



## HIGH GRADE GOLD HITS IN FIRST RECON DRILLING AT AARNIVALKEA, FINLAND

### Key points

- First phase of wide spaced reconnaissance drilling completed as an initial test of the Aarnivalkea base of till (BOT) gold anomalous trend in Finland
- 32 shallow (~80 metre) diamond holes drilled on five broad (240-320 metre) spaced fences covering a 1,200 metre strike length
- Confirms large new shear system hidden beneath transported glacial cover in previously unexplored district
- Confirms gold anomalism in wide spaced holes with intersections of up to 5.5 metres @ 2.0g/t gold and 6 metres @ 5.4g/t gold (with visible gold)
- Results received from 14 holes with 18 more awaited, so full extent and continuity not yet known
- Rig relocated to Aakenusvaara gold prospect until remaining assay results are received, then drilling will resume at Aarnivalkea in late August
- Additional BOT drilling has defined strike extensions to the Aarnivalkea trend and has identified a new parallel trend to the west, with end of hole values of up to 2.17g/t gold
- Very encouraging result for first ever drilling in an entirely new concealed terrain identified by S2's systematic greenfields exploration methodology
- Assays also received for remaining two holes at Gwardar nickel prospect (Polar Bear, WA) indicate prospective nickel sulphide bearing lava channel, 160 metres across and open down plunge

S2 Resources Ltd ("S2" or the "Company") advises that it has completed the first phase of reconnaissance diamond drilling at its 100% owned Aarnivalkea gold anomaly in Finland, and has received assay results for the first 14 of 32 holes drilled.

The drilling has achieved its objective of confirming the presence of a significant shear zone system with intense hydrothermal alteration, widespread gold anomalism, and high grade gold mineralisation, with better intercepts including:

- 10 metres @ 1.0g/t gold from 87 metres in FAVD0006
- 5.5 metres @ 2.0 g/t gold from 42 metres, including 0.7 metres @ 6.7 g/t gold and 1 metre @ 5.3g/t gold, in FAVD0012
- 6.0 metres @ 5.4 g/t gold from 59 metres, including 4 metres @ 7.8g/t gold in FAVD0015

These intercepts are on two lines 560 metres apart, with assay results for the intervening line of holes awaited. The results are considered highly encouraging given that this is the first phase of a broad reconnaissance program designed to confirm the presence of a shear zone, and to test for gold anomalism. The drilling is very wide spaced (fences spaced at intervals of 240-320 metres) and relatively shallow in nature (most holes 80-90 metres depth) making it particularly pleasing that both objectives have been achieved (see Figure 1).

