



## DISSEMINATED NICKEL-COPPER SULPHIDES INTERCEPTED AT WEST MURCHISON PROJECT IN WESTERN AUSTRALIA

### Key Points

- **Maiden drilling program intercepts disseminated nickel and copper sulphides at the Woodrarung magmatic sulphide intrusive target, within the West Murchison Project in Western Australia**
- **Two 3 metre thick intervals containing disseminated sulphides were visually identified in hole SWMC007 with handheld XRF confirming elevated nickel and copper within these zones**
- **Drilling at the Woodrarung target is ongoing with further reconnaissance drilling also planned for the Whitehurst target to the south**
- **Airborne electromagnetic surveys (AEM) due to commence later this month over three additional targets within the West Murchison project**
- **Moving loop ground electromagnetic (MLEM) surveys currently underway at the Three Springs project in Western Australia**

### Disseminated sulphides intercepted at Woodrarung target

S2 Resources Ltd (“S2” or the “Company”) advises that the maiden drilling program at the Company’s 100% owned West Murchison Project in Western Australia (Figure 1) has intercepted disseminated sulphides. Seven reverse circulation (RC) holes have been completed to date for a total of 832 metres, part of a co-funded drilling program under the Department of Mines, Industry Regulation and Safety (DMIRS) sponsored Exploration Incentive Scheme (EIS). This drilling has intersected a thick sequence of mafic-ultramafic rocks, comprising intermixed serpentinites (olivine rich cumulate ultramafics), tremolite-chlorite schists (potentially after pyroxenite) and mafic amphibolites (potentially after gabbro). These rocks are interpreted to represent components of an intrusive magmatic complex and confirm the Company’s targeting methodology. The northernmost drill hole, SWMC007 (see Figure 2), intersected two zones of disseminated sulphides (approximately 5% of the rock mass) between 61-64 metres and 68–71 metres downhole. Handheld XRF readings confirm the presence of elevated nickel (0.20% to 0.76%) and copper (0.30% to 1.18%) within these intervals. The sulphides appear to be associated with a discrete mafic magmatic phase located just above a more ultramafic phase of magma now represented by serpentinite. Drilling at the Woodrarung target was designed to follow up on a previously defined semi-coincident nickel,

copper, platinum-palladium and gold soil geochemical anomaly (refer to S2's ASX announcement dated 13 July 2020).

Drill holes SWMC001 to SWMC006, drilled 160 to 880 metres to the south of SWMC007, encountered only trace sulphides. Samples for all holes will now be submitted for analysis.

Commenting on the drilling, S2's Chief Executive Officer Matthew Keane said, "West Murchison represents a conceptual greenfields project considered prospective for intrusive magmatic style nickel-copper-PGE mineralisation. Confirmation that previously identified magnetic anomalies are associated with intrusive mafic-ultramafic geology, coupled with the presence of nickel-copper bearing sulphides, goes a long way towards proving S2's targeting model for the region".

