Infill Soils & Loupe EM Survey Define LCT Drill Target at Quarry North

Key Highlights:

- **Infill Ultrafine Fraction (UFF) soil sampling highlights significant 1600m x 450m lithium-in-soil anomaly at Quarry North with peak values of up to 146 ppm Li (314 ppm Li_2O).**
- **The anomaly shows coincident anomalous gallium (Ga) and tin (Sn) which are considered as key pathfinder elements for lithium-caesium-tantalum (LCT) mineralisation.**
- **A Trial Loupe Electromagnetic (EM) survey was completed over Quarry North surface geochemical anomaly, with an EM response feature observed within LCT-in-soil anomaly and trend of mapped pegmatite bodies.**

NickelSearch Limited (**ASX: NIS**) ("**NickelSearch"** or **"the Company"**) is pleased to announce results from its infill Ultrafine Fraction (**"UFF"**) soil sampling program (*Figure 1*) at its Carlingup Lithium-Nickel Project **("Carlingup"** or the **"Project")**, situated in the evolving Battery Belt of Ravensthorpe in Western Australia. The Project is situated approximately 10km east of Arcadium Lithium's (ASX:LTM) Mt Cattlin Deposit, which produced 131kt of Spodumene in concentrate in FY23[1] (*Figure 2*).

The UFF infill soil program has been advanced to provide a high-quality surface geochemical dataset for lithium, base metals and gold exploration. The program was also designed to provide greater resolution of the previously identified anomalous areas surrounding the Quarry[2].

A trial reconnaissance Loupe Electromagnetic ("**EM**") survey has been completed, complimenting the mapping and soil programs. Loupe is a field portable Time Domain Electromagnetic ("**TEM**") system that is designed specifically for near-surface conductivity-mapping applications. This system has been deployed on a trial basis to assess its capability of mapping pegmatite host rocks in the immediate subsurface and to add further context to the observed geological and geochemical anomalies.

[1] Allkem Limited ASX Announcement 1 August 2023 – *Allkem Mt Cattlin Annual Ore Resource and Reserve Update as at 30 June 2023*

[2] NickelSearch ASX Announcement 15 January 2024 - *LCT Pegmatite Anomalies Identified in Proximity to the Quarry*

NickelSearch Executive Chairman, Mark Connelly commented:

"The results from our infill soil sampling have given us further confidence in our exploration methodology and we are excited to progress towards our first lithium drill program at the Carlingup Project. We have only scratched the surface of our significant regional landholding within the Ravensthorpe district and believe that the Quarry North target will be one of several high-quality drill targets to be identified as we continue to diligently assess the Project. While we are early in this process, our pivot towards lithium has enabled us to work collaboratively with Arcadium Lithium (hosting the Mt Cattlin Lithium Mine), which continues to support us with technical collaboration.

"The exploration team are working on building a quality pipeline of targets, in order of defining our work programs and advance the permitting required for access to those areas identified as high-ranking drill targets. We look forward to being able to update the market as we progress through this in the coming months."

