MASSIVE SULPHIDE MINERALISATION EXTENDS TO DHEM SURVEY LIMITS AT SEXTON

Key Highlights:

- Downhole electromagnetic (**DHEM**) surveys confirm the extent of previously modelled plates at the Sexton Prospect.
- The conductance of the new models ranges up to 30,000 Siemens (**S**) and extends to the survey limits up- and down-plunge.
- Massive sulphide mineralisation intersected in both the Upper Mineralised Horizon (**UMH**) and Lower Mineralised Horizon (**LMH**) in two diamond drillholes at the Sexton Prospect completed in June 2023.
- Assays from diamond drilling at Sexton are expected by mid-August, at which time follow-up drilling can be considered.

NickelSearch Limited (ASX: NIS) (**NIS** or the **Company**) is pleased to provide an update on the DHEM survey results from two diamond drillholes completed at the Sexton Prospect at its Carlingup Nickel Sulphide Project (**Carlingup**) near Ravensthorpe in Western Australia. Two diamond holes (23NRD028 and 23NDD030) at Sexton intersected visual sulphides[1] [2] in the UMH and LMH, with both horizons intersected at shallower depths than expected in hole 23NDD030.

NickelSearch Managing Director, Nicole Duncan, commented:

"The alignment of the conductive plates at Sexton with known mineralisation is encouraging, with potential for further positive results beyond the limit of testing.

"It is particularly pleasing to see the conductive plates continuing as far as we can assess with the DHEM survey. We intersected visual sulphides, including massive sulphide mineralisation, in our June 2023 diamond drilling at Sexton and overlaying this information from the DHEM surveys gives us confidence in the prospectivity of Sexton.

"The visual nickel sulphide mineralisation intersected in the diamond drilling is sitting in a structure located at relatively shallow depths starting quite close to surface at ~40m and continuing to ~145m depth. We look forward to assay results in the coming weeks."

SEXTON DHEM

The recent diamond drilling program at Sexton targeted two distinct bodies of mineralisation encountered in earlier RC drilling[3] and corroborated by then-current DHEM surveys. These new DHEM results from diamond holes 23NRD028 and 23NDD030 show that the mineralisation continues to the boundary of the survey limits. The constrained models from these DHEM survey results also show that the mineralisation is in a corridor roughly 80m wide.

[1] ASX Announcement 14 June 2023 – Massive Visual Sulphide Intersected at Sexton
[2] ASX Announcement 12 July 2023 – Massive Nickel Sulphide Mineralisation Extended at Sexton
[3] ASX Announcement 14 March 2023 – Nickel Sulphides Confirmed at Sexton

In total, four holes have been surveyed with DHEM and together these are interpreted to define three conductive horizons that dip shallowly to the south-east. There is an off-hole conductor below 23NRC011 that is untested, and another centred below 23NDD030 that has not been closed off.

Modelling the anomalies was challenging because the plates have a high conductance, especially the lower anomaly. A reasonable fit was achieved to the field data using a series of plates to account for the complexities observed in the DHEM response of each hole. Overall, the levels of modelled conductance are high: the lower horizon is 20,000-30,000S, the middle horizon is 2,500-30,000S and the upper horizon is 1,000-10,000S. These values are all consistent with accumulations of massive sulphides.