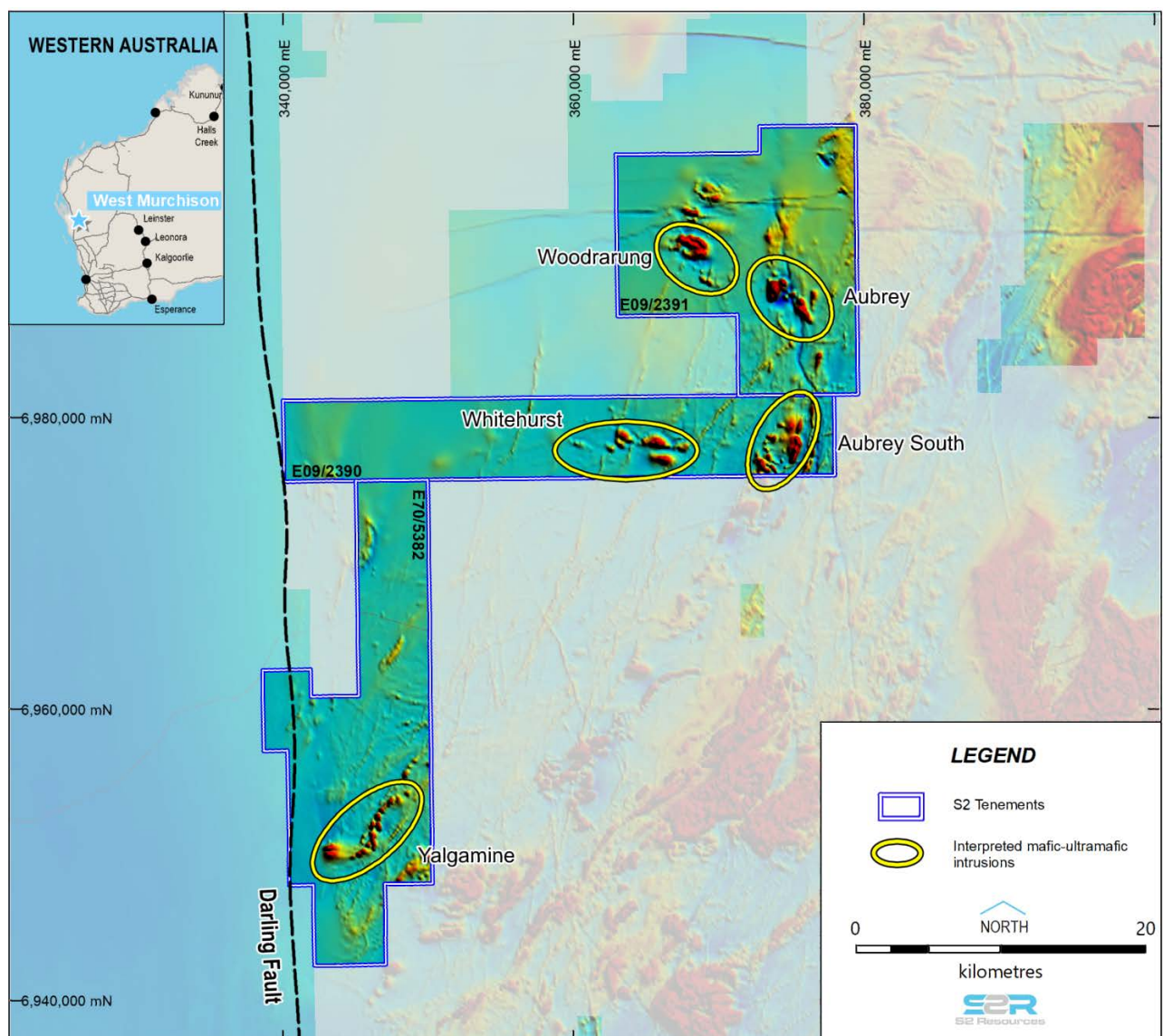


Figure 1. Location of the magnetic and geochemical targets at the West Murchison Project underlain by aeromagnetic imagery showing both mapped and interpreted mafic-ultramafic intrusions.