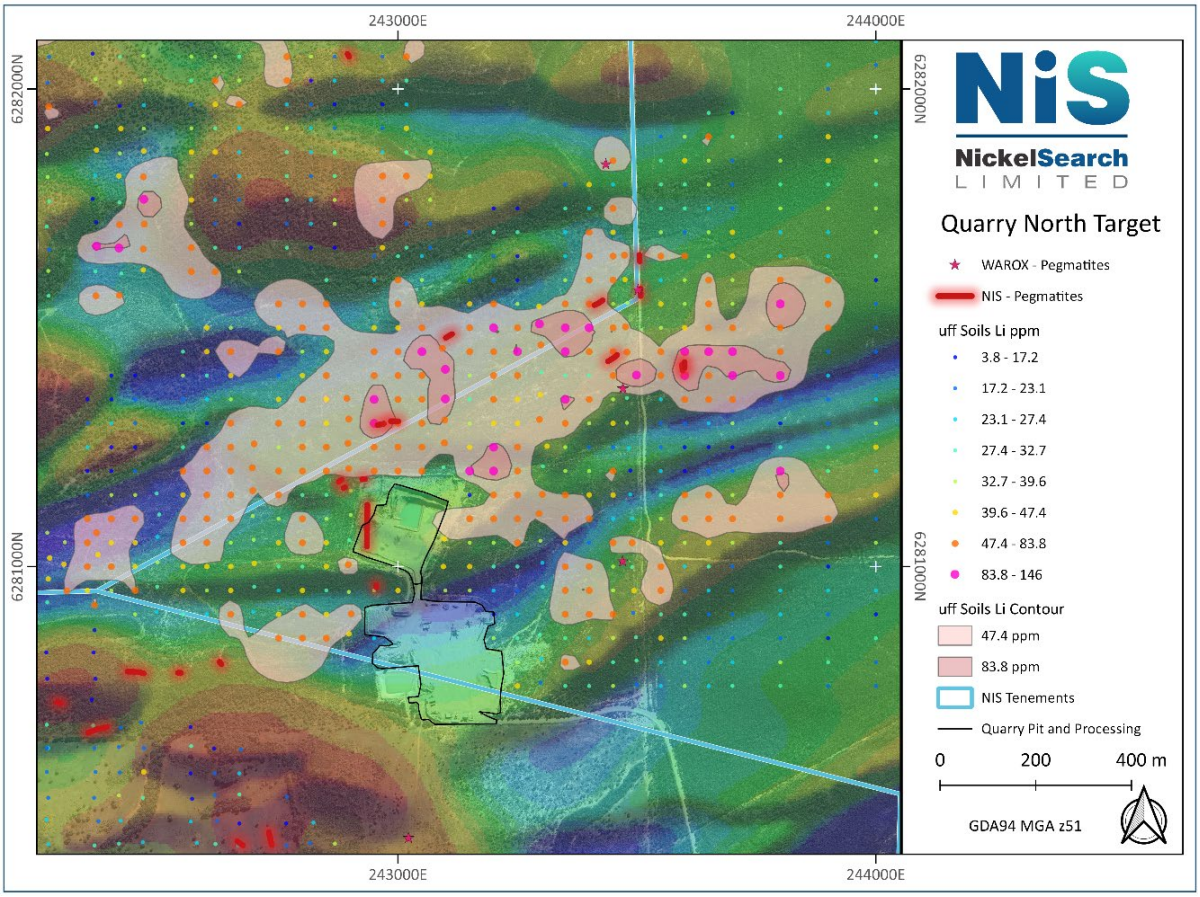

Figure 1: *Soil* ***Lithium*** *results (****Li ppm****) over magnetic image on aerial photograph showing pegmatite trends and Li contours*

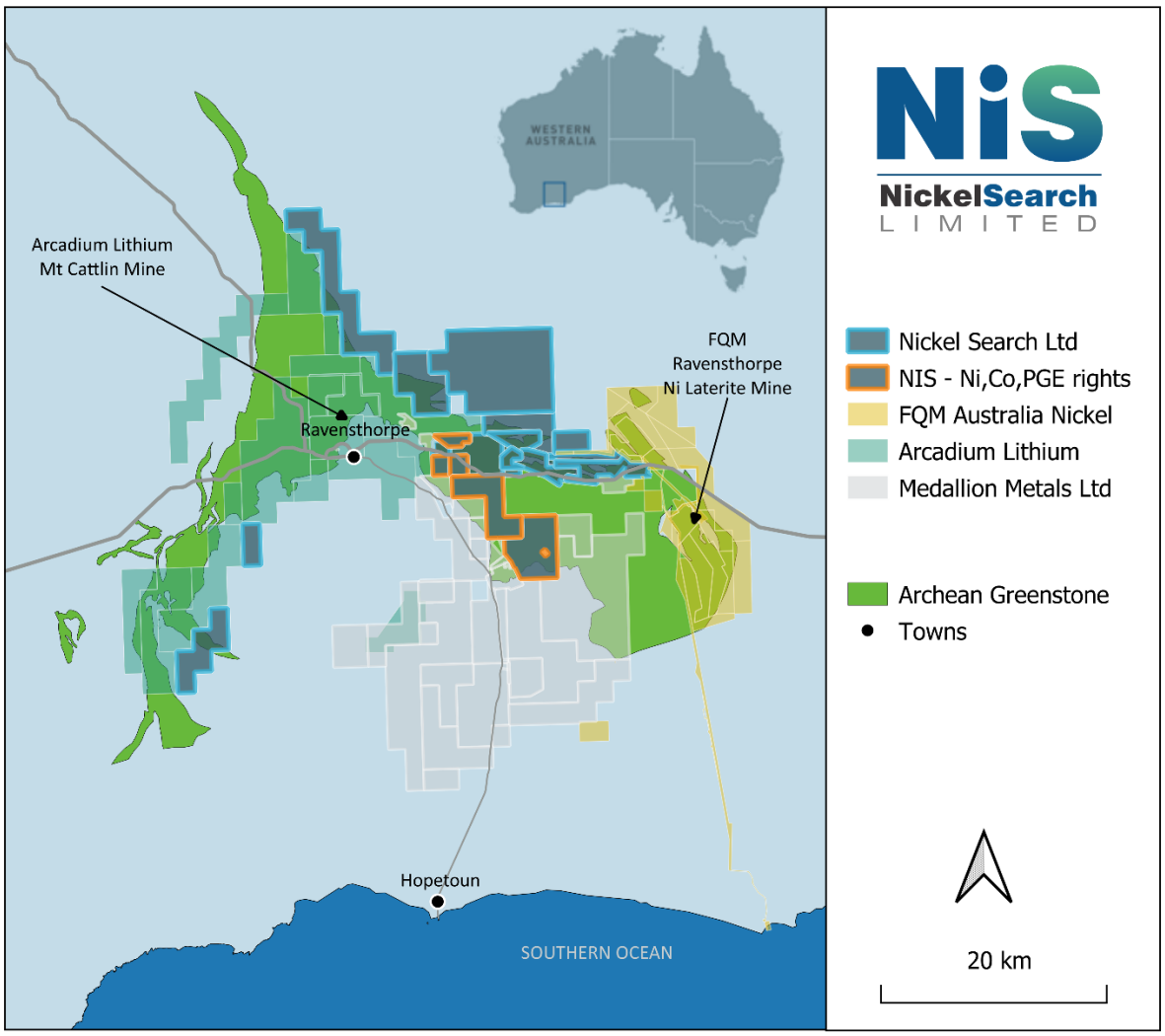

Figure 2: *Location of NIS Ravensthorpe LCT-Ni Project and District Tenement Map*

Infill Soil Sampling Program

Results from an infill UFF soil sampling program at Carlingup have been received, providing detail to the broadscale lithium-caesium-tantalum ("**LCT**") anomalies previously identified surrounding the Quarry. This program provided significant definition of a 1600m x 450m lithium-in-soil anomaly, with peak values of 146 ppm Li (314ppm Li_2O).