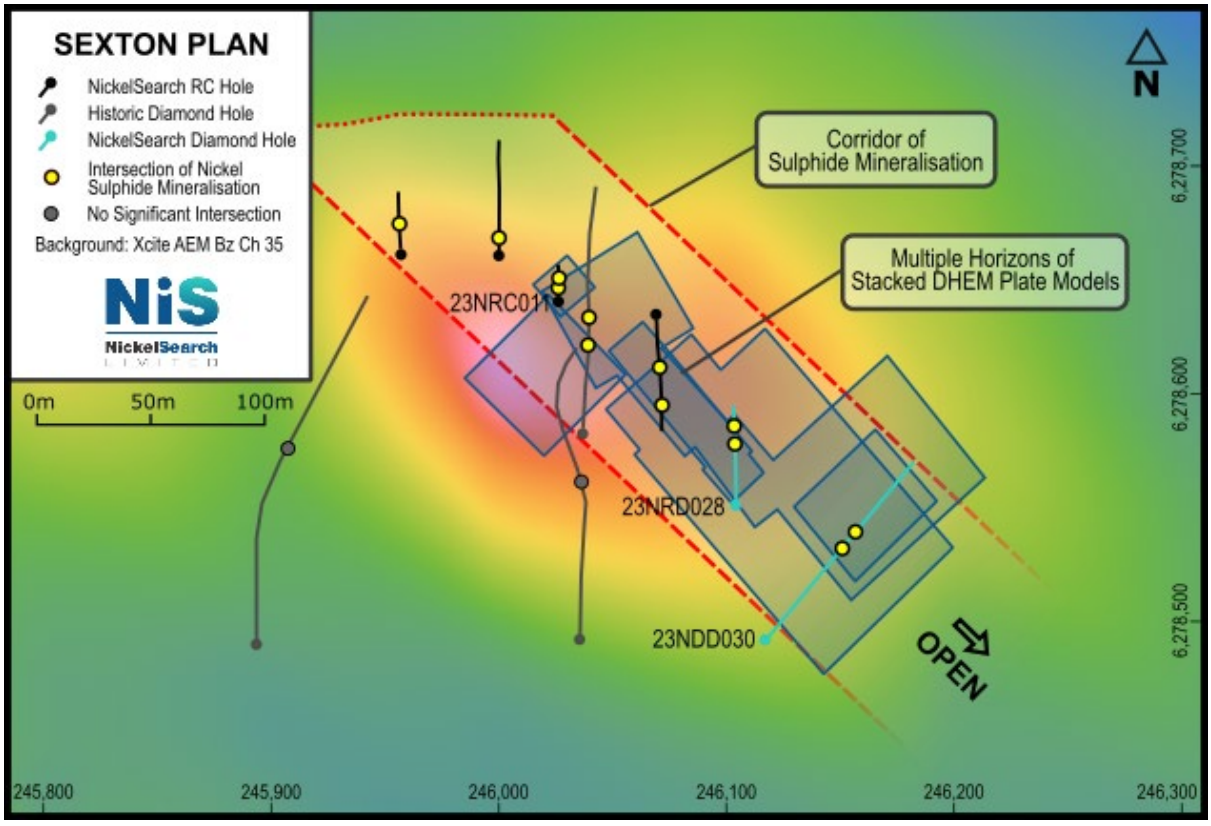

Figure 1: Plan of the Sexton area. The DHEM plate models, associated with the massive sulphide intersections, plunge shallowly to the east-southeast.

SEXTON DIAMOND DRILLING

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 ultramafic (see Figure 2, and NIS ASX Announcement dated 12 July 2023). The amount and thickness of sulphide that has been intersected in each hole is variable.

Assay results are pending. The DHEM plates, in conjunction with assay results, will allow for the generation of follow-up drill targets to extend mineralisation.

