



EXPLORATION LICENCES GRANTED FOR WEST MURCHISON PROJECT, PROSPECTIVE FOR MAGMATIC NICKEL-COPPER-COBALT AND PGE RICH METALS

Key Points

- **All three exploration licences at S2's 100% owned West Murchison project have been granted, covering a combined area of approximately 690km²**
- **The West Murchison project is prospective for Ni-Cu-Co-PGE mineralisation with mapped outcropping ultramafics and anomalous nickel and copper in soil geochemistry**
- **The project also has gold potential with rock chips returning up to 0.83g/t Au and a gold in soil anomaly coincident with the nickel and copper anomalism**
- **S2 plans to commence electromagnetic (EM) surveys and further soil sampling in June-July 2021**

S2 Resources Ltd ("S2" or the "Company") advises that all three Exploration Licences (E70/5382, E09/2390 and E09/2391) at its 100% owned West Murchison project have been granted, covering a combined area of approximately 690 square kilometres (refer to S2 ASX announcement dated 14th April 2020). Correspondingly, S2 has entered into a heritage agreement with the Wajarri Yamatji Native Title group.

The three Exploration Licences sit on the north-western margin of the Archean Yilgarn Craton within the Narryer Terrane, proximal to the Darling Fault which is long lived structure dating back to the Proterozoic (Figure 1). The area is considered prospective for intrusive, mafic-ultramafic related Ni-Cu-Co-PGE mineralisation due to:

- Mapped mafic-ultramafic bodies, as well as additional discrete magnetic features interpreted to be similar bodies under cover (Figure 2)
- The region's complex structural history, including evidence of Proterozoic overprinting associated with the Capricorn Orogen
- Evidence of nickel mineralisation with sub-economic nickel intercepts associated with multi-phase sulphide mineralisation within the Milly Milly intrusion, to the north of the project area (best result 22.7 metres at 0.3% Ni, including 0.5 metres at 0.64% Ni)
- Nickel, copper, PGE and gold anomalism confirmed in S2 surface sampling of one of these intrusions