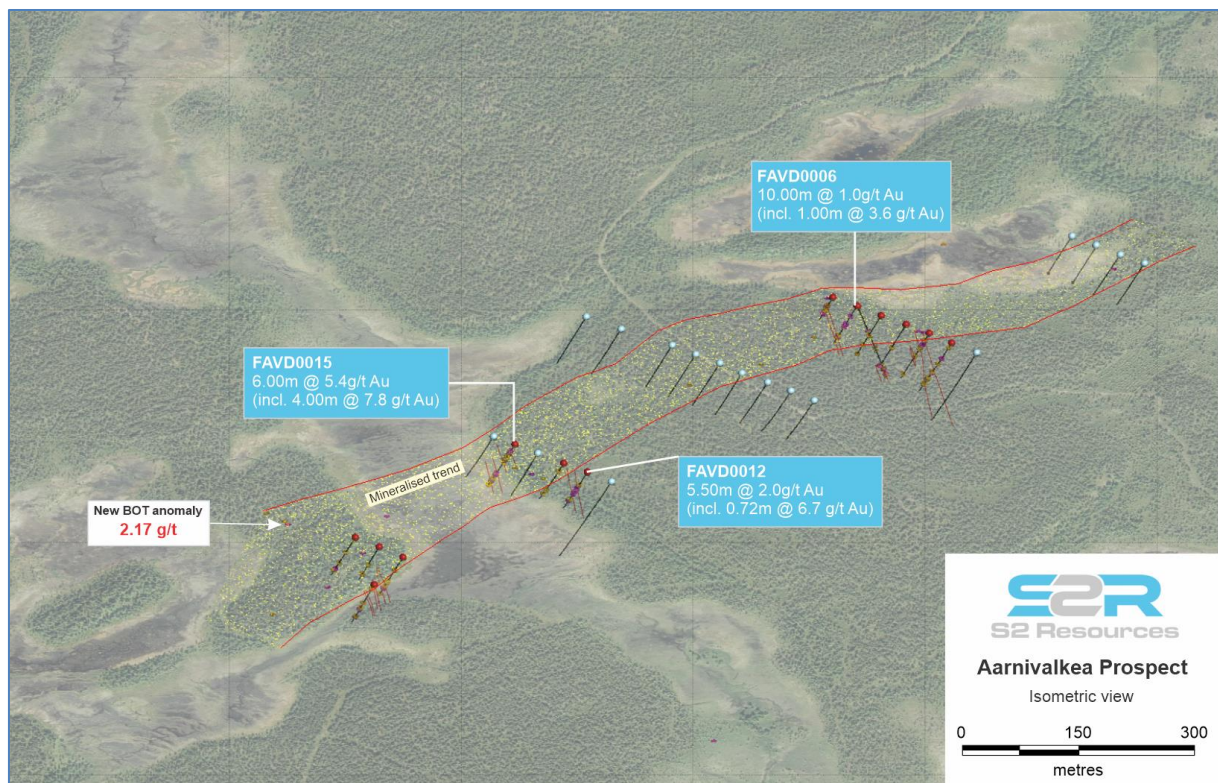


Figure 1. Isometric view looking northwest showing wide spaced (240-320 metre) fences of shallow (~80 metre) diamond holes and the location of the new BOT anomaly to the west of current drilling. Holes with light blue collars are those awaiting assay results.

Gold anomalism/mineralisation is mainly associated with interpreted steep easterly dipping zones of intense shearing and alteration within and at the contacts of basalts and dacitic porphyries (see Figure 2).

