12 July 2023

MASSIVE NICKEL SULPHIDE MINERALISATION EXTENDED AT SEXTON

KEY HIGHLIGHTS

- Massive sulphide mineralisation intersected in both the Upper Mineralised Horizon (UMH) and Lower Mineralised Horizon (LMH) in two diamond drillholes at the Sexton Prospect.
- Multiple sulphide intersections previously reported over a 9.85 metre interval in diamond drill hole 23NRD028.
- Diamond drill hole 23NDD030 intersected massive sulphides in the same horizon, which demonstrates the nickel mineralisation continues 60m further along strike, extending the total strike length to 250m.
- Assays from the two diamond holes at Sexton expected in early August, and follow-up downhole electromagnetic (DHEM) surveys are now planned for these diamond holes to further test the extent of the sulphide mineralisation, which exhibits a strong DHEM anomaly response.
- Diamond drilling underway at the high priority B1 Prospect, where recent reverse-circulation (RC) drilling intersected nickel sulphides (see announcement 25 May 2023).

NickelSearch Limited (**ASX: NIS**) (**NIS** or the **Company**) is pleased to provide an update on diamond drilling completed at the Sexton Prospect at its Carlingup Nickel Sulphide Project (**Carlingup**) near Ravensthorpe in Western Australia. Both diamond drillholes (**DD**) at Sexton intersected visual sulphides[1] in the UMH and LMH, with both horizons intersected at shallower depths than expected in the second DD.

NickelSearch's Managing Director, Nicole Duncan, commented:

"We are delighted to report that we have once again intersected visual sulphides, including massive sulphide mineralisation, in our diamond drilling program at Sexton, one of our highly prospective targets at Carlingup.

"The hole confirmed the presence of nickel sulphide mineralisation sitting in a structure located at relatively shallow depths of ~145m and starting quite close to surface at ~40m, which is particularly pleasing. This mineralisation was intersected shallower than anticipated, and our planned DHEM surveys in the DD will allow for more constrained models and show where the intersections are in respect of the new models. We eagerly look forward to assay results in the coming weeks."

SEXTON DIAMOND DRILLING

The drilling program at Sexton targeted two distinct bodies of mineralisation encountered in earlier RC drilling and corroborated by DHEM surveys. The primary aim for the drilling was to identify the massive sulphides associated with the LMH, with the holes also designed to test the potential for further nickel sulphide mineralisation within the UMH.

[1] Refer to ASX Announcement 14 June 2023 – Massive visual sulphide intersected at Sexton.

Analysis following completion of the drilling confirms the overall strike length of Sexton mineralisation to extend to 250m and remains open both up- and down-plunge. To date, the drilling has shown there are multiple horizons of nickeliferous sulphide, shallowly plunging to the southeast, with the up- and down- dip extents undefined and open along strike. The mineralisation intersected is at the upper and lower contact of a banded iron formation (**BIF**) unit, within the ultramafic. In addition to sulphides on the BIF contacts, there are sulphides internal to the ultramafics. The amount and thickness of sulphide that has been intersected in each hole is variable, which is not uncommon in nickel sulphide systems that can pinch and swell.

The two holes successfully intersected sources of the DHEM plates modelled from the previous RC drilling. The intersections were shallower than anticipated, with multiple sulphide intersections. The planned DHEM surveys will now be completed to allow for more constrained models and in conjunction with assay results allow for the generation of follow up drill targets to extend mineralisation and vector in on higher grade zones.