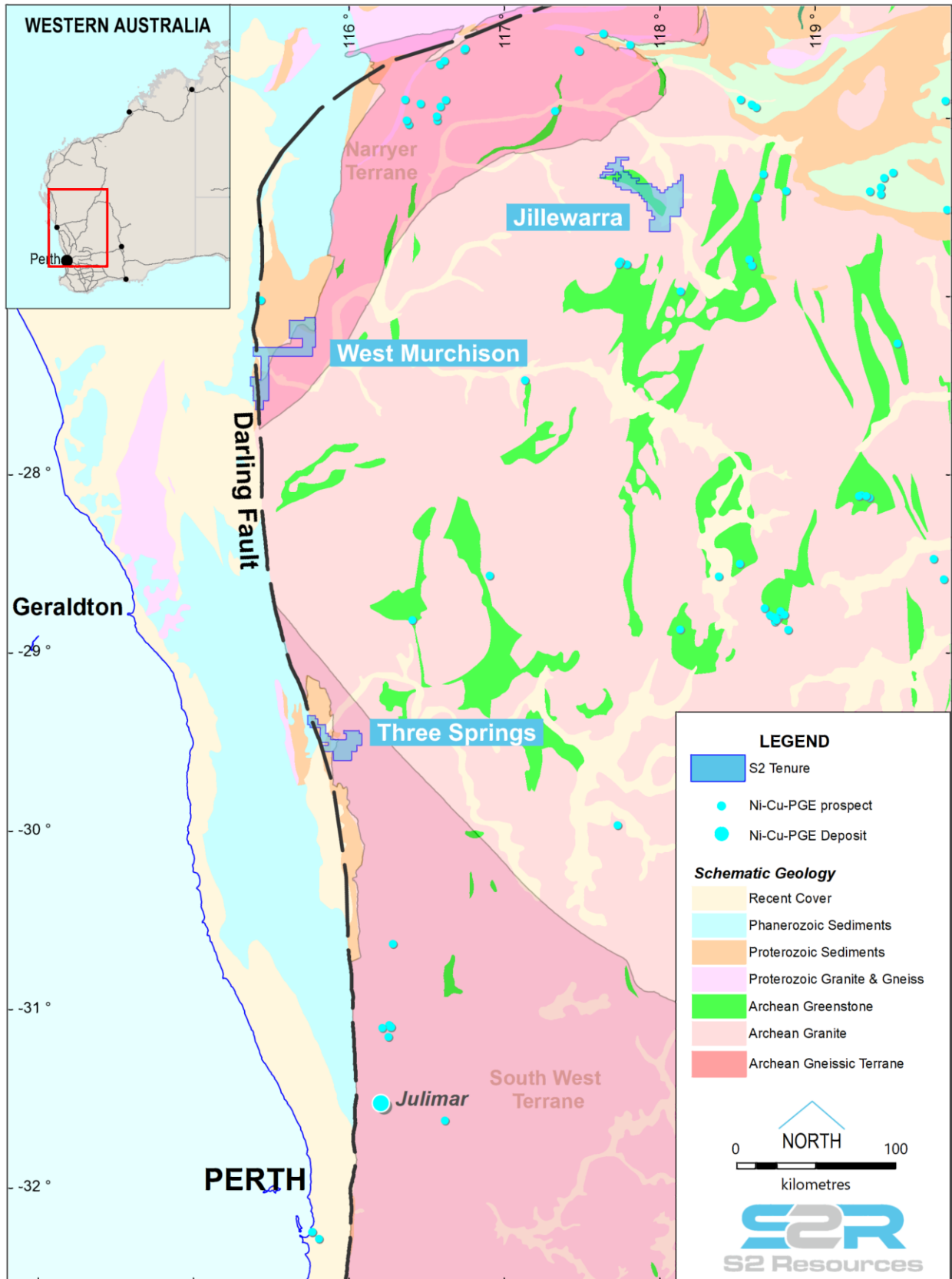


Figure 1. Location of the West Murchison project on the north-western edge of the Yigarn craton within the Narryer Terrain, proximal to the Darling Fault.

