NickelSearch LIMITED

ASX: NIS

Australia's emerging battery minerals explorer

6 December 2021

HIGH GRADE NICKEL HIT WITH SIGNIFICANT PGM AT RAV8

KEY HIGHLIGHTS

- **First assays from maiden RC drilling at RAV8 confirm high grade nickel including:**
  - **2m at 4.5% nickel within an interval of 5m at 2.6% nickel in drill hole NIS003**
- **Drilling has extended the historical mineralisation up plunge to the north at Shoot 3**
- **Importantly, the nickel sulphide mineralisation contains potentially significant Platinum Group Metals (PGM), copper and cobalt credits with individual assays up to 1.3 g/t palladium, 0.35% copper and 0.1% cobalt**
- **Assay results of remnant massive sulphide from the RAV8 mine also confirm the association of nickel with PGM and other valuable elements, with PGM up to 3.2 g/t, copper up to 0.2% and cobalt up to 0.2%**
- **Drilling at the high priority RAV4-West deposit has now been completed with 12 RC holes for a total of 827m. This completes NickelSearch's maiden drill program with a total of 32 RC holes for 3,563 m**
- **Selected samples from priority holes have been submitted for analysis and further assay results are pending**
- **Diamond drilling planned for Q1 2022 to test high-grade zones in the five known deposits and high priority greenfield exploration targets at Carlingup**

NickelSearch Limited (ASX: NIS) (NickelSearch or the **Company)** is pleased to announce excellent assay results from the initial drilling program at the Company's RAV8 nickel deposit (**RAV8**) within the Carlingup Project (**Carlingup** or the **Project**).

NickelSearch's Chairman, David Royle, commented:

"We are very pleased to confirm that the previously reported sulphide intersections from our first RC drilling program at RAV8 have returned high grade nickel as well as copper, cobalt and PGM values. These expedited initial assays strengthen our confidence that we may see similar strong results from all three nickel deposits drilled this year. Our initial RC drill program at Carlingup has been successfully completed ahead of schedule and diamond drilling is planned for Q1 2022 to test high-grade zones in the five known deposits. We look forward to sharing further results with shareholders as soon as they are received."

Figure 1. RAV8 Deposit – RC Drill Rig (October 2021)

Expedited assay results from RC drilling at the RAV8 deposit, completed ahead of schedule in October 2021, have returned a significant assay intersection in hole NIS003 of:

- **5m at 2.6% nickel, 0.4 g/t palladium, 0.1 g/t platinum, 0.3% copper and 0.05% cobalt** from 101m;
- *including* **2m at 4.5% nickel, 0.7 g/t palladium, 0.14 g/t platinum 0.3% copper and 0.08% cobalt**

These results confirm the previously reported visual intersection of 12% disseminated and vein sulphide announced on 23 November 2021. Drilling has extended the historical mineralisation at Shoot 3 by 50m up plunge to the north (Figure 2).

Nickel mineralisation in Shoot 3 is interpreted to occur as high tenor disseminated and vein style nickel sulphides within a narrow ultramafic body within footwall volcanic rocks. Geological interpretation is ongoing to better understand these footwall lenses since there are significant implications for further potential across the Project at depth beneath the host ultramafic rocks.