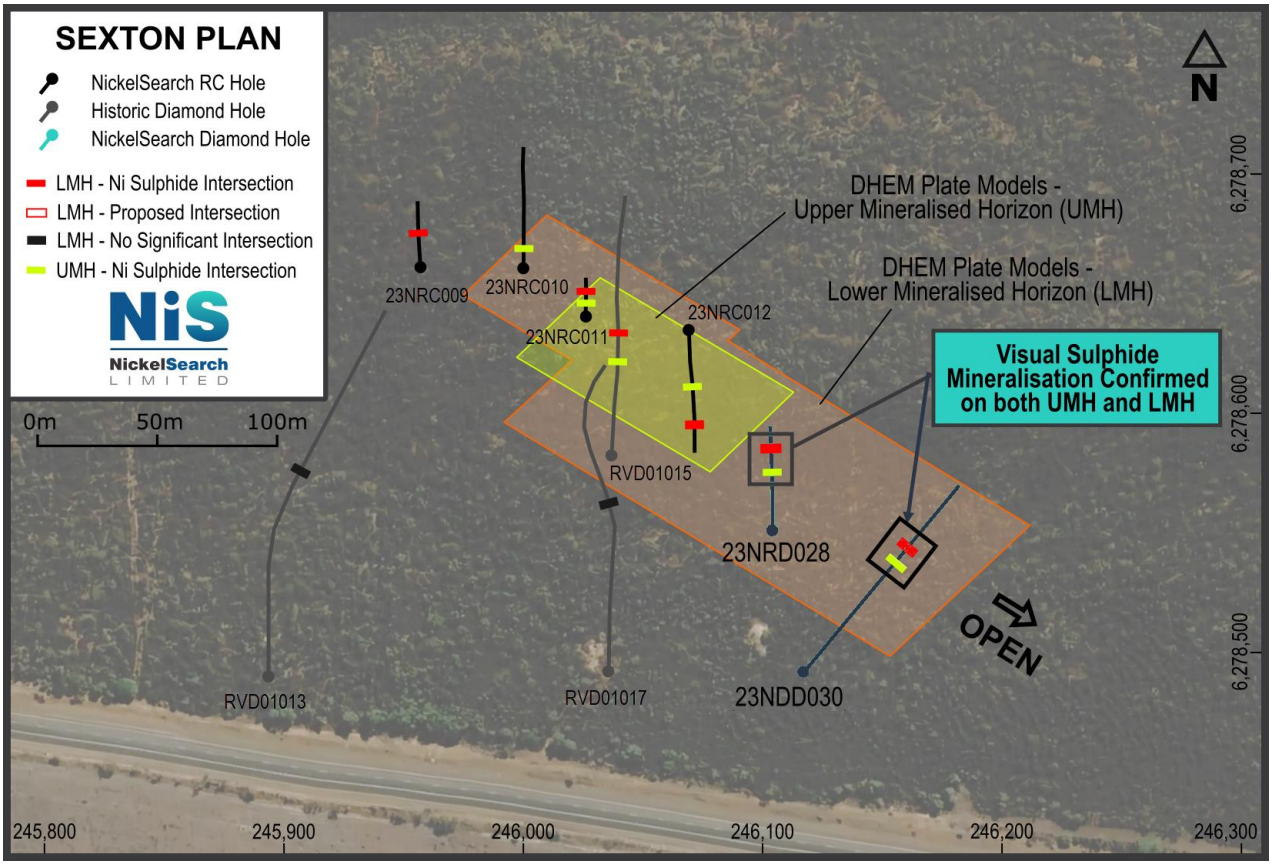

Figure 1: *Plan of the Sexton area. The DHEM plate models, associated with the massive sulphide intersections, plunge shallowly to the east-southeast. 23NDD030 246116mE 6278495mN 165mRL -68° towards 040° (GDA94/MGA51).*