The soil program was designed in follow up to geological mapping (*Figure 1*) and to provide detailed coverage of the previously identified anomalous surface geochemistry. This program has assisted with the refining of drill targets through the analysis of lithium and associated pathfinder element results.

The Quarry North lithium anomaly is now sampled on a nominal 50m x 50m grid with a total of 542 new samples reported in this update. Samples were subject to LabWest's Ultrafine Fraction separation and analysis by ICPMS, providing 53 elements reading to sub ppm detection limits allowing for suitable assessment of the pathfinder elements. The multi-element anomaly at Quarry

North presents a compelling drill target with coincident caesium, tantalum, niobium, rubidium, gallium and tin variably correlated to the broader lithium anomaly *(see Figures 5-10*).

The broad west-southwest, east-northeast trending anomaly parallels cross cutting structures that can be observed in the regional aeromagnetic data. These structures are exploited by Proterozoic dolerite dykes, several of which can be observed in close proximity to the Mt Cattlin mine. At the Quarry prospect scale, pegmatite and dolerite intrusions can be observed exploiting these same structural geometries. A secondary series of north to north-northwest trending pegmatite and aplite dykes were also observed during mapping in the wider area, suggesting that there is potential for the structural interplay to create sites for pegmatite emplacement.

Loupe TEM Survey

A trial Loupe EM survey was completed to complement the mapping and soil programs. Loupe is a field portable TEM system, designed specifically for near-surface conductivity-mapping applications. This system has been deployed on a trial basis to assess its capability for determining pegmatite host rocks from country rocks in the immediate subsurface.

Stations at an approximate spacing of 1m were observed along 31 profiles encompassing 13.6-line kilometres, covering both the Quarry and Quarry North target areas. The total field EM response has been gridded, showing subtle response contrast at fast decay times due to the resistive nature of the bedrock and shallow soil cover.

Numerous areas of elevated EM response are observed in the gridded data. The strongest and best-defined peak response (*Figure 3*) sits within the 1600m x 450m lithium-in-soil anomaly, however the location of the EM anomaly is coincident with lower geochemical values within the broader geochemical anomaly. Ground observations across the EM response show a change in both the vegetation and soil profile (note this ground has previously been worked for agricultural purposes). Notably, immediately above of the EM anomaly, the material at surface is dominated by pegmatitic textured material (*Figure 4*). This differs from the surrounding areas either side of the EM response anomaly.

Other areas of elevated response are thought to be explained by a creek line (to the northwest of the main lithium-in-soil anomaly) and a Proterozoic dolerite dyke (to the southeast of the main lithium-in-soil anomaly). Inside the quarry, no significant EM response contrast is observed. A comparative high can be seen to correlate with a mapped pegmatite in the southwest corner of the quarry pit (trending north), however the limitations of accessing walls, standing water and various stockpiles has hindered the ability to transect across the entire pit exposure.

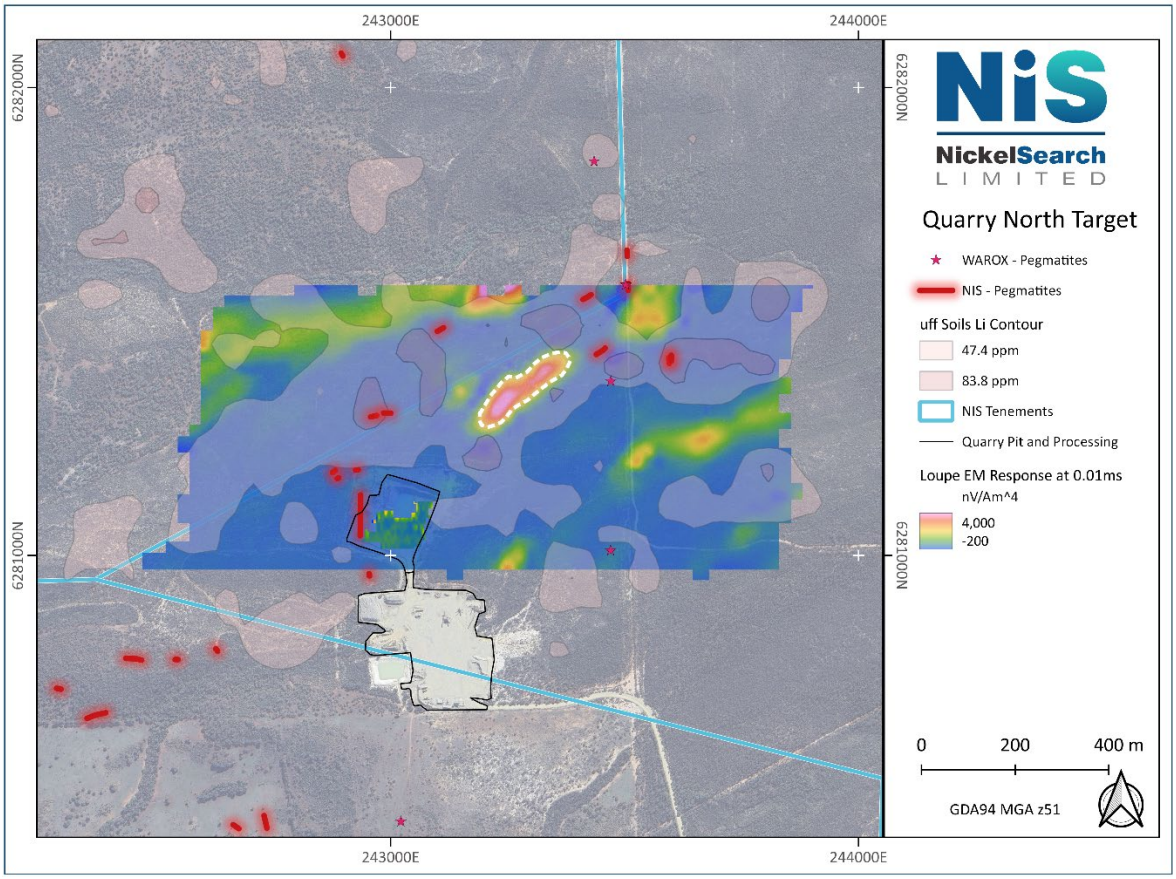

Figure 3: *Loupe EM response with peak response outlined in white dashed line on aerial photography and Li contours*