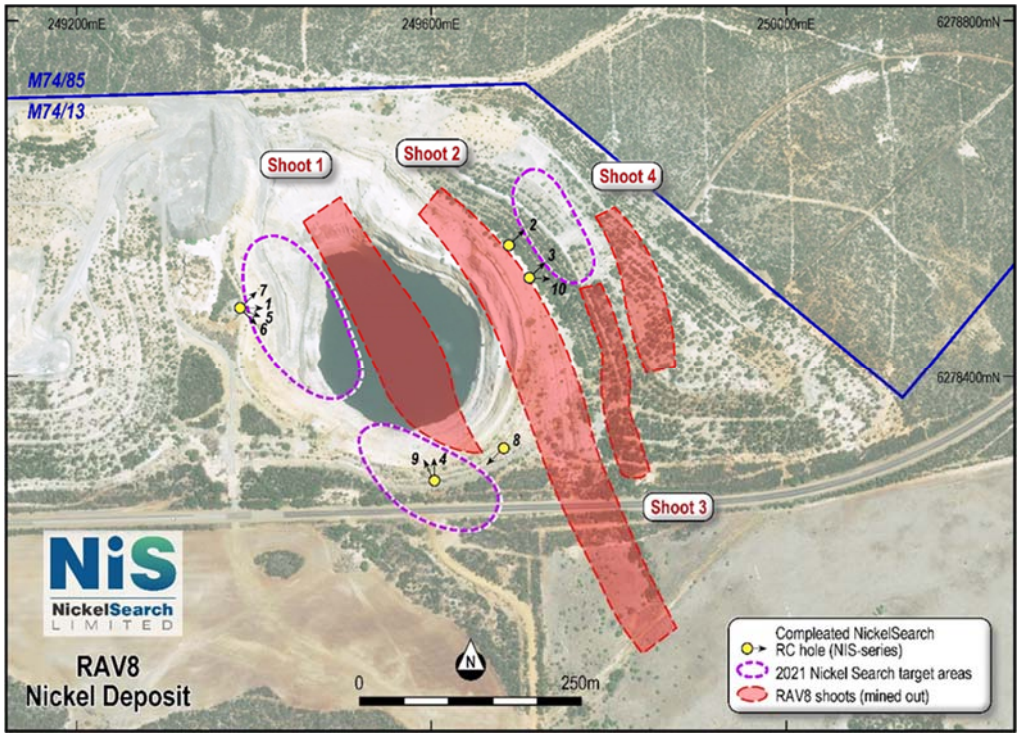

Figure 2: RAV8 Nickel Deposit showing completed RC holes and high-grade sulphide shoots

Importantly, the nickel sulphide bodies contain significant amounts of copper, cobalt, and platinum group metals (**PGM**) credits which are likely to be included in future resource estimates (see Table 1). A one metre interval in NIS003 assayed:

- **1m at 4.8% nickel, 1.3 g/t palladium, 0.1 g/t platinum, 0.2% copper and 0.1% cobalt** from 103m

This finding is also supported by recent assaying of massive sulphide ore samples by NickelSearch from historical underground mining, located on the old RAV8 ore stockpile areas. These samples returned significant assays of up to **14.6% nickel, 2.1 g/t palladium, 2.6 g/t platinum, 0.2% copper and 0.2% cobalt** (Figure 3; Table 2).

Figure 3: Photographs of RAV8 massive sulphide ore samples selected for assay

The high tenor of nickel sulphide and the association with potentially economic concentrations of PGM's at RAV8 is highly unusual and more detailed work will be undertaken by NickelSearch to classify the varying nickel mineral species at the deposit.

The Company's systematic exploration program for this year has now been completed with an additional 12 RC holes drilled for a total of 827m at the RAV4-West deposit (Figure 4). Visual observations of drill cuttings at RAV4-West are encouraging and suggest potential for extension of the sulphide body to the east (refer to the Company's ASX announcement dated 23 November 2021). Assay results will be reported as soon as they are available.

This completes the planned initial phase of drilling at three of the five known sulphide nickel deposits (RAV8, RAV5 and RAV4-West) with a total of 32 holes for 3,563 m.

Next Steps

Diamond drilling is planned for Q1 2022 to test high-grade zones in the five known deposits and provide critical geological and structural data as well as material for metallurgical test work. Scout drill testing of priority greenfield exploration targets is also planned.