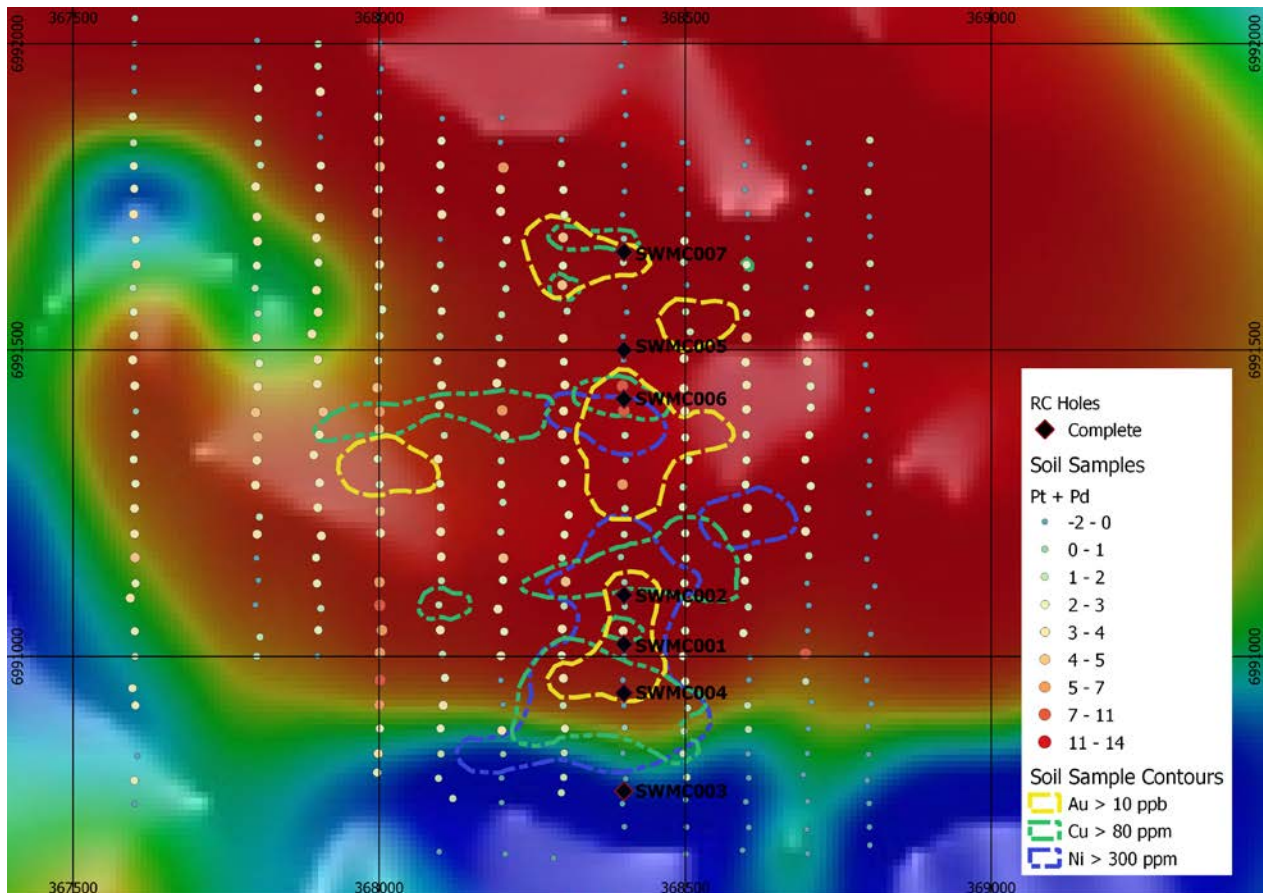


Figure 2. Location of RC drill holes at the Woodrarung target showing coincident soil geochemical anomalism underlain by aeromagnetic imagery.

### Ongoing drilling and geophysics at West Murchison

RC drilling is ongoing. Following the completion of hole SWMC007, the next hole will be drilled approximately 40 metres to the south. Note that holes SWMC007 and SWMC005 were drilled some 160 metres apart. Further drilling to the north of SWMC007 is planned subject to obtaining an extension to the existing heritage survey clearance area.

The current drill program will also include approximately four reconnaissance RC holes at the Whitehurst target to the south of Woodrarung. Drilling at Whitehurst will target a nickel-copper-chrome soil geochemical anomaly which is coincident with mapped ultramafic outcrops. Soil samples in this area contain up to 226 ppm copper associated with anomalous nickel (max 685 ppm). There is also an isolated PGE anomaly up to 21ppb (combined platinum and palladium) on the southern margin of the copper anomaly (Figure 3).

A HELITEM® airborne electromagnetic survey is due to commence later this month over the Aubrey, Aubrey South and Yalgamine targets (Figure 1). Previous soil geochemical surveys have identified anomalous nickel and copper at all three target areas.