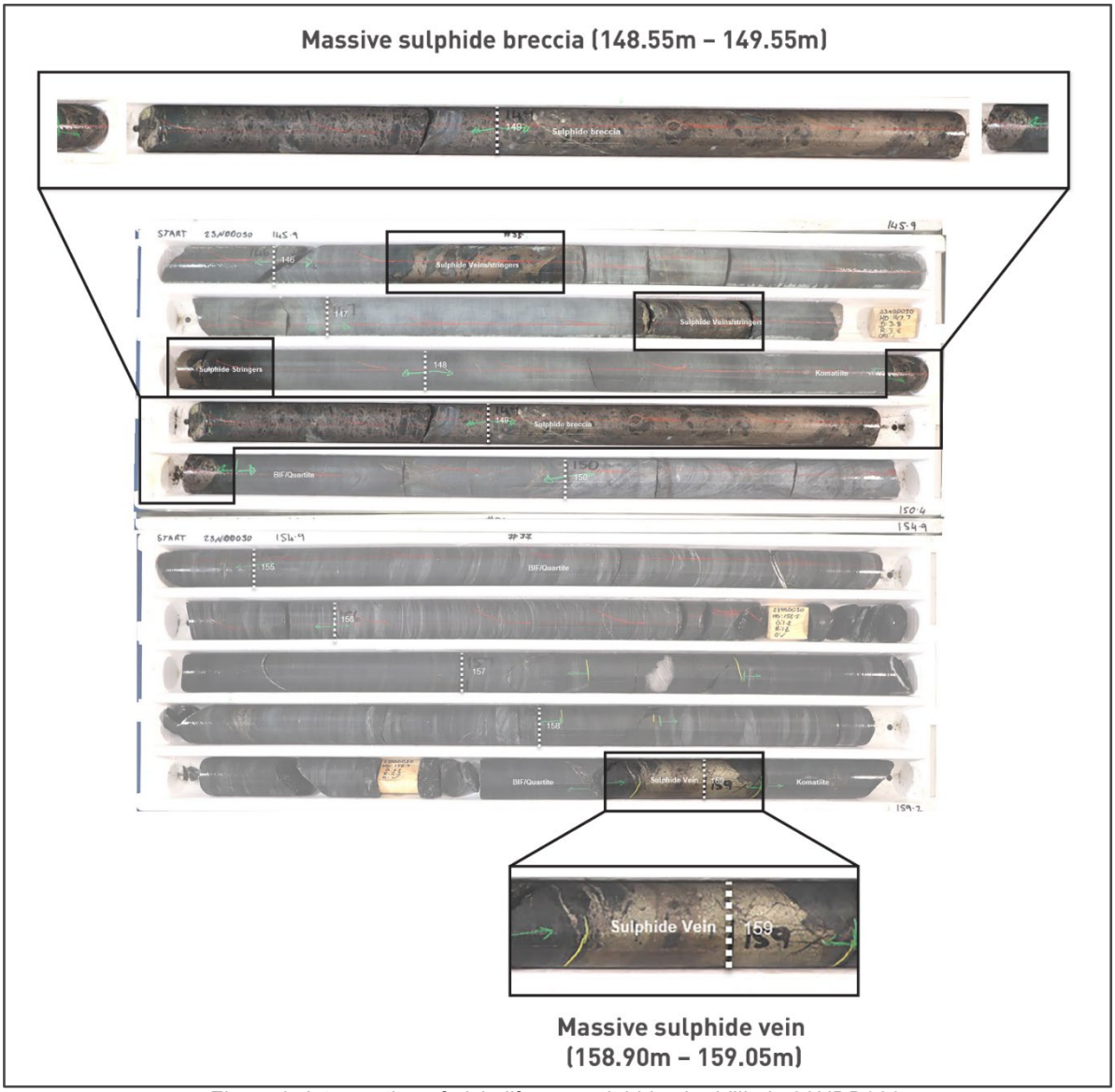

Figure 2: Intersection of nickeliferous sulphides in drillhole 23NDD030, with some massive sulphide intersections highlighted.

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.*

NEXT STEPS

- Assay results are pending from diamond drill holes 23NRD028 (Sexton); 23NDD030 (Sexton) and 23NDD031 (B1).
- Follow-up drill targets at Sexton will be considered upon analysis of the assay results.
- The exploration team will also review historic electromagnetic surveys at B1 and consider the opportunity to conduct further ultrafine soil sampling in the Target area.
- With these results, the Company can consider further drilling within the broader B1 mineralised horizon, to test areas where the sulphides may have accumulated.

Table 1: Collar Locations of Diamond Drilling

Hole number	Actual Depth (metres)	Northing* (metres)	Easting* (metres)	Elevation (metres above sea level)	Azimuth (true north degree)	Dip (degree)
23NRD028	173.4	627854	246097	160	0	-80
23NDD030	266.4	6278495	246116	160	40	-68