Figure 4: *Example of scattered pegmatitic material, located above Loupe EM response outlined in Figure 3*

Programme of Works (PoW)

Upon the completion of the Land Access Agreements[3], the Company applied for several PoWs to allow for drill testing of targets identified to date. The Company can now update on the progress of these applications, with the PoW immediately covering the quarry being granted. However, the application for the PoW over the Quarry North target is pending, with the Department requiring

[3] NickelSearch ASX Announcement 13 March 2024 - *Key Land Access Agreements Secured to Progress Drilling Application*

NickelSearch to complete a flora survey before the application will be progressed. The survey is scheduled to be conducted during the spring months when the vegetation is in flower. The remaining PoWs are still under departmental review, with some minor requests needing to be addressed. The Company does not believe these will significantly delay the granting of permissions.

Next Steps

The detailed geochemistry program has produced a broad scale lithium-in-soil anomaly variably correlated with LCT pathfinder elements at the Quarry North target. The trial reconnaissance Loupe EM survey has generated a coincident EM response contrast that requires drill testing to identify the source of the feature.

Ideally, the Company would move to test these immediately, however, is now required to complete further flora assessments during the spring months. As a result, the Company intends to expand the surface geochemical sampling program, targeting further evidence of LCT mineralisation on its substantial landholding in the Ravensthorpe district. This work will then feed into a wider scoped permitting process, including all flora and fauna as well as any heritage surveys and landowner access agreements. At that point, the Company will be well positioned to apply for PoWs to allow access to test its highest-priority drill targets.

Considering recent personnel changes within the Company, NickelSearch is currently working through all exploration targets that have been identified and is generating a consolidated target pipeline and strategic exploration plan. This includes a review of the LCT work to date, nickel projects and the potential for copper-gold targets to be added to the portfolio. While this is occurring, the Company will advance its exploration through low-cost surface sampling and mapping programs. The Company considers this to be the best process to unlock the next generation of discoveries and value for NickelSearch shareholders.

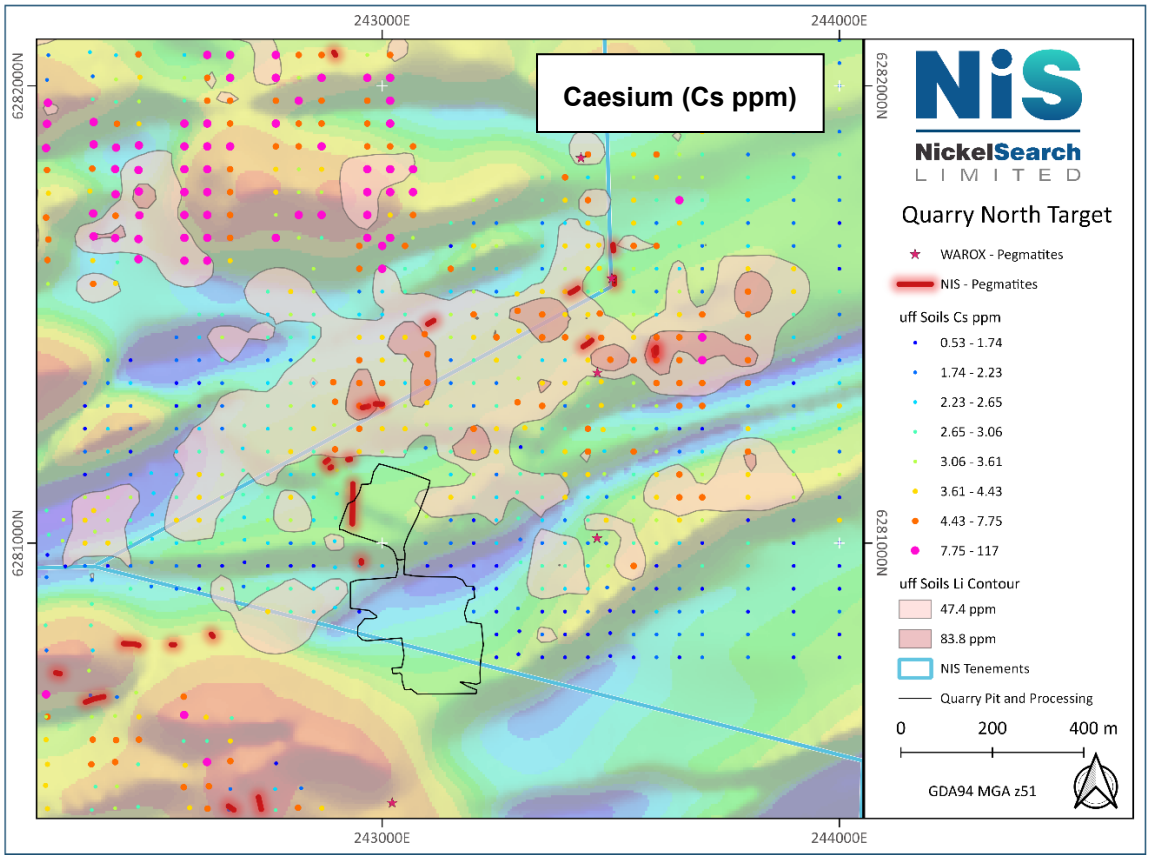

Figure 5: *UFF soil* ***Caesium*** *results (****Cs ppm****) over magnetic image showing pegmatite trends and Li contours*