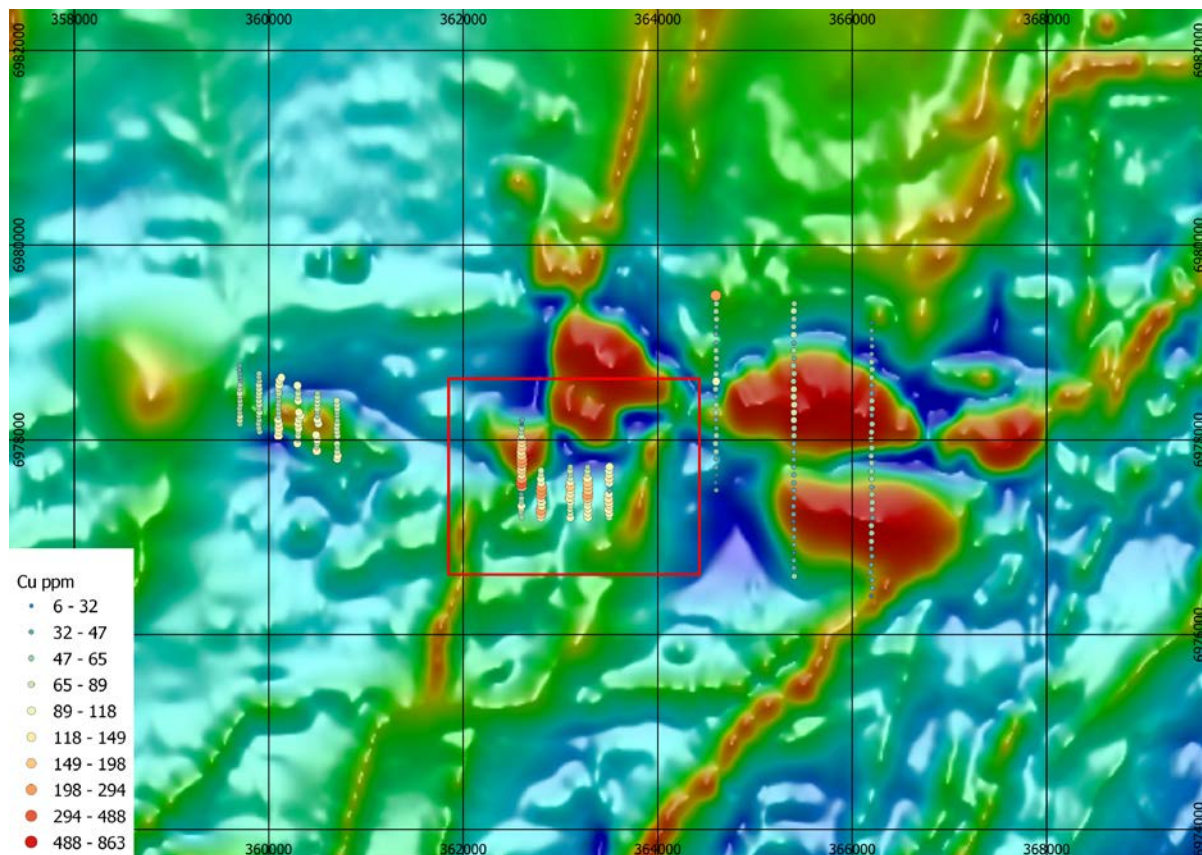


Figure 3. Whitehurst copper in soil anomalies (recorded in ppm from ultrafine soil sampling) over RTP magnetics.

### EM surveys underway at Three Springs

S2's 100% owned Three Springs project is also considered prospective for intrusive magmatic style nickel-copper-PGE mineralisation (Figure 4). A ground moving loop electromagnetic (MLEM) survey is currently underway testing three initial target areas identified from underlying magnetic ridges and outcropping mafic-ultramafic geology. S2 completed a first pass auger drilling program over these areas in January-February 2022 (assay results are awaited).

