reconnaissance 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.
<b>Relationship between mineralisation widths and intercept lengths</b>	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').	At Aarnivalkea, the trend of mineralisation at the targets/prospects described is estimated to be dipping steeply to the east at approximately 75 to 80 deg.  Refer to figures in body of text.
<b>Diagram</b>	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.
<b>Balanced reporting</b>	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.

Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	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.	Not applicable
<b>Further work</b>	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	Drilling is ongoing at Aarnivalkea, with the current drilling planned to scope out the gold potential beneath the shallow drilling to date.