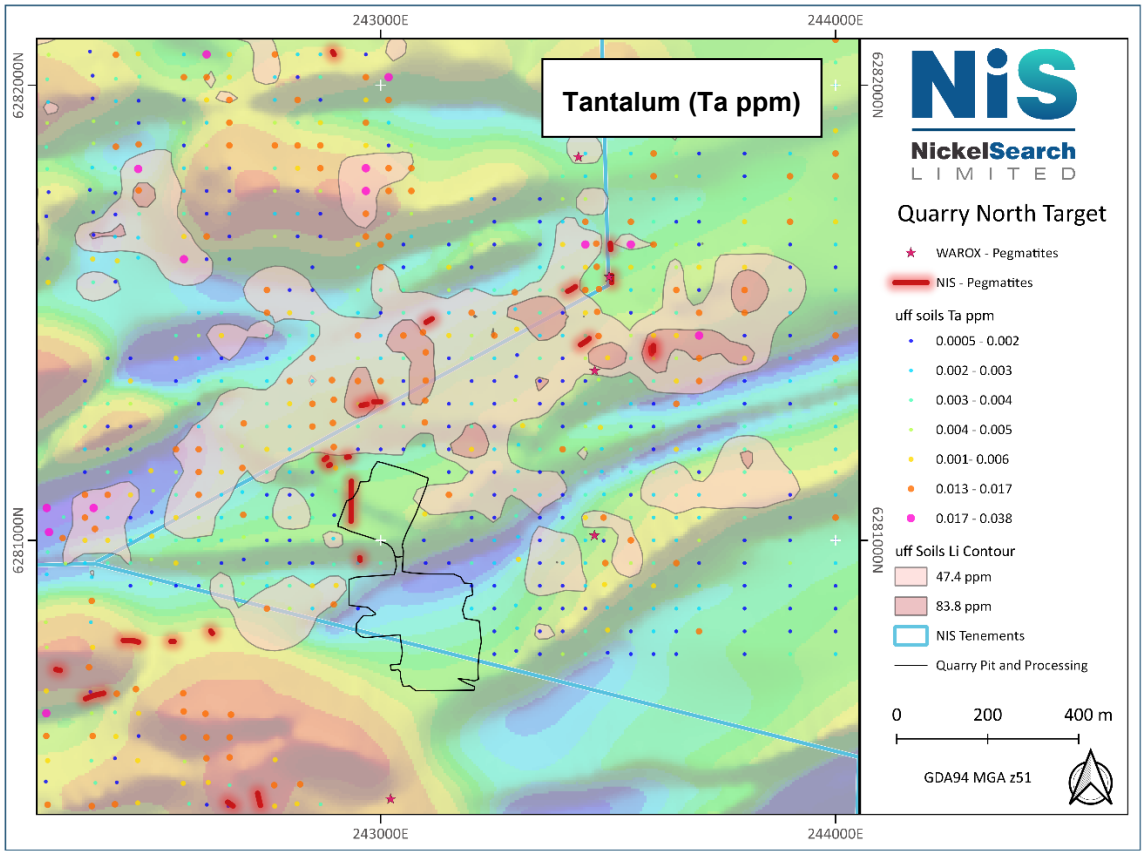

Figure 6: *UFF soil* ***Tantalum*** *results (****Ta ppm****) over magnetic image showing pegmatite trends and Li contours*