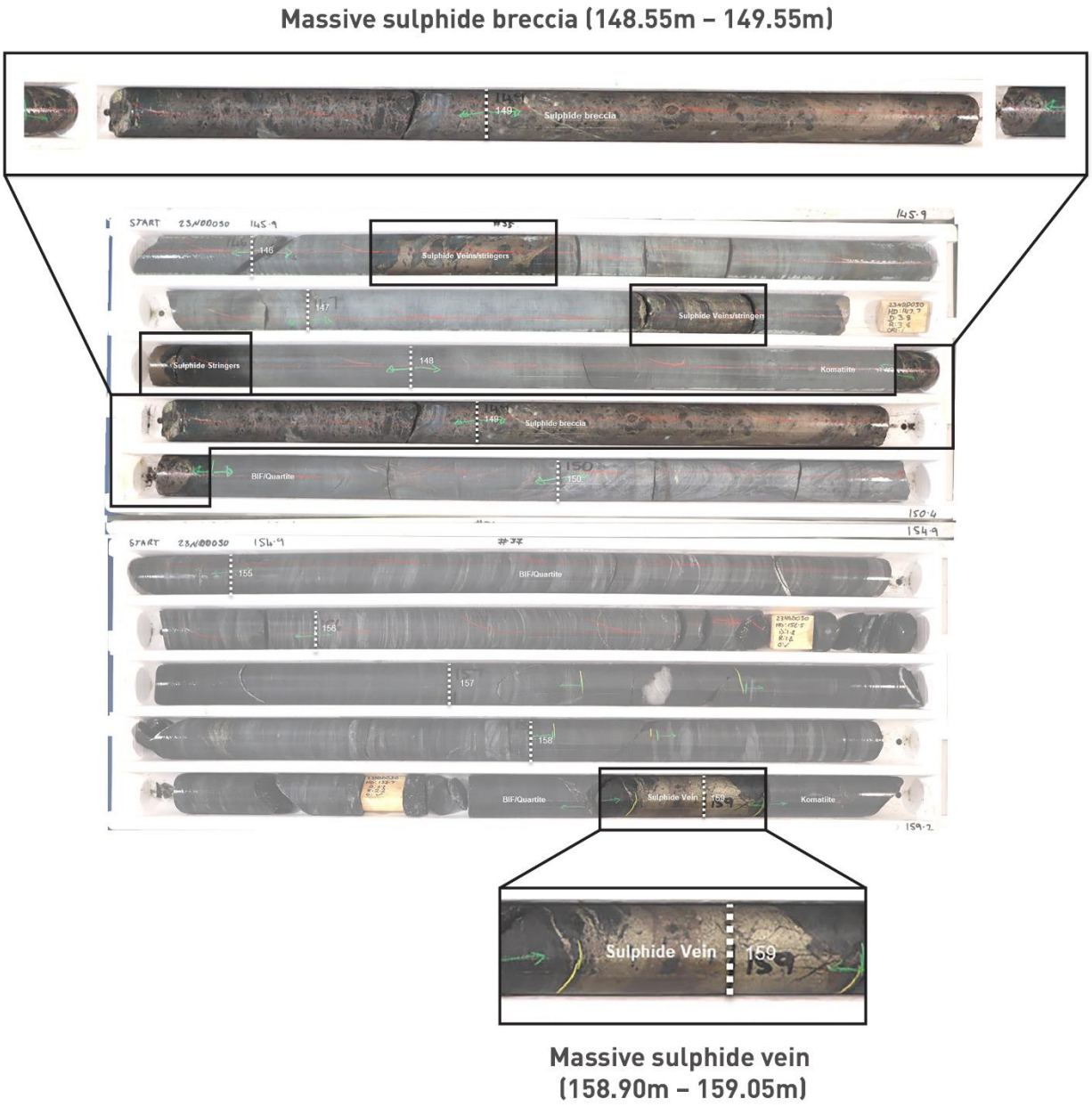

Figure 2: Intersection of nickeliferous sulphides in drillhole 23NDD030, with some massive sulphide intersections highlighted

LOGGING RESULTS

In the first diamond hole at Sexton (23NRD028), the mineralisation is spread over nine metres and includes a number of intervals of various thickness of net textured/matrix to semi-massive/ massive sulphides. The sulphides are predominantly pyrrhotite +/- pentlandite and pyrite, with minor chalcopyrite. For full details of this logging, please refer to ASX Announcement dated 14 June 2023 – "*Massive visual sulphide intersected at Sexton*".