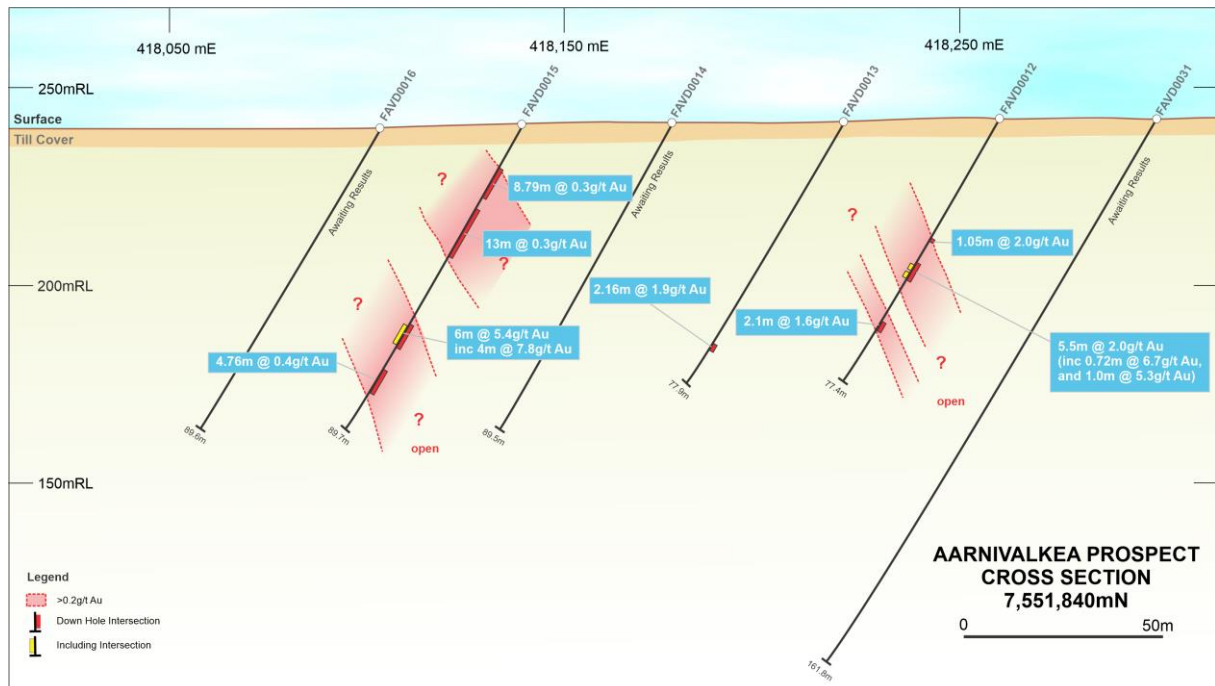


Figure 2. Cross section showing anomalous envelopes (>0.2g/t gold) and mineralised intercepts (>1.0g/t gold) for those holes with assays received to date.

The alteration exhibits classic mesothermal lode gold characteristics including an earlier phase of ductile shearing and chlorite-sericite (potassic) alteration, a later phase of albite (sodic) alteration with brittle quartz-carbonate-(scheelite) veining, brecciation, and locally strong carbonate-silica-sulphide alteration with pyrite and/or arsenopyrite. Free gold has been observed in the most strongly mineralised intercept in hole FAVD0015 (see Figure 3).



Figure 3. Magnified photograph showing free gold grains and associated arsenopyrite crystals within a silicified matrix.



Meanwhile, BOT drilling undertaken concurrently with the diamond drilling has extended the Aarnivalkea anomaly to the south and has also identified a parallel trend to the west of the main trend, with a best end of hole value of 2.17g/t gold (see Figure 4).