* GDA94/MGA51

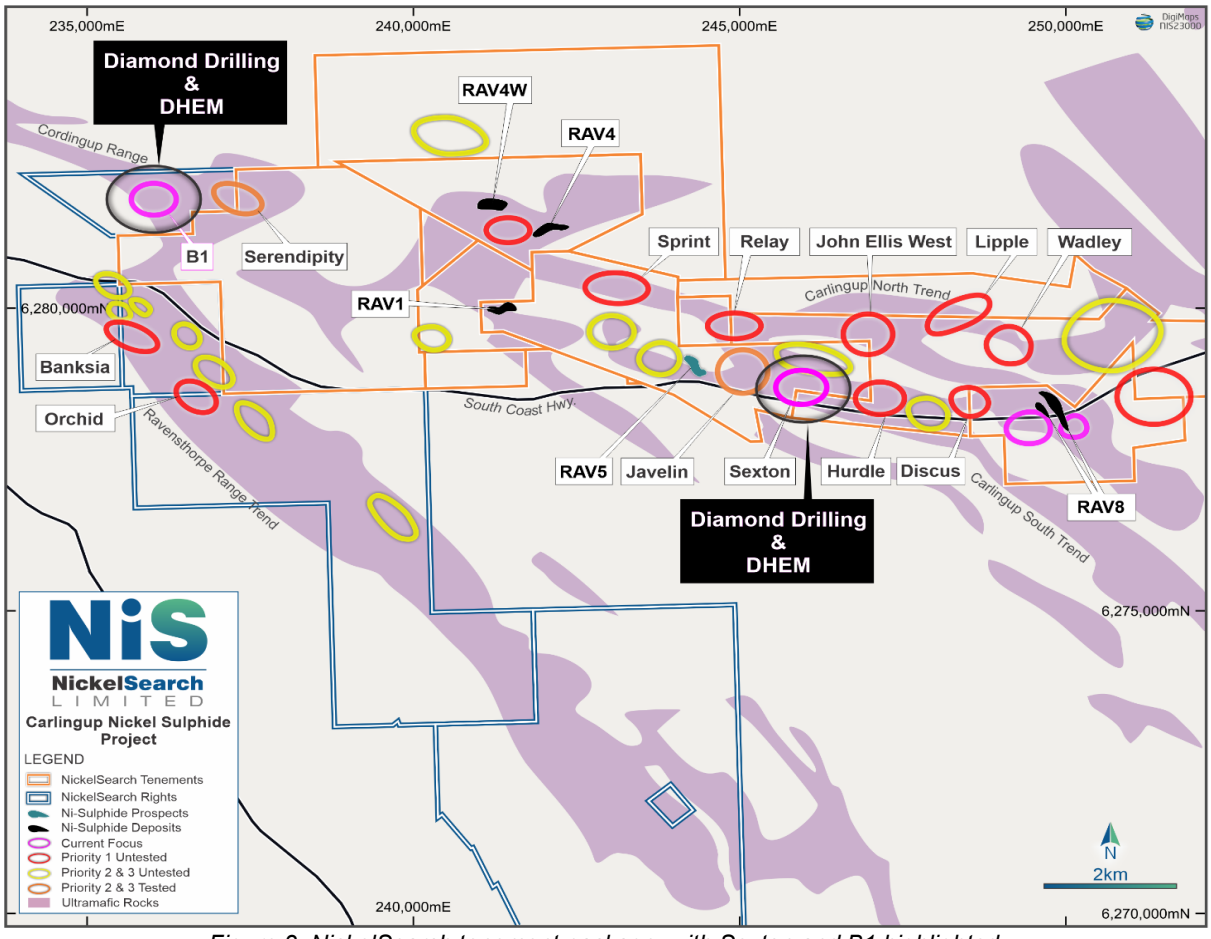

Figure 3: NickelSearch tenement package, with Sexton and B1 highlighted.

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

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About NickelSearch

NickelSearch Limited [ASX: NIS] is a dedicated nickel sulphide explorer focused on advancing its flagship Carlingup Nickel Project in Western Australia.

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.

Highly Prospective Tenure Covering +10km Strike

Multiple high priority, drill-ready greenfield nickel sulphide targets

Proven high grade nickel production of 16.1kt Ni at 3.45%

Significant, shallow resource base open in most directions

Competent Person's Statements:

Exploration Results

The information in this announcement that relates to exploration targeting and results is based on, and fairly represents, information compiled and reviewed by Nicholas S 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.

Mineral Resource

The information in this announcement that relates to estimates of Mineral Resources for NickelSearch has been extracted from the Company's announcement dated 30 March 2023, which was released to ASX and is available on the Company's website at www.nickelsearch.com. NickelSearch Limited confirms that it is not aware of any new information or data that materially affects the information included in the Company announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in that relevant ASX market announcement continue to apply and have not materially changed.

NickelSearch Limited confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the relevant ASX market announcement.