In the second diamond hole (23NDD030), the mineralisation intersected is similar to that of 23NRD028, with several sulphide intervals at the ultramafic and sediment contacts. The main sulphide morphologies included semi-massive/massive breccias and veins, predominately pyrrhotite +/- pentlandite and pyrite, with minor chalcopyrite locally.

23NDD030 intersected two (variably) mineralised intervals separated by BIF, upper 144.85-149.55 (4.7m) and lower 158.9 -160.75 (1.85m).

The samples from the drill holes have been sent for laboratory analysis. Laboratory assay times are expected to be approximately 6 weeks. Note that hole 23NRD029 is an RC pre-collar that the Company does not intend to use in this drilling program.

NEXT STEPS

- DHEM surveys will be performed on the two diamond holes at Sexton, as soon as possible.
- Assay results from this drilling are eagerly awaited.
- Drilling underway at B1 Prospect, where May 2023 intercepts[2] confirmed and extended the area of known historical nickel sulphide intercepts with sulphide-bearing komatiites and cumulate ultramafics logged.

[2] Refer to ASX Announcement 25 May 2023 – Nickel Sulphides intersected at B1

Table 1: *Significant visual logging results from recent drilling at Sexton**

Hole ID	From (metres)	To (metres)	Comments
23NDD030		144.9	Komatiite, minor brecciation with sulphide stringers
23NDD030	144.9	148.55	Komatiite, brecciation increased locally with sulphide matrix
23NDD030	148.55	149.55	Massive sulphide breccia, clasts chlorite dominant, minor sediment towards lower contact
23NDD030	149.55	150.80	Sediment, BIF distinct contact between deformed, folded sediment with magnetite and sulphide bands
23NDD030	150.80	151.15	Fault(?), massive quartz vein, with sulphides at upper and lower contact
23NDD030	151.15	157.15	Sediment, BIF as above vein, layering is undeformed except at upper contact or disrupted by later veining +/- sulphide
23NDD030	157.15	157.35	Sediment, BIF with sharp upper, diffuse lower contacts, irregular quartz veining and minor sulphide
23NDD030	157.35	158.05	Sediment, BIF less layered, 3-4cm sulphide band at 157.6m
23NDD030	158.05	158.17	Sediment, BIF distinct interval with sharp upper and lower contacts
23NDD030	158.17	158.90	Sediment, BIF, lamination, frequency decreasing downhole, massive quartz rich base, sulphide patchy throughout
23NDD030	158.90	159.05	Massive sulphide vein at contact between sediment and ultramafic
23NDD030	159.05	160.55	Komatiite, with localised aggregation of sulphide disseminations common throughout
23NDD030	160.55	160.75	Sulphide vein with sediment fragments
23NDD030	160.75		Komatiite