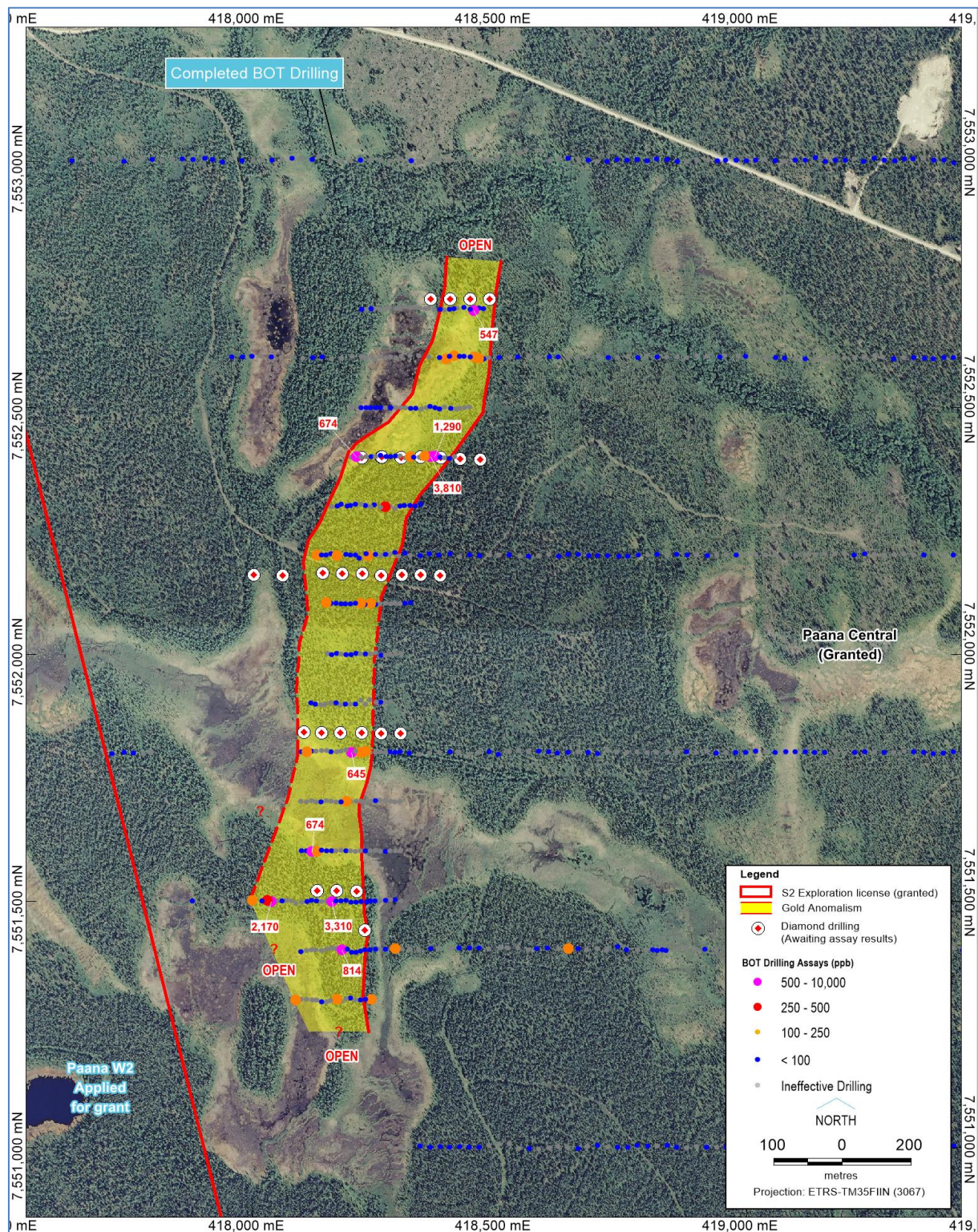


Figure 4. BOT anomaly with additional line to the south and a new trend to the west (at the southwest end of the anomaly).



The Company's "Paana W2" exploration licence application to the west and southwest of Aarnivalkea is being fast tracked through TUKES, the Finnish Mining Authority, to enable extended BOT exploration on the southern continuation of the prospective mineralised structures (see Figure 5).