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.

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 (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.	• Core samples of approximately 0.2m -1.2m in length were collected for rock characterisation and from mineralised intervals as determined by the supervising geologist. • Each one metre sample was visually logged, plus field analysis was completed by handheld pxrf and magsus meter. • Samples are dispatched to an accredited laboratory, Intertek Minerals in Perth where they are pulverized, followed by analysis using methods 4A/MS48 and FA25/MS or FP1/OM where applicable. • Certified Reference Materials (CRM) were inserted in the sample sequence.
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.).	• 23NRD028 was pre-collared by reverse circulation, 23NDD030 was rough cored from surface. • Both holes were completed by diamond drilling with oriented standard tube HQ/NQ_2 Core. • Holes drilled at appropriate dip angles/azimuth where possible to orthogonally intercept the geological target.

Criteria	JORC Code explanation	Commentary
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.	• The percussion and drill core sample recoveries were assessed and recorded during the program, and these were overall good to excellent. • No relationship between sample recovery and grade has been undertaken.
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.	• Both drill holes have been photographed, geologically logged, supplemented by basic petrophysics and geotechnical measurements (where applicable) to a standard that would be appropriate for a mineral resource estimation. • Both drill 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.	• The sample preparation technique carried out in the field is considered industry's best standard practice. • The RC precollars were sampled their entire length. • Unmineralised and mineralised sections of the core were split in half by diamond saw and sampled in intervals determined by the supervising geologist. • The samples were then transported to Intertek in Perth for sample preparation and analysis where they will be sorted, crushed and pulverised (up to 3kg) to achieve 85% passing 75µm to produce a homogenous representative media for analysis. • The sample sizes are considered to be appropriate to correctly represent nickel sulphide mineralisation and associated geology based on the style of mineralisation, the thickness and consistency of the intersections and the sampling methodology.

Criteria	JORC Code explanation	Commentary
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.	• Assaying has been completed by a commercial registered laboratory (Intertek Minerals) with internal duplicates and standards being inserted and reported in the sample batch. • Nickel CRMs were inserted into the batch by NickelSearch. • Individual samples assayed for a suite of 48 elements including nickel, copper, cobalt and related elements as per the laboratory's procedure for a 4-acid digestion followed by Inductively Coupled Mass Spectral analysis. • Samples above 5000ppm Ni were re-assayed by sodium peroxide fusion in zirconium crucible and determination by Inductively Coupled Optical Emission Spectral analysis. • Select samples analysed for Au, Pt and Pd by 25g Fire Assay followed by Inductively Coupled Mass Spectral analysis. • A Niton handheld portable XRF analyser (pXRF) was used to assist in the identification of the mineral sulphides and mineralised boundaries. No pXRF analyses have been reported.
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.	• Assay, sample ID and logging data are matched and validated using filters in the drill database. • Assay results are provided by the laboratory to NickelSearch in a csv file format and then validated and entered into the database managed by third party database managers. • Primary geological and sampling data were recorded digitally and synchronized to a digital database where it was validated by experienced database personnel assisted by the geological consultants. • There has been no cross checking of laboratory performance at this stage. • Twinned holes have not been used in this program.
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. • The rig was aligned using compass and tape, then more precisely by gyroscopic survey tool mounted to the drill mast. • All drill holes were surveyed using a north seeking gyro and downhole records calculated every 10m at the completion of each hole by the drill contractor. • 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.	• The drilling tested selected geophysical targets. • As the drilling is exploration in nature rather than definition, the spacing and distribution of holes 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 targets 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.	• All samples collected during the program were transported from Ravensthorpe by a commercial transport contractor to Perth, and then delivered to Intertek Minerals in Perth for submission and analysis. • Sample security was not considered a significant risk to the project. No specific measures were taken to ensure sample security beyond the normal chain of custody for sample submission.
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 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 Limited 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.
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.	• 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.

Criteria	JORC Code explanation	Commentary
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.	• NA
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').	• NA
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.
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.	• NA
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 (DHEM) survey data from early 2023 has been used to assist targeting drillholes. • The DHEM survey results of these drillholes are the subject of this release.
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.	• Follow-up drilling at the Sexton Prospect will be considered after the assay results are received.