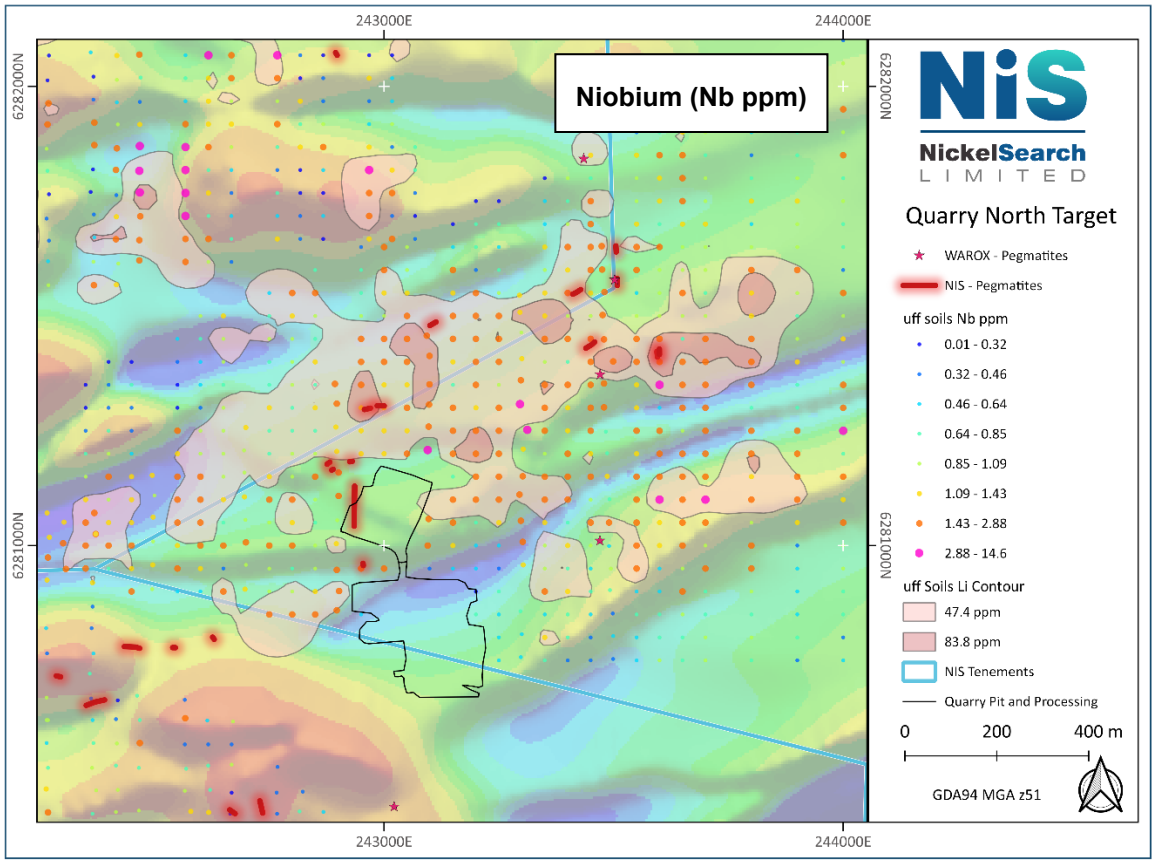

Figure 7: *UFF soil* ***Niobium*** *results (****Nb ppm****) over magnetic image showing pegmatite trends and Li contours*

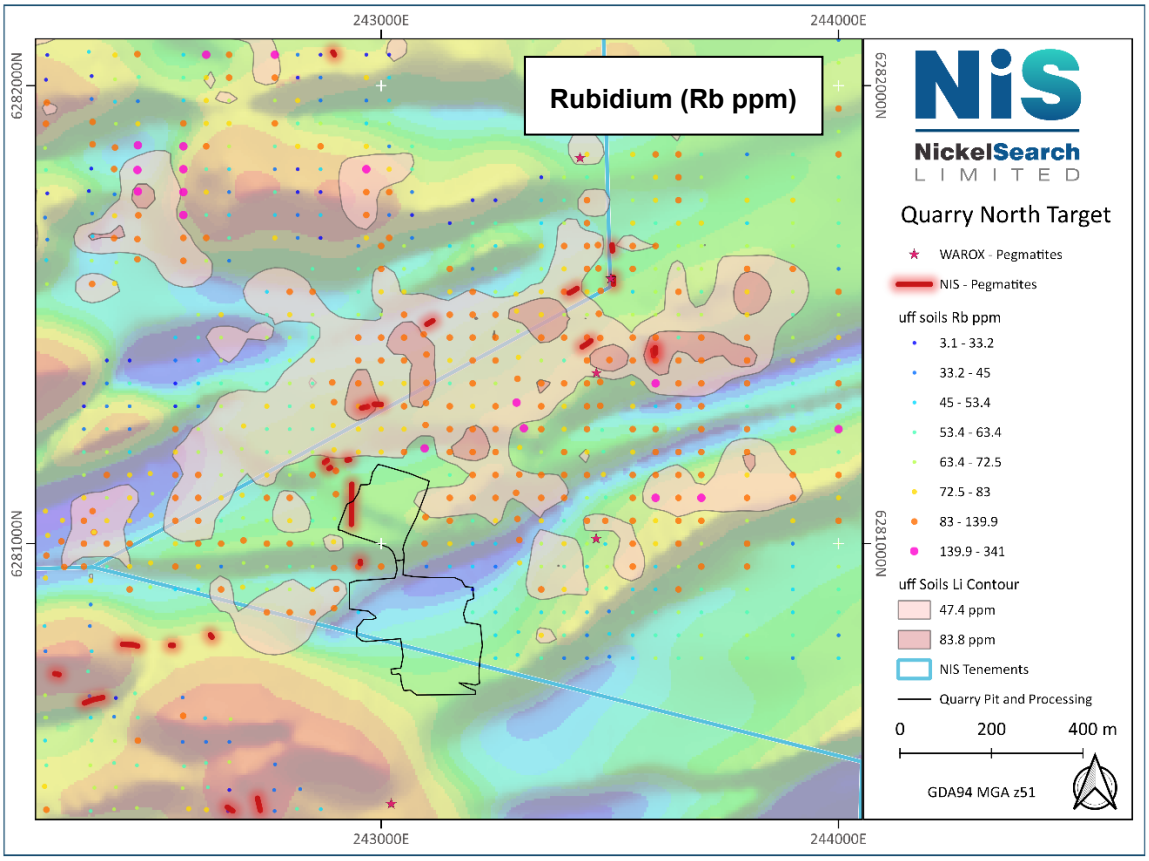

Figure 8: *UFF soil* ***Rubidium*** *results (****Rb ppm****) over magnetic image showing pegmatite trends and Li contours*