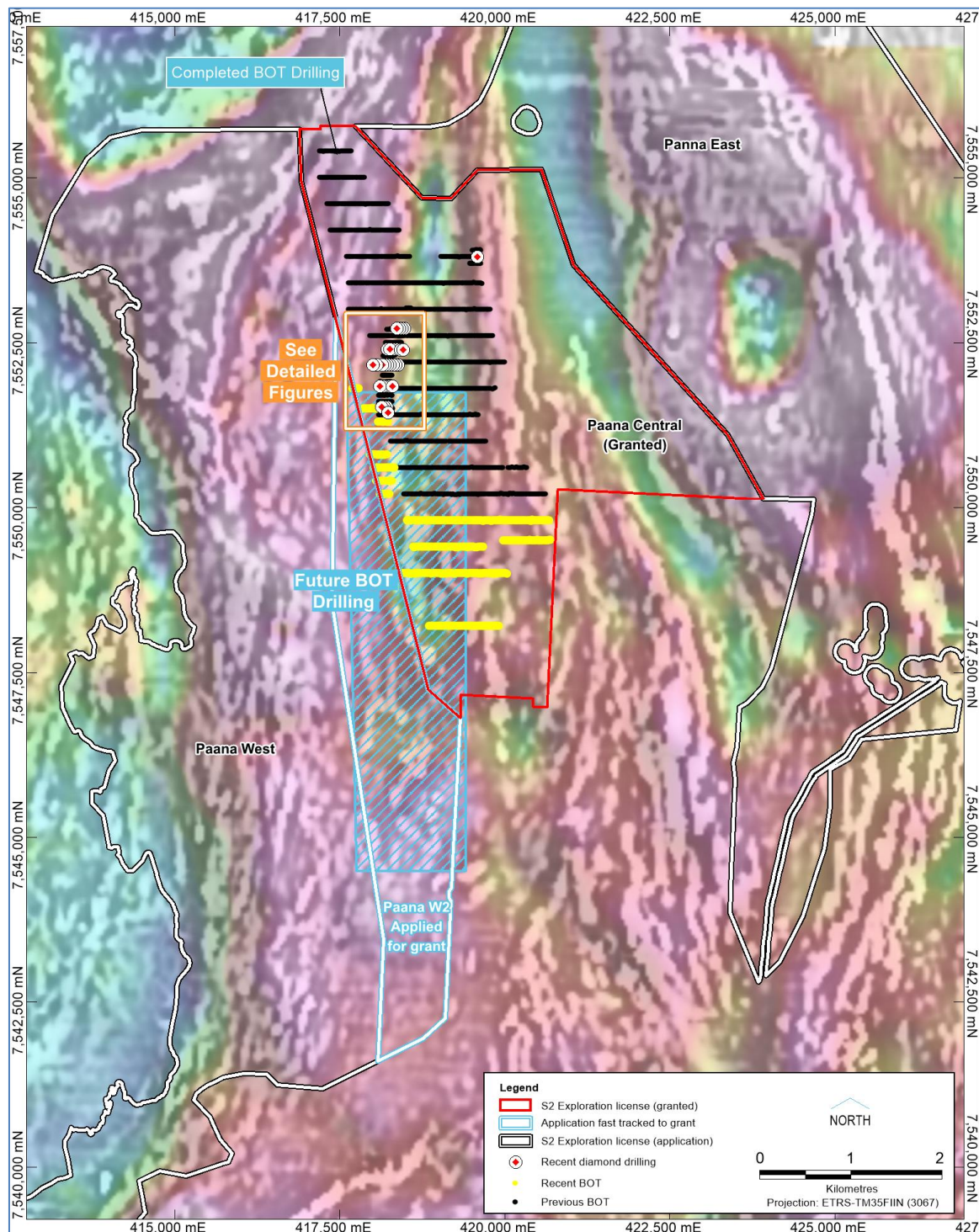


Figure 5. Location of Aarnivalkea prospect (red diamond drillhole collars) relative to completed BOT drilling (black dots/lines), planned BOT drilling (yellow dots/lines) and fast-tracked "Paana W2" exploration licence application area (light blue outline). Additionally, S2 has sole rights to the remainder of the large Paana exploration licence application area (white outline).

Given the broad spacing of the holes drilled to date and the number of holes with assays still awaited it is too soon to identify specific hotspots for follow up so the rig has been moved to start drilling the Aakenusvaara gold prospect. Once the remaining assays have been received the rig will commence follow up drilling which will comprise infill lines to tighten the spacing along strike, extensional lines to test the new BOT anomalies, and probe around the gold hotspots identified in phase 1.

It is anticipated that the remaining assays will be received by mid-late August and that the rig will recommence drilling at Aarnivalkea by late August. Much of the prospect is accessible year round but some parts located beneath shallow swamps may only be accessed during the winter freeze (usually December to March), so these considerations will also govern priorities.

*S2's CEO Mark Bennett said "Finland is a highly prospective but under-explored country and despite being only 25 kilometres away from Europe's biggest gold mine, Aarnivalkea is completely unexplored, so these preliminary drilling results underpin the reason why we decided to explore there. Our next milestone is the receipt of further assays from other holes completed, and we hope to build on these results over the coming weeks through our systematic program at Aarnivalkea whilst also progressing our other emerging gold and nickel prospects elsewhere in Lapland".*

#### **Gwardar nickel prospect, Western Australia**

Results have also been received for the remaining holes recently drilled at the Gwardar nickel prospect, Polar Bear, Western Australia, where S2 holds 100% of the nickel rights on the ground previously sold to Westgold (now RNC).

Hole SPBD0360, reported on 22<sup>nd</sup> July 2019, intersected several zones of nickel sulphide in the centre of a Kambalda-style lava channel including 17.83 metres @ 0.75% nickel (including 0.75 metres @ 2.41% nickel and 0.68 metres @ 3.31% nickel) and 3.33 metres @ 1.38% nickel.

The two follow up holes drilled at approximately the same depth but to the north and south of SPBD0360 also intersected disseminated and narrow massive sulphides, indicating that the lava channel is nickel sulphide-bearing over a lateral width of about 160 metres, and open down plunge.

Hole SPBD0362 intersected a possible footwall embayment marking the southern edge of the lava channel approximately 80 metres to the south of the intercept in SPBD0360, containing a narrow zone of sulphides (1.22 metres @ 1.38% nickel including a narrow band of massive sulphides grading 6.16% nickel over 15 centimetres). Hole SPBD0361, drilled approximately 80 metres north of SPBD0360 intersected 5.7 metres @ 0.57% nickel (see Table 2 for details of intercepts).

Although these intercepts are not mineable grade and width, the abundance of sulphide, the size of the lava channel, and the fact that it is open down plunge are considered encouraging indications of its potential. Follow up drilling is being planned.