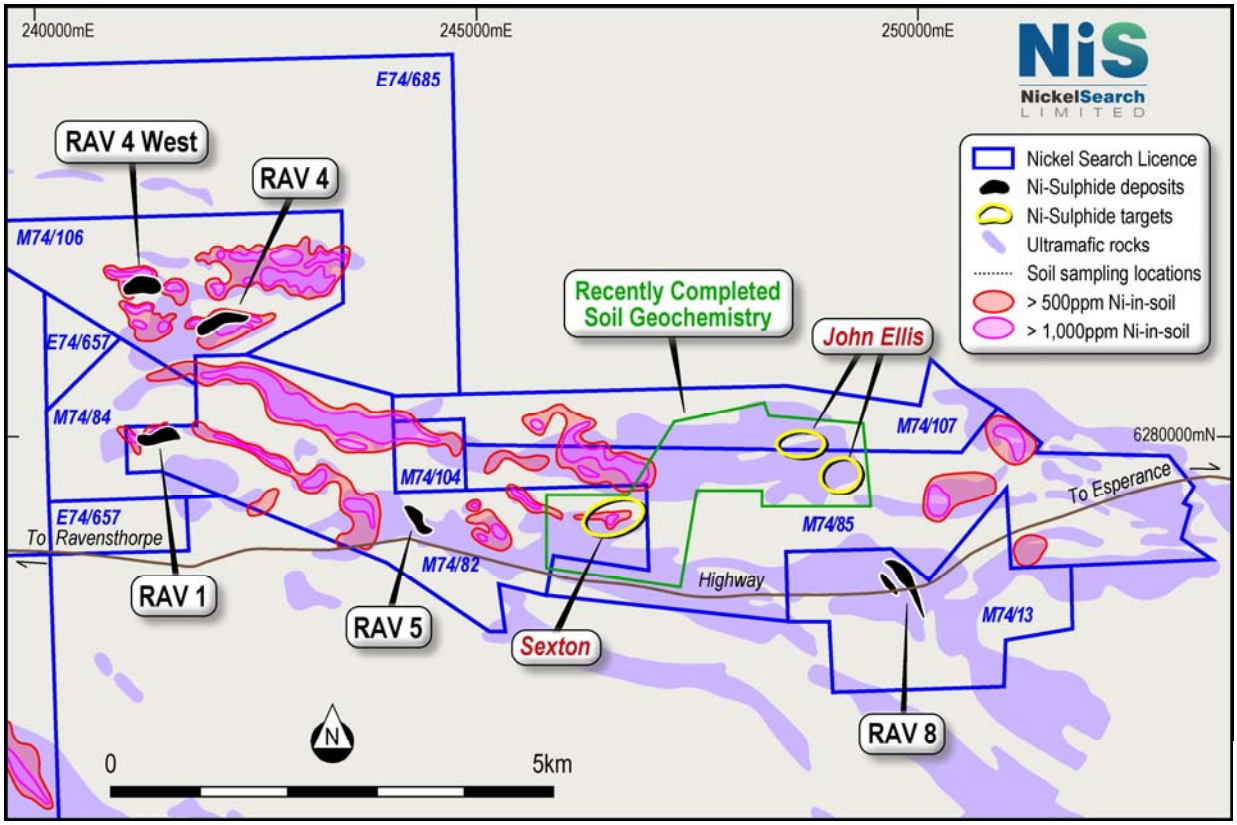

Figure 4: NickelSearch's Carlingup Project showing tenements, nickel deposits and exploration targets

ASX ANNOUNCEMENT

Hole ID	East	North	From	To	Interval	Ni%	2PGM g/t	Pd g/t	Pt g/t	Cu%	Co%	Cutoff
NIS003	249710	6278513	101	106	5	2.58	0.49	0.40	0.09	0.28	0.05	0.5% Ni
			101	105	4	3.06	0.57	0.46	0.11	0.35	0.06	1.0% Ni
			103	**105**	**2**	**4.54**	**0.85**	**0.72**	0.14	**0.27**	**0.08**	**2.0% Ni**
			103	**104**	**1**	**4.79**	**1.42**	**1.33**	0.09	**0.18**	**0.10**	**4.5% Ni**

Table 1. RAV8 Deposit: Assays for drill hole NIS003

Notes for Table 1:

- Location coordinates GDA94: zone51, collar positions determined by handheld GPS
- Hole NIS003 was drilled at a -60 dip and 048-degree azimuth

Sample	East	North	Ni %	2PGM g/t	Pd g/t	Pt g/t	Cu %	Co %
CL09	249514	6278549	**11.63**	**3.22**	**0.63**	**2.60**	**0.73**	**0.15**
CL10	249514	6278549	**12.31**	**2.15**	**2.05**	**0.10**	**0.20**	**0.16**
CL11	249514	6278549	**12.66**	**0.65**	**0.55**	**0.11**	**0.12**	**0.16**
CL12	249514	6278549	**14.63**	**2.65**	**2.12**	**0.54**	**0.17**	**0.21**

Table 2. Assay results from remnant massive sulphide ore from the RAV8 mine

Notes for Table 2:

- Location coordinates GDA94: zone51, sample positions determined by handheld GPS
- NickelSearch cannot be certain of the in-situ origin of these samples from within the RAV8 orebody and does not represent that these grades are repeatable or will be discovered in the future. The disclosure is made to demonstrate there is evidence of an association of PGM elements to nickel at RAV8

Enquiries

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Competent Person's Statement

The information in this announcement that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr Leo Horn. Mr Horn is a Technical Advisor for Nickel Search Limited and a member of the Australian Institute of Geoscientists. Mr Horn has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this announcement and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code"). Mr Horn consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. Mr Horn holds an interest in the Company's securities.