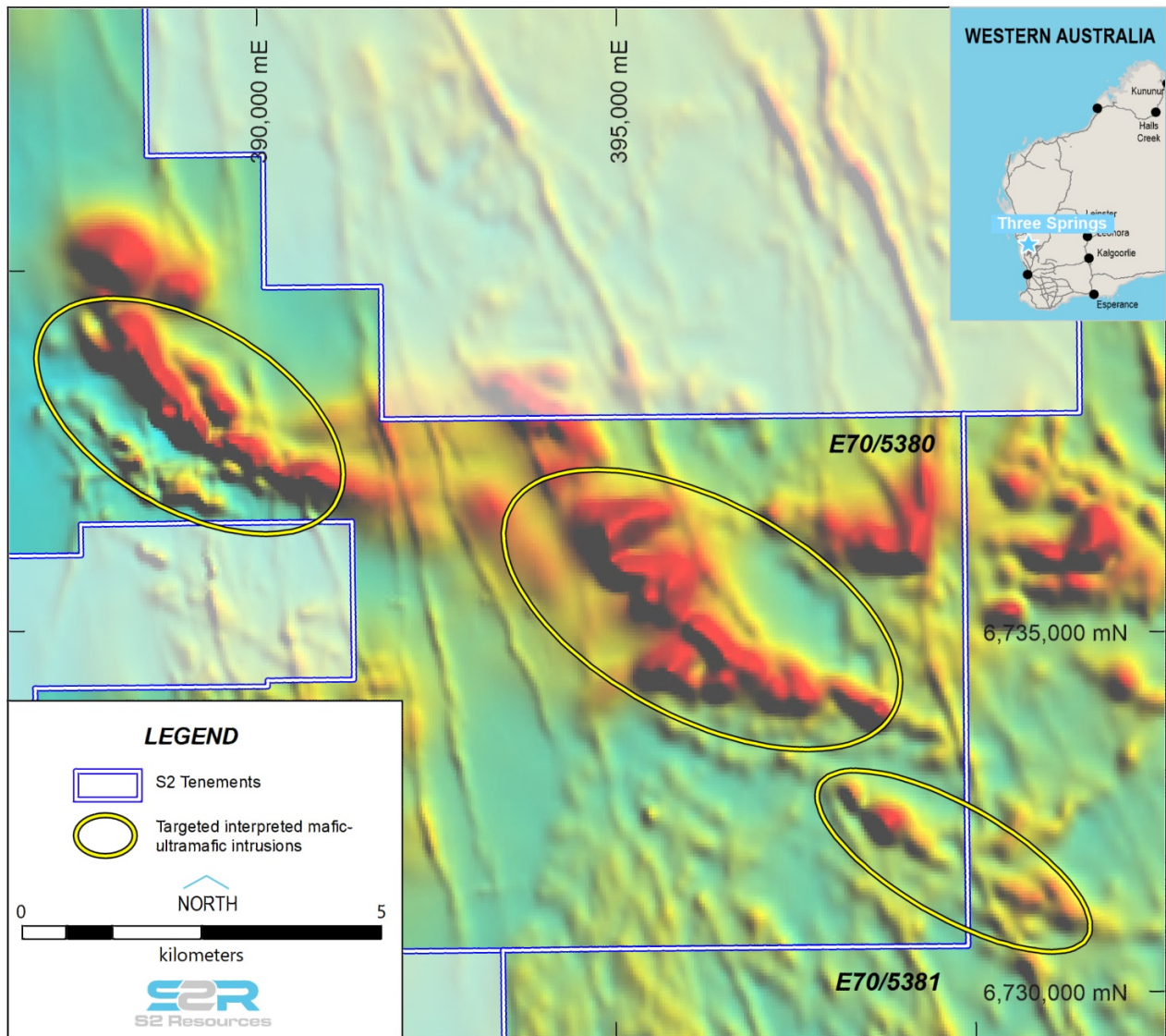


Figure 4. Airborne magnetic image of the Three Springs Project showing three target areas defined by magnetic highs and outcropping mafic-ultramafic geology.

This announcement has been provided to the ASX under the authorisation of the S2 Board.

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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 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.

**Table 1. Summary of drilling – West Murchison RC drilling**

Target	Hole	Easting	Northing	RL	Azimuth	Dip	Depth	From	To	Width	Grade
Woodrarung	SWMC0001	368400	6991020	308	180	-60	148			AWR	
Woodrarung	SWMC0002	368400	6991100	308	180	-60	118			AWR	
Woodrarung	SWMC0003	368400	6990780	300	180	-60	118			AWR	
Woodrarung	SWMC0004	368400	6990940	306	180	-60	64			AWR	
Woodrarung	SWMC0005	368400	6991500	309	180	-60	118			AWR	
Woodrarung	SWMC0006	368400	6991420	309	180	-60	118			AWR	
Woodrarung	SWMC0007	368400	6991660	312	180	-60	148			AWR	

### SECTION 1: SAMPLING TECHNIQUES AND DATA – WEST MURCHISON

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>	Current drilling by S2 at West Murchison consists of aircore drill holes, completed by Strike Drilling, based out of Perth.  A one metre split is collected for each meter using an on-board, cyclone cone splitter and retained. The one-metre samples are collected through zones of logged sulphide for submission to the laboratory. For all other intervals, a nominal 4 metre composite samples are collected using a spear.
	<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 selected samples are to be submitted for analysis for multi-element suite by four acid digest with an ICP/OES and ICP/MS finish and gold, platinum palladium by 50g fire assay
<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>	RC drilling is being completed utilizing a 5 inch, face sampling hammer.