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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.

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.

Hole	Easting	Northing	RL	Dip	Azimuth	Depth	From	To	Width	Grade Au g/t
FAVD0001	418381	7552400	245	-60	270	95.2	16.08	16.71	0.63	2.0
and							23.66	27.00	3.34	1.3
including							23.66	24.36	0.70	4.6
FAVD0002	418341	7552401	244	-60	270	92.8	87.00	88.00	1.00	1.7
FAVD0003	418301	7552399	244	-60	270	83.8	NSI			
FAVD0004	418260	7552400	243	-60	270	80.0	21.31	22.19	0.88	1.2
and							62.77	64.19	1.42	0.7
FAVD0005	418221	7552399	243	-60	270	47.8	16.00	17.70	1.70	2.0
FAVD0006	418261	7552400	244	-60	90	100.0	<b>87.00</b>	<b>97.00</b>	<b>10.00</b>	<b>1.0</b>
including							90.00	91.00	1.00	3.6
FAVD0007	418420	7552396	246	-60	270	104.6	32.00	34.00	2.00	0.8
and							62.80	64.60	1.80	1.1
including							62.80	63.70	0.90	3.3
and							75.00	79.30	4.30	0.4
and							88.00	91.00	3.00	0.5
FAVD0008	418210	7551521	239	-60	270	80.4	25.50	27.80	2.30	0.4
and							64.00	65.00	1.00	3.0
FAVD0009*	418170	7551521	240	-60	270	71.3	NSI			
FAVD0010*	418131	7551521	240	-60	270	80.6	65.00	66.00	1.00	3.4
FAVD0011*	418226	7551441	239	-60	270	81.0	66.00	69.00	3.00	0.6
FAVD0012*	418260	7551840	242	-60	270	77.4	35.00	36.05	1.05	2.0
and							42.00	47.50	5.50	2.0
including							<b>43.41</b>	<b>44.13</b>	<b>0.72</b>	<b>6.7</b>
including							<b>46.50</b>	<b>47.50</b>	<b>1.00</b>	<b>5.3</b>
and							59.90	62.00	2.10	1.6
FAVD0013*	418221	7551841	242	-60	270	77.9	65.28	67.44	2.16	1.9
FAVD0014	418178	7551841	241	-60	270	89.5	AWR			
FAVD0015*	418140	7551841	241	-60	270	89.7	12.21	21.00	8.79	0.3
and							25.00	38.00	13.00	0.3
and							59.00	65.00	6.00	5.4
including							<b>61.00</b>	<b>65.00</b>	<b>4.00</b>	<b>7.8</b>
and							73.99	78.75	4.76	0.4
FAVD0016	418104	7551842	240	-60	270	89.6	AWR			
FAVD0017	418380	7552160	250	-60	270	86.8	AWR			
FAVD0018	418340	7552162	250	-60	270	89.8	AWR			
FAVD0019	418302	7552161	249	-60	270	89.6	AWR			
FAVD0020	418260	7552161	249	-60	270	89.8	AWR			
FAVD0021	418221	7552163	249	-60	270	89.8	AWR			
FAVD0022	418181	7552164	247	-60	270	89.6	AWR			
FAVD0023	418142	7552165	247	-60	270	89.3	AWR			
FAVD0024	418061	7552160	244	-60	270	98.8	AWR			
FAVD0025	418002	7552162	241	-60	270	98.8	AWR			
FAVD0026	418461	7552396	246	-60	270	145.9	AWR			
FAVD0027	418480	7552719	243	-60	270	89.7	AWR			
FAVD0028	418440	7552720	242	-60	270	89.8	AWR			
FAVD0029	418401	7552721	242	-60	270	89.9	AWR			
FAVD0030	418360	7552721	242	-60	270	68.9	AWR			
FAVD0031	418300	7551840	242	-60	270	150.0	AWR			
FPAD0001	419580	7553800	251	-60	270	83.7	AWR			

Table 1. Details of all diamond holes completed at Paana central lease (including Aarnivalkea) in 2019 by S2. Note Holes marked with an asterisk\* have preliminary results only.