HIGHLIGHTS

- Highly prospective tenure covering +10km strike
- Multiple high priority, drill-ready resource extension targets
- Proven high grade nickel production of 16.1kt Ni at 3.45%
- Significant, shallow resource base open in most directions
- Strategically positioned next to major nickel mining & processing hubs

COMPANY OVERVIEW

About NickelSearch

Nickel Search Limited (ASX code: NIS) is a dedicated WA nickel sulphide explorer focused on advancing it's flagship Carlingup Nickel Project. The asset has an existing resource base of 171kt of contained nickel.

Directors & Management

David Royle
Non-Executive Chairman

Craig Moulton
Managing Director

Norman Taylor
Non-Executive Director

Paul Bennett
Non-Executive Director

Donald James
Non-Executive Director

NickelSearch

ACN 110 599 650

Projects

CARLINGUP NICKEL PROJECT (100%)

Shares on Issue

104,064,018

Options

9,000,000

ASX Code

NIS

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2012 JORC Table 1

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used 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	• Sampling procedures adopted by Nickel Search recently at Carlingup utilise a reverse circulation rig from which 1 m composite 1-2 kg cone split sample (RC) was taken • Hole diameter was 5.5" (140mm) reverse circulation percussion (RC). • Portable XRF (pXRF) analysis on 1m cone split samples guided which samples were sent to be assayed • Samples were collected in calico bags for dispatch to the sample laboratory. Sample preparation was in 3-5kg pulverizing mills, followed by sample splitting to a 200g pulp which will then be analysed by Intertek Genalysis Perth using methods FA50/MS (50g fire assay ICP MS for Au, Pt, Pd) and 4AMS/48 (Four Acid 48 Element Package • These industry standard sampling procedures are considered to be adequate for the style of nickel deposit and for the reporting of Exploration Results.
Drilling techniques	Drill type (e.g. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	• In October 2021 Nickel Search contracted a Schramm track mounted T450 RC rig from Three Rivers Drilling
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed Measures taken to maximise sample recovery and ensure representative nature of the samples	• Recoveries for all sampling methods are recorded by the geologist during the drill program. • No recovery issues were identified during the

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	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	drill program within mineralised intervals. • Sample representation is considered to be adequate for the reporting of Exploration Results
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	• Detailed geological logs have been carried out on all RC drill holes, but no geotechnical data have been recorded (or is possible to be recorded due to the nature of RC samples). • The geological data is considered suitable for inclusion in a Mineral Resource estimate. • Logging of RC drill chips recorded lithology, mineralogy, mineralisation, weathering, colour and other sample features. • RC chips are stored in plastic RC chip trays. • All holes were logged in full
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled	• RC samples were collected on the drill rig using a cone splitter attached to the cyclone of the RC rig. • All of the mineralised samples were collected dry or wet as noted in the drill logs and database. • The RC field sample preparation followed industry best practice. This involved collection of 1m samples from the cone splitter and transfer to calico bag for dispatch to the laboratory. • Field QC procedures for RC drilling involve the use of alternating standards and blank samples (insertion rate - standard 1:50, blank 1:100). • Duplicates of cone split samples were taken 1:50 • The sample sizes were considered more than adequate to ensure that there are no particle size effects relating to the grain size of the mineralisation, which

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		lies in the percentage range. • Drilling and sampling procedures at Carlingup are considered to be the best practice and are also considered to be adequate for the reporting of Exploration Results.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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.	• Samples were submitted to Intertek Genalysis Perth and analysed using methods FA50/MS (50g fire assay ICP MS for Au, Pt, Pd) and 4AMS/48 (Four Acid 48 Element Package) • This is considered a total analysis, with all the target commodity minerals dissolved. • A Niton portable handheld XRF analyser was used to guide logging, selection of one metre sampling intervals, and confirmation of logged mineralisation • Field QC procedures involve the use of standards and blank samples (insertion rate standard 1:50, blank 1:100). In addition, the laboratory runs routine check and duplicate analyses.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	• The Company's Directors and appointed technical advisors have visually inspected and verified the significant drill intersections. • No holes have been twinned at this stage. • Primary data was collected using a standard set of Excel templates on a Toughbook laptop computer in the field
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used.	• Collar locations are taken using a handheld GPS. • Gyroscopic downhole surveys were taken at approximately every 50m. • The grid system used is MGA94, zone 51 for