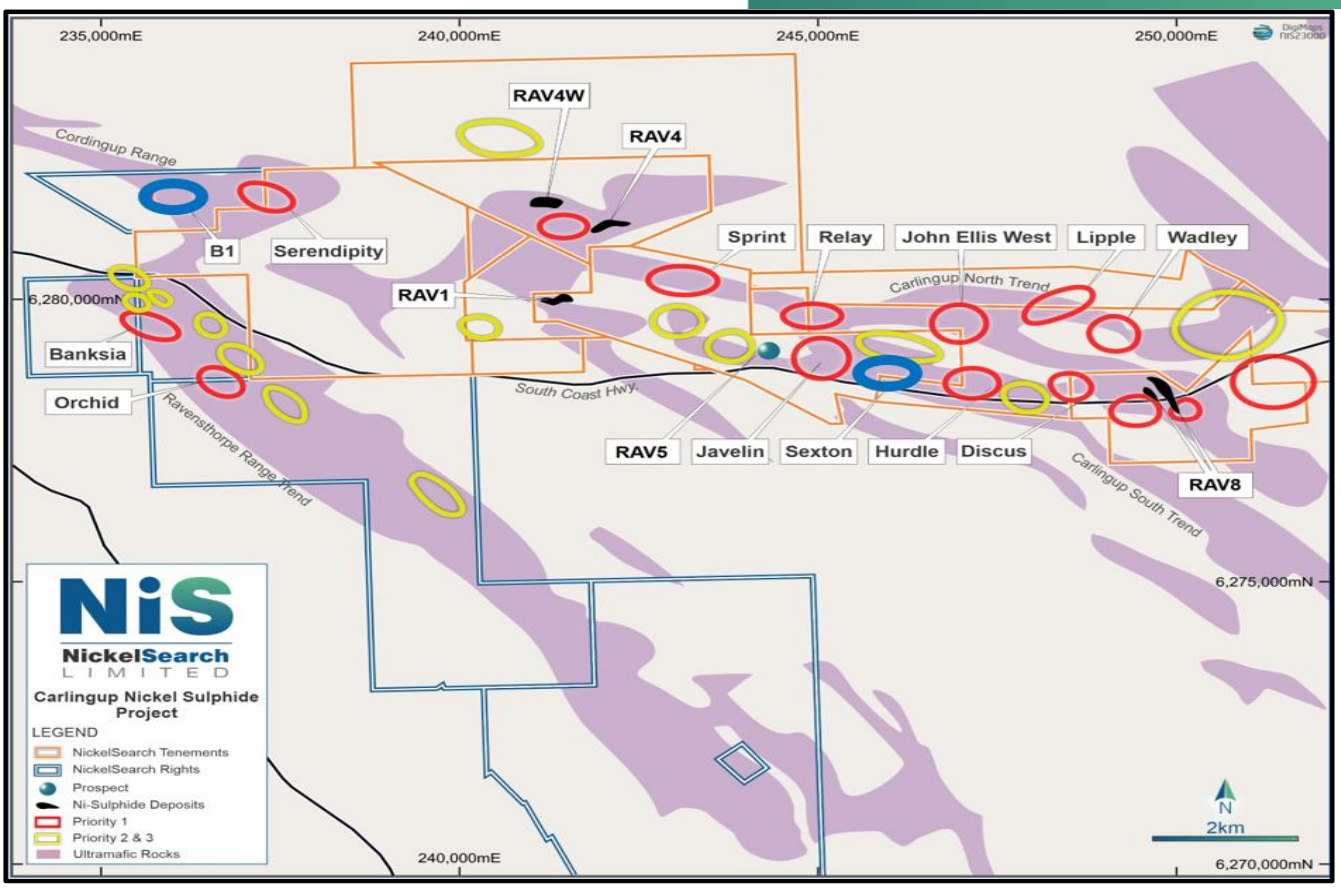

Figure 3: NickelSearch tenement package, with Sexton and B1 in blue.

This announcement has been approved for release by the Board of NickelSearch Limited.

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COMPETENT PERSON STATEMENT:

The information contained within this announcement on the historic massive sulphide intersection at Sexton is extracted from the announcement titled "Multiple Exploration Targets Prioritised" released 16 May 2022, which is available to view on www.nickelsearch.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The information in this announcement that relates to exploration targeting and results is based on, and fairly represents, information compiled and reviewed by Nick Walker, who is a consultant to NickelSearch, and is a Member of The Australian Institute of Geoscientists. Mr Walker has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is 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' (the JORC Code 2012). Mr Walker consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

FORWARD-LOOKING STATEMENTS:

This announcement contains certain forward-looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "except", "intend", "plan", "estimate", "anticipate"," continue", and "guidance", or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management. Indications of, and guidance on future earnings, cash flows, costs, financial position, and performance are also forward-looking statements. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change, without notice, as are statements about market and industry trends, which are based on interpretation of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results or trends to differ materially. These variations, if materially adverse, may affect the timing or the feasibility and potential development of NickelSearch's exploration activities.