Hole	Easting	Northing	RL	Dip	Azimuth	Depth	From	To	Width	Ni (pct)	Cu (pct)
SPBD0083	388748	6472647	266	-60	286	272.0	NSI				
SPBD0360	388840	6472440	266	-60	268	270.0	159.00	166.00	7.00	0.47	0.04
and							183.00	200.83	17.83	0.69	0.05
including							194.53	195.28	0.75	2.41	0.08
and including							<b>200.15</b>	<b>200.83</b>	<b>0.68</b>	<b>3.31</b>	<b>0.43</b>
and							223.67	227.00	3.33	1.38	0.24
SPBD0361	388825	6472470	266	-60	287	290.0	248.90	254.60	5.70	0.57	0.07
SPBD0362	388870	6472400	266	-55	240	250.0	186.30	188.09	1.79	0.60	0.04
and							211.20	212.42	1.22	1.38	0.05
including							<b>212.27</b>	<b>212.42</b>	<b>0.15</b>	<b>6.16</b>	<b>0.09</b>

Table 2. Details of all diamond holes completed at Gwardar, Western Australia in 2019 by S2.

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 - FINLAND

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 Moreenitoy 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.
	<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 and base metals. Drill core is sampled at S2's facilities in Kittila, Finland.
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. Diamond drilling with NQ2 wireline bit producing a 50.7mm diameter core.

Criteria	JORC Code explanation	Commentary
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	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.
	<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
	<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>	Bot samples are dried and sieved with the fine fraction submitted for assay. 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, 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.
	<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



Criteria	JORC Code explanation	Commentary
<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. 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, Ti & 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, Ti & Zn undergo an oxidising digestion with ICP-AES Finish (code ME-ICPORE).
	<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>	Andy Thompson, Country Geology Manager for S2 has personally inspected all drill cores and rock samples.
	<i>The use of twinned holes.</i>	No twinned diamond holes have been drilled at Arnievalkea
	<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>	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.
	<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>	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.
	<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

Criteria	JORC Code explanation	Commentary
<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>	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.
	<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 - FINLAND

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 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.
<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 Outokumpu not having been assayed for gold.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	The prospect 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.



Criteria	JORC Code explanation	Commentary
<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').	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.
<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.	None at present
<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	BoT drilling will continue where ground is accessible throughout summer. This will initially focus immediately south and south west of Arnievalkea where the geochemical anomaly is still open. 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. A detailed airborne magnetic survey is planned so as to complement infill the current excellent but more regional data. Infill gravity over the Paana tenements is also being planned.

## **SECTION 1 SAMPLING TECHNIQUES AND DATA – GWARDAR, WA**

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>	<p>The Gwardar prospect was sampled in four diamond drill holes, undertaken by DDH1 Pty Ltd. Drilling is orientated in a westerly direction, with specific azimuth modified to gain desired separation along strike.</p> <p>Sampling has been carried out by cutting and sampling half core through areas of visible mineralisation, with sample intervals to lithological contacts, to a maximum length of 1.2 metres.</p> <p>All are forwarded for analyses by Minanalytical Laboratories Services Australia Pty Ltd in Perth.</p>
	<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 diamond core is HQ and NQ2 size, sampled on geological intervals (0.2 m to 1.2 m), cut into half (NQ2) or quarter (HQ) core to give sample weights under 3 kg. Samples were crushed, dried and pulverised (total prep) to produce a sub sample for analysis by four acid digest with an ICP/OES
<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>	Drilling is standard diamond coring, using either HQ triple tube or NQ2 core diameter. The core has been orientated using a an Ace orientation tool.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	Diamond core recoveries are logged and recorded in the database. Overall recoveries are >>95%.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers.
	<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>	<p>Logging of diamond core and RC samples records lithology, mineralogy, mineralisation, structural (DDH only), weathering, colour and other features of the samples</p> <p>logging uses a standard legend developed by S2 which is suitable for wireframing of the basement interface.</p> <p>Exploration holes are not routinely geotechnically logged but resource holes are.</p>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	All core is photographed in both dry and wet form.