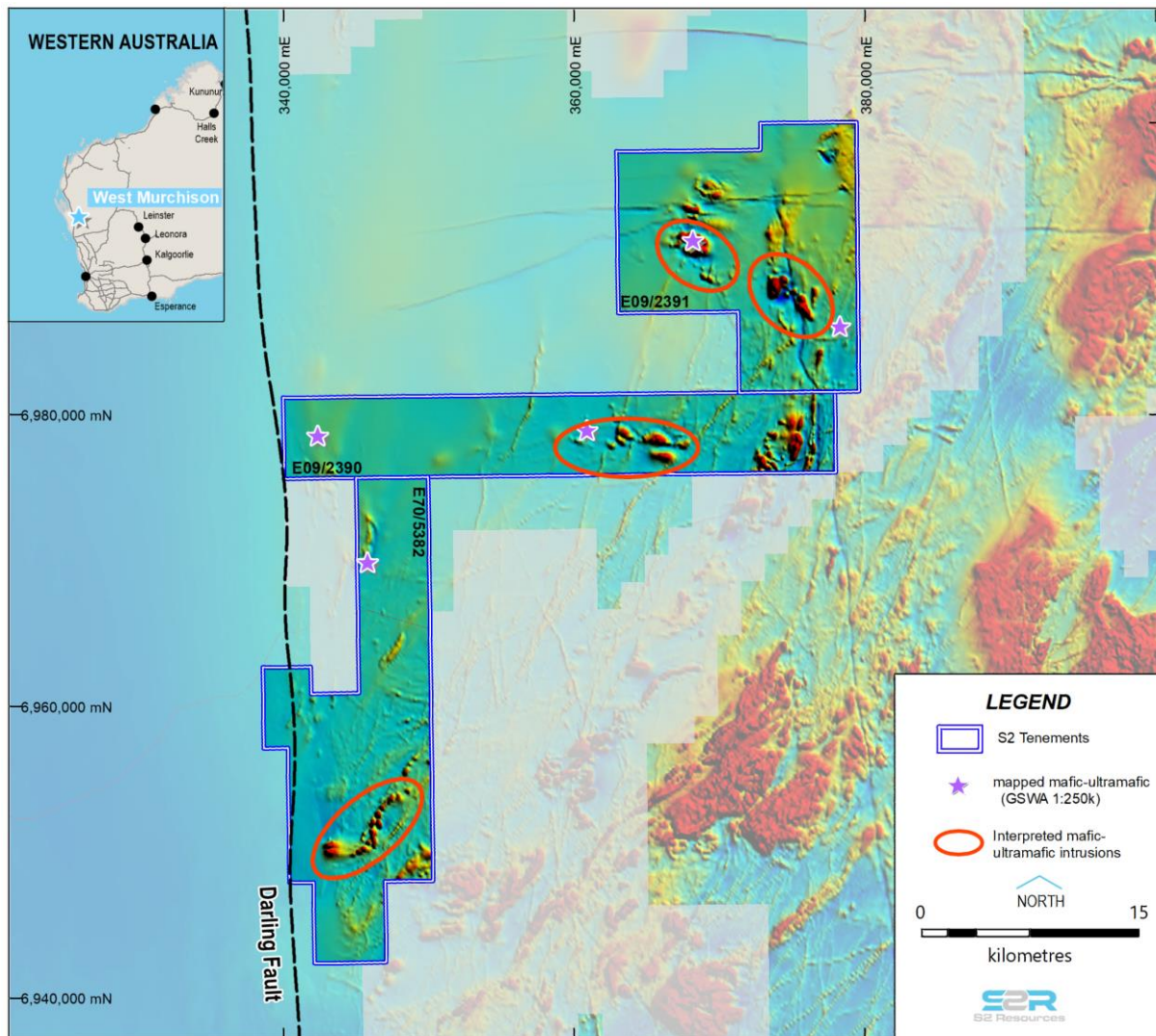


Figure 2. Granted Exploration Licences at the West Murchison project underlain by aeromagnetic imagery showing both mapped and interpreted mafic-ultramafic intrusions.

Nickel-copper and gold soil anomalism

Limited early soil sampling by S2 over one of these intrusions in 2020 identified a coherent coincident Ni-Cu anomaly over a weathered ultramafics in a magnetic high in the northern portion of the tenement package. This anomaly is 200 metres wide at the 100ppm copper threshold, with a best result of 550 ppm copper with coincident strongly anomalous (1,562 ppm) nickel. It is open to the east where the interpreted southern margin of the underlying mafic-ultramafic body extends for a further kilometre under cover (Figure 3, refer to S2 ASX announcement dated 13th July 2020). The same program also identified a significant gold anomaly and a single rock chip sample grading 0.83g/t gold (Figure 4, refer to S2 ASX announcement dated 10th August 2020). Modest platinum and palladium anomalism was also detected in soils, as was the case in the early sampling over the Nova-Bollinger deposit in the Fraser Range.

Plan of work

Moving loop electromagnetic (MLEM) surveys are planned over selected magnetic highs, commencing from June-July 2021. This will coincide with infill soil geochemical sampling over the identified anomalism discussed above.

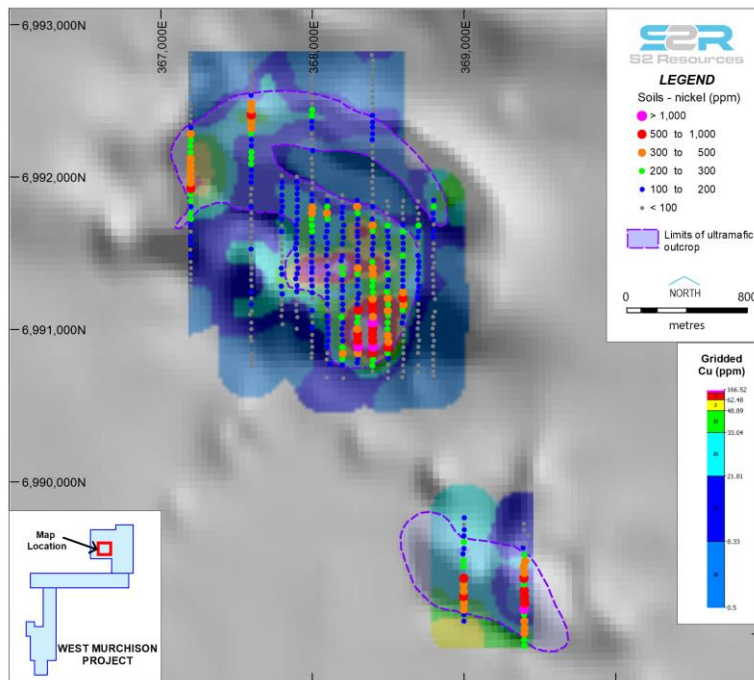


Figure 3. Nickel-copper soil anomalies (colour) over the magnetic anomalies interpreted to represent an ultramafic intrusion (greyscale). Nickel is shown as coloured dots and copper is shaded on the image.