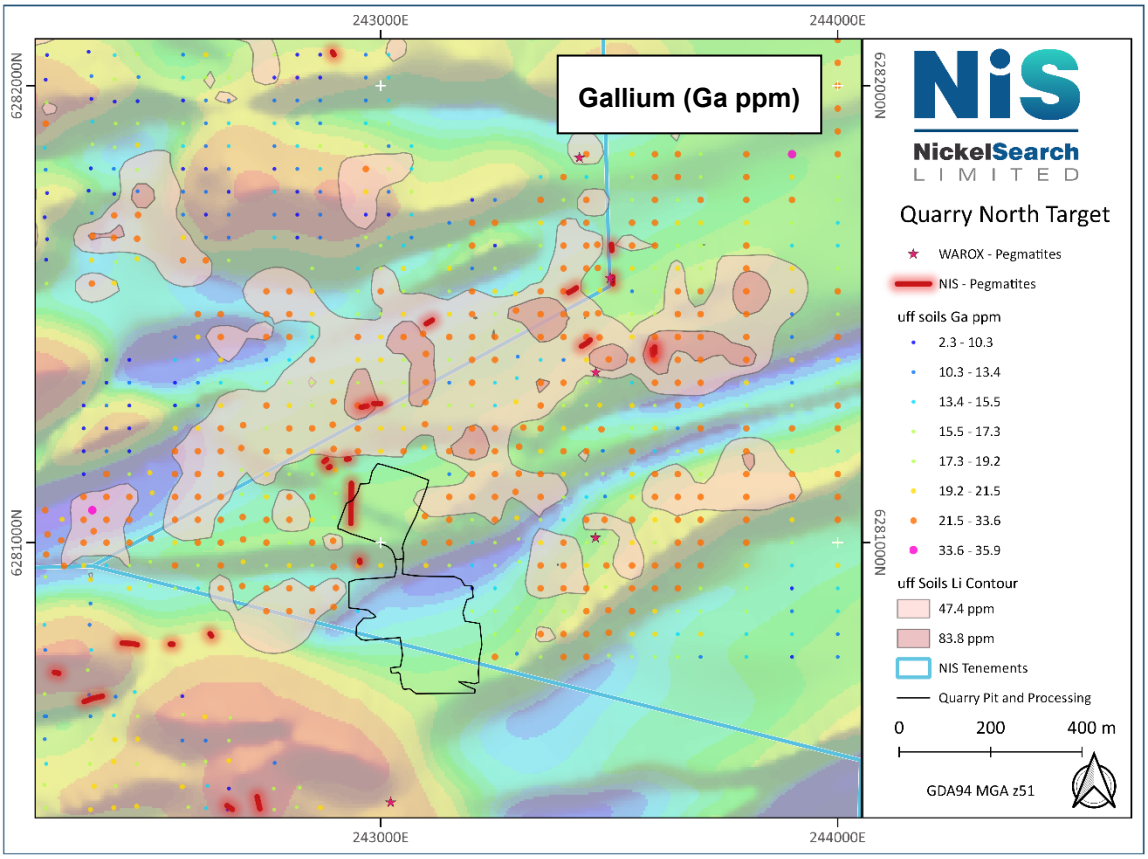

Figure 9: *UFF soil **Gallium** results (**Ga ppm**) over magnetic image showing pegmatite trends and Li contours*

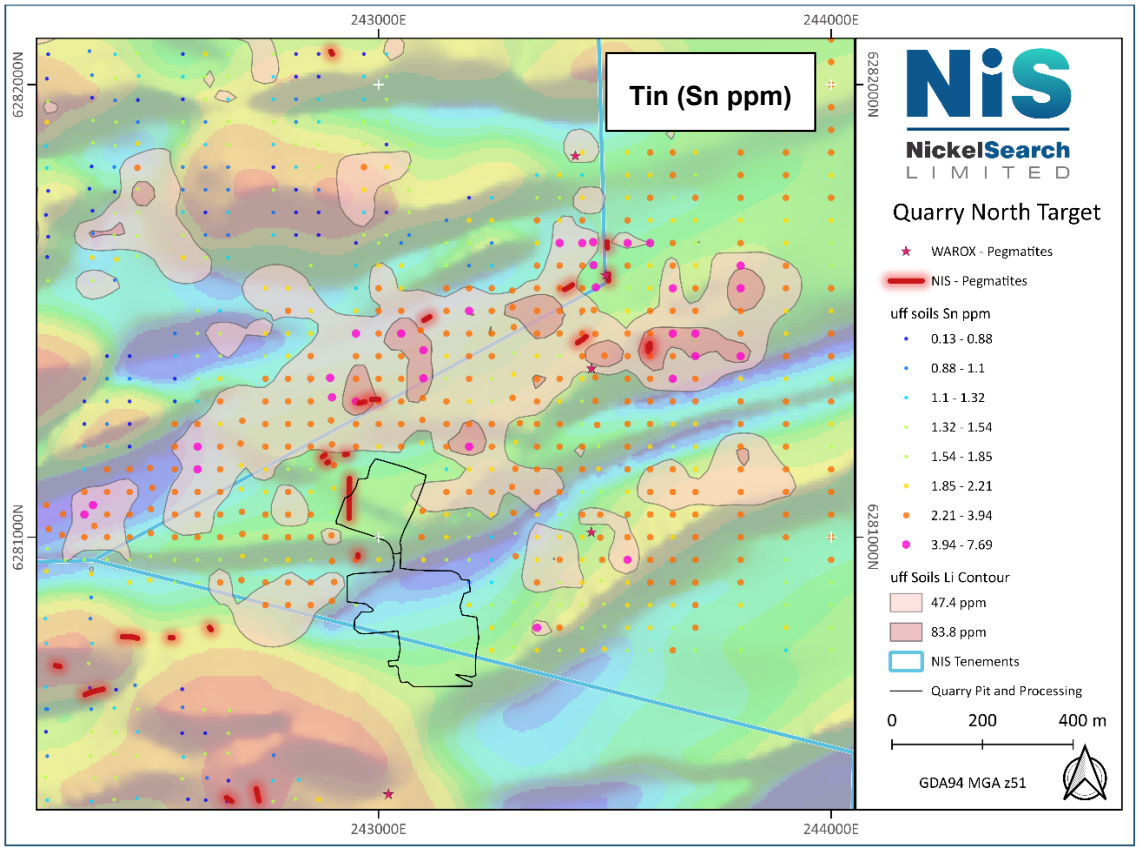

Figure 10: *UFF soil **Tin** results (**Sn ppm**) over magnetic image showing pegmatite trends and Li contours*