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>	Qualitative sample recoveries have been recorded for each metre
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Use of drilling fluids have been used to maximise recoveries where appropriate
	<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 assays have been received, so no relationship can yet be determined
<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>	Logging of RC samples uses a standard legend developed by S2 which records lithology, mineralogy, mineralisation, weathering, colour and other features of the samples
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging is considered qualitative.
	<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>	No core drilling
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</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>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Full QAQC system in place to determine accuracy and precision of assays
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Sample collection sites were selected to avoid areas of obvious disturbance as well as to avoid creek lines. All sample equipment was clean and dry brushed between sites to avoid contamination.
	<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 composite samples, sampling was conducted by running the spear or scoop through the entire sample spoil. Samples were collected such that the amount of material collected from each metre was as similar as possible.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample size is considered appropriate.
<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>	The use of 4-acid digest and fire assay techniques are appropriate for the stage of exploration, and are considered near total digest
	<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>	No significant intersections have yet been reported on the tenements
	<i>The use of twinned holes.</i>	No twin holes have been completed

Criteria	JORC Code explanation	Commentary
	<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 to any assay data has been undertaken
<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.
	<i>Specification of the grid system used.</i>	The grid system is GDA94 (MGA), zone 50.
	<i>Quality and adequacy of topographic control.</i>	Elevation data for the soil data has been derived directly from the Garmin handheld GPS and is considered adequate given the preliminary nature of the exploration activities.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Drilling has been completed on a single N-S drill line with holes spaced 80 – 320 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>	The sampling to date is inadequate to establish geological and grade continuity for the purposes of Mineral Resource estimation
	<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>	The sampling is preliminary in nature and is currently not possible to assess whether sampling is unbiased
	<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>	Not applicable (see comments above)
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Samples were collected and bagged up on site to transported to the company's office facilities in Perth
<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 – WEST MURCHISON

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 West Murchison Project comprises three exploration licenses, located southwest of Murchison in Western Australia. The ELs are E09/2390, E09/2391 and E70/5392. The ELs are 100% owned by Southern Star Exploration Pty Ltd, a 100% owned subsidiary of S2 Resources. The tenements are located wholly within (WC2004/010) Wajarri Yamatji #1 Native Title claim (partially determined) and partially within (WC1996/093) Mullewa Wadjari Community Native Title claim
	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.	No known impediments to obtaining a licence to operate in the area. All of the Exploration Licences are granted and a heritage agreement has been finalised with the native title claim group (Wajarri Yamatji #1).



Criteria	JORC Code explanation	Commentary
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	The Tenements have had no published or open file exploration work for magmatic nickel/ copper or orogenic gold style mineralisation. WMC undertook limited rock chip sampling in 1977 to assess the potential for chromite mineralisation of outcropping ultramafic within the project area.
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	The project is located on the southwest margin of the Narryer Gneiss Terrain, a poly-deformed complex of granite and interleaved Archean greenstone (mafic, felsic and sedimentary lithologies) accreted to the northwest margin of the Yilgarn Craton. The target mineralisation style is magmatic nickel-copper-PGE sulphide mineralisation hosted in or associated with mafic-ultramafic intrusions.
<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 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>	All drilling conducted on the tenement are reported in Table 1.
<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.	No results from drilling have been reported on the tenements
	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.	No results from drilling have been reported on the tenements
	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').	No results from drilling have been reported on the tenements
<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.	<p>Surface soil geochemical sampling has been completed over selected areas.</p> <p>MLEM electromagnetic surveys have been carried out over the Woodrarung and Whitehurst target areas</p>
<b>Further work</b>	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive</p>	<p>Upon completion of RC drilling at Woodrarung, the rig will move to test geochemical targets on the Whitehurst target area.</p> <p>A heliborne AEM survey is planned over the remaining untested target areas (Aubrey, Aubrey South and Yalgamine)</p>