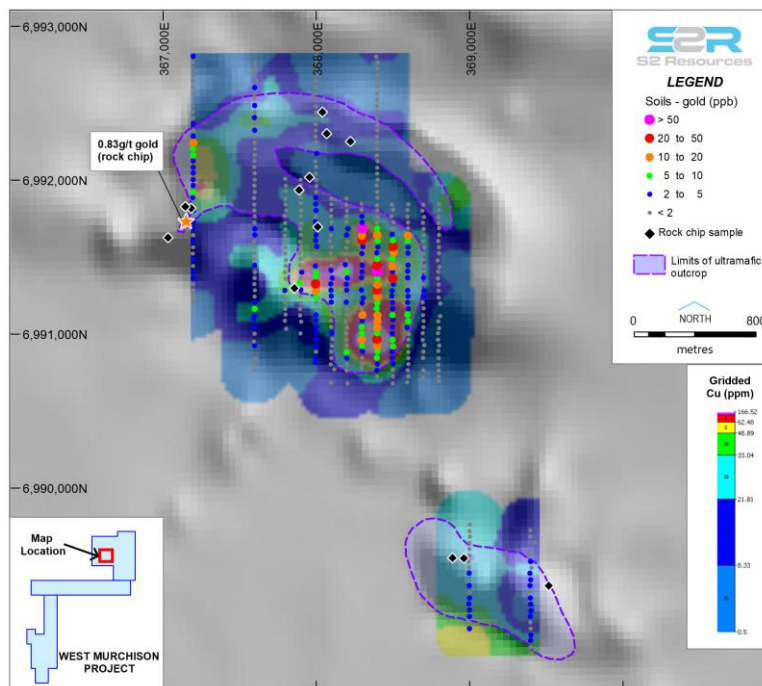


Figure 4. Gold anomalies in soil geochemistry over the magnetic anomalies interpreted to represent an ultramafic intrusion (greyscale). Higher grade rock chip sample also noted to the west of gold in soil anomalism.

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

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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.

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

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	Soil sampling has been carried out by collecting a soil sample from approximately 20-30cm depth and screened using a -80# sieve (177µ). Approximately 200g of the -80# sample was collected and retained in a waxed paper geochemical bag. Geochemical samples were analysed using an Olympus Delta portable XRF analyser. Samples were then submitted to a commercial laboratory for precious metal analysis.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	The portable XRF analyser was regularly calibrated using the provided disk.
	<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>	A 200g, -80# soil sample was used to undertake portable XRF analysis of the sample. Samples were then submitted to Minalytical and pulverised and analysed for au-Pt-Pd using 25g charge for fire assay. Selected samples were also analysed for a 41 element multi-element suite using four acid digest to confirm the pXRF results
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>	No drilling has been conducted on the tenements

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	No drilling has been conducted on the tenements
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	No drilling has been conducted on the tenements
	<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 drilling has been conducted on the tenements
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	A description of the sample location and nature of the soil collected was recorded at each site entered into the companies SQL database
	<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>	Data for all sample sites were recorded
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No drilling has been conducted on the tenements.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Samples were collected by dry sieving and collecting the 80# fraction for analysis.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	The sample preparation is considered appropriate for the nature of the samples being collected. The samples are also considered to be of sufficient quality and appropriateness to be submitted to a commercial geochemical laboratory for wet chemistry analysis
	<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>	Sample sites were selected to avoid areas of obvious recent disturbance so as to maximise the representative nature of the sample collected
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample size is considered appropriate.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Selected soil samples were analysed by Minanalytical Laboratory in Perth. Samples analysed using a 25g lead collection fire assay with an ICP-MS finish for Au, Pt, Pd. Selected samples were also analysed for an extensive multi-element suite (41 element) using a four acid digest and combination of ICP-OES and ICP-MS. Both methods are considered to be near total digest and appropriate for the type of samples collected.
	<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>	An Olympus Delta portable XRF machine was used to analyse the soil samples. Each analysis was carried out using a 35 second reading time (15 seconds for beam 1 and 20 seconds for beam 2). No calibration factors have been applied to the analysis.

Criteria	JORC Code explanation	Commentary
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Standard reference material samples were used during the analysis process. Duplicate analysis of selected samples was undertaken to ensure repeatability.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	No significant intersections have been reported on the tenements
	<i>The use of twinned holes.</i>	No drilling has been conducted on the tenements
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	The data has been exported directly from the XRF and has been loaded into the companies SQL database
	<i>Discuss any adjustment to assay data.</i>	No adjustments to any assay data has been undertaken
Location of data points	<i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	The location of soil samples has been recorded and downloaded directly from a handheld Garmin GPS (accuracy of approximately +/-3 metres)
	<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.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Soil samples have been collected on 40 metre spacings along N-S grid lines, with lines spaced 400 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
Orientation of data in relation to geological structure	<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)
Sample security	<i>The measures taken to ensure sample security.</i>	Samples were collected and bagged up on site and transported to the company's office facilities in Perth
Audits or reviews	<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
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The 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).
Exploration done by other parties	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.
Geology	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.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. 	No drilling has been conducted on the tenements
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	No drilling has been conducted 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 drilling has been conducted on the tenements
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	None used.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	No drilling has been conducted on the tenements
Diagram	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results considered significant are reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Reconnaissance mapping of the project areas has been undertaken.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Over interpreted, prospective intrusive mafic-ultramafic bodies, including the intrusion that contains the soil anomalism. Additional region soil program over additional target intrusive bodies are planned.