Criteria	JORC Code explanation	Commentary
	<i>The total length and percentage of the relevant intersections logged</i>	All drillholes were logged in full to end of hole.
<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 was cut in half (NQ2) and quarter core (HQ) onsite using an automatic core saw. All samples were collected from the same side of the core.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	No non-core sampling was completed
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	The sample preparation follows industry best practice in sample preparation involving oven drying, coarse crush and pulverisation of entire sample to minimum of 85% passing - 75um.
	<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>	Non-biased sampling using the orientation line as a guide for cutting with the same half used for all sampling.  No duplicate samples have been collected at this stage
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are considered to be appropriate to correctly represent the sought after mineralisation style
<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>	For core samples the analytical techniques used a four acid digest multi element suite with ICP/OES or ICP/MS finish (25 gram or 50 gram FA/AAS for precious metals).  The acids used are hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for silica based samples.  The method approaches total dissolution of most minerals.
	<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>	The S2 Exploration Manager has personally inspected all sampled core and assay results.
	<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
<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>	Drill hole collar locations were recorded using handheld Garmin GPS. Elevation values were in AHD RL and values recorded within the database. Expected accuracy is + or - 5 m for easting, northing and 10m for elevation coordinates.  Downhole surveys using an Axis north-seeking gyro with readings at surface and then every 30m downhole.

Criteria	JORC Code explanation	Commentary
	<i>Specification of the grid system used.</i>	The grid system is MGA_GDA94 (zone 51), local easting and northing are in MGA.
	<i>Quality and adequacy of topographic control.</i>	Topographic surface uses handheld GPS elevation data, which is adequate at the current stage of the project.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The nominal drillhole spacing is project specific, refer to figures in text
	<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, sampling technique 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>	Geochemical sampling of basement interface only.
	<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>	Drilling of diamond core is on a nominal 60 degrees to the west, which is broadly orthogonal to the mineralisation.
<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 on site at the S2 remote camp.  Bagged samples are transferred to Minanalytical Laboratory in Kalgoorlie 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 – GWARDAR, WA

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 Gwardar prospect is located on tenement M63/230 owned by Polar Metals Pty Ltd (a wholly owned subsidiary of Royal Nickel Corp) and is part of the Polar Bear Project. S2 retains rights to nickel mineralisation within the Polar Bear project.  M63/230 is located within the Ngadju Native Title Claim (WC99/002).
	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.	Historical drilling by Anaconda Nickel Ltd drilled a number of diamond and percussion drill holes along the interpreted ultramafic basal contact. Collar locations from historical drill holes have not been field verified.  INCO conducted a reconnaissance small loop Slingram type EM survey. Six diamond holes were drilled (none at Gwardar).  Sirius Resources undertook MLEM and RC and diamond drilling along the Taipan – Gwardar trend, with a total of one diamond hole and six RC holes within the Gwardar prospect.  The collar locations for all INCO and Sirius drill holes have been verified by S2 personnel.

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<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	<p>The geology at Polar Bear is dominated by complexly deformed Achaean greenstone assemblages of the Norseman-Wiluna Greenstone Belt which have been metamorphosed to upper greenschist facies.</p> <p>The Eudyne Mafic Sequence (EMS) consists of tightly folded ultramafic and mafic intrusives and extrusives with minor interflow sediments. The rocks are frequently talc-carbonate altered and moderately well foliated. The ultramafic rocks are typically komatiites and komatiitic basalt.</p> <p>The deposit style sought after is analogous to Kambalda-style nickel copper sulphide deposits.</p>
<b>Drill hole Information</b>	<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"> <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.	Reported assay results for diamond drilling have been length and bulk density weighted. Intervals have been calculated using a 0.4% nickel lower cut-off, with maximum of 2m internal dilution.
	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.	Individual sample intervals vary between 0.2 and 1.2 metres, selected based on lithological contacts.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No reporting of metal equivalent has been used.
<b>Relationship between mineralisation widths and intercept lengths</b>	<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 NNW, dipping at approximately 60 degrees to the ENE. RC and Diamond drilling has been used to determine this.</p> <p>Refer to figures in body of text.</p>
<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.	No other exploration data present.
<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	Detailed processing and modelling of DHEM data. Additional diamond drilling to test down-dip of the existing drilling.