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	Quality and adequacy of topographic control.	easting, northing and RL.
Data spacing and distribution	Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied.	• The drillholes are spaced at varying distances apart at the RAV8 prospect to follow up historical mineralisation trends in areas that have seen limited or no drilling and targeting down plunge mineralisation (mineralisation plunges S-SSE) • RC 1m composite cone split samples were analysed using a pXRF and anomalous samples submitted for assay over selected intervals • Assay composites have been applied at 0.5%, 1.0%, 2.0% and 4.5% nickel. • Sample spacing and procedures are considered appropriate for the reporting of Exploration Results.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• The holes have been designed to intersect the interpreted mineralisation trends and plunges as close to perpendicular as possible however at RAV8 collar positions are limited to the access road around the periphery of the open pit. True width of mineralised lenses is yet to be defined accurately. • The drilling azimuth was determined from historical exploration results to target the down dip extensions to known areas of mineralisation and infill drilling in areas of limited testing to further expand the mineralisation footprint • Historical drilling suggests mineralisation (massive and disseminated sulphide Ni-Cu-Co-PGM mineralisation) is located on or near the basal contact of the target ultramafic flow and pXRF results (Ni, Co, Cu, S & other

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		metals) of 1m cone splits have been used as a guide for exploration drilling
Sample security	The measures taken to ensure sample security.	• Nickel Search ensured that sample security was maintained to ensure the integrity of sample quality.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• No review of the sampling techniques has been carried out.

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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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The Carlingup Project, located 20km east of Ravensthorpe comprises 8 MLs, 7 ELs covering 108 sq km (All rights: ML74/013, M74/085, M74/107, M74/104, M74/082, M74/084, M74/106, E74/685, E74/657, E74/675; nickel-cobalt-PGM only rights: M74/083, E74/656, E74/602/ E74683, E74/638) • The tenements are in good standing. • The project tenements are in good standing and no known impediments exist. • The tenements are 100% owned (all rights) or 100% nickel-cobalt-PGM rights
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties	• Refer to JORC tables in the Nickel Search Prospectus dated 23 August 2021
Geology	Deposit type, geological setting and style of mineralisation.	• The Carlingup Project is located within the Carlingup Terrane of the Archaean Ravensthorpe greenstone belt, near the southern margin of the Yilgarn Craton. The Carlingup Project straddles the Bonnymidgup Shear Zone, an intensely sheared to mylonitic thrust contact dipping 10 to 30° south. The shear separates the Archaean Ravensthorpe metavolcanic and metasedimentary greenstone sequence from the underlying felsic sequence of gneissic granitoid and associated felsic metasediments • The Archaean greenstones are represented by Bandalup Ultramafics, the uppermost, tectonically interleaved ultramafic rocks, and the equivalents of the Chester Formation, which are older clastic sedimentary rocks. • Together these two units comprise the middle portion of the Archaean Ravensthorpe metavolcanic and metasedimentary greenstone sequence. The

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		felsic sequence comprises gneissic granitoid and derived phyllite, quartz-muscovite schist, and quartz-feldspar-biotite microgneiss near the thrust contact • The Ni-sulphide occurrences are associated with the Bandalup Ultramafic on the northern limb of the Maydon Syncline. Mineralisation occurs typically as disseminated sulphides, though narrow, variably continuous lenses of massive to semi-massive sulphide near the basal contact are common
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: Easting and northing of the drill hole collar Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar Dip and azimuth of the hole Down hole length and interception depth Hole length.	• Summary tables of drill hole information for all projects are included in the body of the announcement
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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No assays are reported in this announcement
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	• The true width of mineralisation has not yet been verified at Carlingup at this stage. Ore drilling is required to verify true width.

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	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').	
Diagrams	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 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.	• The company believes that the ASX announcement is a balanced report with all material results 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.	• Everything meaningful and material is disclosed in the body of the report. Geological and geophysical observations have been factored into the report.
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.	• Further work is detailed in the body of the announcement.