CAUTIONARY STATEMENT

*Certain information in this announcement may contain references to visual results. The Company draws attention to the inherent uncertainty in reporting visual results. Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

About NickelSearch

NickelSearch Limited (ASX code: NIS) is a dedicated WA nickel sulphide explorer focused on advancing its flagship Carlingup Nickel Project.

The Project has an existing resource base totalling 155kt contained nickel and is strategically located in the same greenstone corridor as IGO's Forrestania nickel mining complex, and adjacent to First Quantum Minerals' Ravensthorpe Nickel Operation.

Directors & Management

Nicole Duncan
Managing Director

Mark Connelly
Non-Executive Chair

Paul Bennett
Non-Executive Director

Lynda Burnett
Non-Executive Director

Norm Taylor
Non-Executive Director

NickelSearch
ACN 110 599 650

Projects
Carlingup Nickel Project (100%)

Shares on Issue
139,018,964

Options
88,830,709

ASX Code
NIS

- Highly prospective tenure covering **+10km strike**
- Multiple high priority, **drill-ready** greenfield 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

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JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• Pending
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• Oriented HQ/NQ_2 diamond core drill holes • Holes drilled at appropriate dip angles/azimuth where possible in order to orthogonally intercept the modelled EM plates
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.* • *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.*	• Pending
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.*	• Pending.

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
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.*	• Pending
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Pending
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.*	• Pending
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole collars were initially located and pegged using a handheld GPS with an expected accuracy of +/-3m for easting, northing and elevation. • All drill holes were surveyed using a north seeking gyro • The grid system used is GDA94, MGA zone 51.

Criteria	JORC Code explanation	Commentary
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.*	• Drill holes will test selected geophysical EM targets • The spacing and distribution of holes is not relevant to this drilling program which is at the exploration stage rather than definition drilling. • The drilling to date at Sexton is not sufficient to establish the degree of geological and grade continuity to support the definition of Mineral Resource and Reserves and the classifications applied under the 2012 JORC code.
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 drill holes were planned to intersect the modelled geophysical target zones at an appropriate orientation. However, the orientation of key structures may be locally variable and any relationship to mineralisation has yet to be identified. • No orientation-based sampling bias has been identified in the data to date.
Sample security	• *The measures taken to ensure sample security.*	• Pending
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No formal audits or reviews have been conducted on sampling technique and data to date other than Newexco due-diligence procedures.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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.*	• NickelSearch Ltd is the operating entity of the Carlingup project • 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 only rights M74/083, E74/656, E74/602/ E74/683, E74/638). • The project tenements are in good standing and no known impediments exist. • The tenements are 100% owned by NickelSearch.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The region has a long history of mining (Rav8) and exploration and has been explored for nickel, copper, lithium and gold. • Historical exploration results and data quality have been considered during the planning of this drill program.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Nickel Sulphide occurrences identified to date are associated with the Bandalup Ultramafic on the northern limb of the Maydon Syncline. • They occur typically as disseminated sulphides, however narrow lenses of massive to semi-massive sulphide have been located near the basal contact of the ultramafic, but are poorly exposed.

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.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Drill hole collar locations are shown in the maps in the body of the ASX release.
		• Diamond core drilling is ongoing.
		• Relevant information pertaining to the drill holes is provided in the ASX announcement. This information is limited to collar location, azimuth, dip and hole length. Information relating to mineralisation is preliminary in nature and subject to receipt and assessment of assay results.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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 data aggregation methods were used.
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 (eg 'down hole length, true width not known').*	• Pending
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 and tables in the body of the ASX release.

Criteria	JORC Code explanation	Commentary
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.*	• Pending
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.*	• Downhole Electromagnetic survey data from 2023 has been used to assist targeting drill holes
Further work	• *The nature and scale of planned further work (eg 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 will be planned after drilling is complete, the sample results and the results from down hole EM (DHEM) surveys are modelled with the geology and other available geophysical data.