Compliance Statement:

The information in this release that relates to previously reported exploration results for NickelSearch are extracted from the ASX Announcements listed in footnotes to this release, which are also available on the Company's website at www.nickelsearch.com and the ASX website www.asx.com under the code NIS. NickelSearch Limited confirms that it is not aware of any new information or data that materially affects the information included in the relevant Company announcement, and ongoing results are published as further assays are received.

Competent Person Statement:

The information in this announcement that relates to exploration targets and exploration results is based on information compiled by Jon McLoughlin, a competent person who is a member of the Australian Institute of Geoscientists (AIG). Mr McLoughlin is employed by Nickel Search Limited. Mr McLoughlin has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mr McLoughlin consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

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 battery metals explorer focused on advancing its flagship Carlingup Project in Western Australia. The Project has an existing mineral resource base totalling 155kt contained nickel and is strategically located in the same greenstone corridor as IGO's Forrestania nickel mining complex, and only 10km from Arcadium's Mt Cattlin Lithium Mine.

- **Strategic landholding only 10km from Mt Cattlin mine**
- **High-grade lithium rock chips up to 5.19% Li_2O**
- **Outcropping pegmatites on 4 high priority lithium areas**
- **Technical collaboration with Arcadium Lithium on lithium potential**

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 (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.
		• Soil samples:
		  • were taken on a regular grid pattern over a range of soil types. Samples were collected from a nominal depth of 0.2m and screened, with about 250g of <2mm material collected for submission for assay.
		  • At the laboratory, soils samples were subject to LabWest's Ultrafine Fraction separation where the < 2 micron material is collected through agitation of the sample in water, allowing settling to occur, and selectively sampling clay of the target size fraction.

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.).	• No drilling is reported in this announcement.
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.	• No drilling is reported in this announcement.
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.	• No drilling is reported in this announcement.

JORC Code, 2012 Edition – Table 1

Criteria	JORC Code Explanation	Commentary
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.	• Duplicate samples of each soil sample were taken but not sent for assay. The samples were not split and are considered representative of the in-situ soil material, notwithstanding that the in-situ material for soil sampling was in many cases ploughed/disturbed farm soil. Sample sizes for the soils were appropriate for the analysis being undertaken.
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.	• Soil samples were analysed by LabWest using their proprietary Ultrafine methodology. The assay results stated for the soils are considered partial and do not represent the whole sample but the < 2 micron clay component of the sample. • No Geophysical instruments such as pXRF were used to determine assay values. • For soil samples, certified reference materials (CRMs) inserted by the laboratory for their own QAQC procedures were examined and found to be within acceptable limits for the majority of relevant elements. The results also passed the internal laboratory QAQC process prior to being issued.
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 results have been examined by two separate geologists and the results reported in this report have been cross checked against the original laboratory certificates of analysis. • No twinned holes have been completed. • Sample data were entered digitally by the field personnel responsible for the sampling. The coordinates have been confirmed by plotting the sample positions on aerial photography. Primary data and assay results are loaded into a managed geological database with password and permissions protections. • No adjustments have been made to assay data. Results for lithium were received from the laboratory as Li ppm. Where these have been converted to Li_2O ppm values for publication purposes the formula Li_2O (ppm) = Li (ppm) * 2.153 was used.
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	• The location of surface samples was recorded with handheld GPS. The GPS coordinates presented in this

JORC Code, 2012 Edition – Table 1

Criteria	JORC Code Explanation	Commentary
	estimation. Specification of the grid system used. Quality and adequacy of topographic control.	report relate to the location of the sampled material as it was collected. • The grid system used for soil samples was GDA2020 MGA Zone 51. • No topographic control has been established for the surface samples. The samples were taken from the surface at the stated location.
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.	• Soil samples were collected in a grid with ~50 - 100m E-W spacing and ~50m N-S spacing. • No resource estimation is made. • No compositing has been applied to the 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.	• Soil samples were taken using a grid pattern with north-south lines 50 - 100m apart and samples taken at 50m intervals along lines, resulting in a square or rectangular grid. Several different structural orientations have been identified or interpreted that may be important to the distribution of pegmatites, including NE-SW, N-S, E-W, and NNW-SSE. • The orientations of the mineralised structures are not well understood at this stage in this area, and it is not possible at this stage to assess whether sampling orientation introduced any bias to the results.
Sample security	The measures taken to ensure sample security.	• Surface samples were kept in the custody of the Company from collection until delivery at the laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• No audits or reviews have been completed.

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,13 ELs and 1 PL covering 194.5 sq km (NiS tenement package – ML74/013, M74/085, M74/107, M74/104, M74/082, M74/084, M74/106, E74/685, E74/657, E74/675, E74/777 E74/719, E74/762, E74/744, E74/743, E74/804, P74/0387; Medallion Metals Ltd tenement package (NiS nickel-cobalt-PGE rights) – M74/083, E74/656, E74/602, E74/683, E74/638). • Exploration Licenses E74/762 and Prospecting License P74/387 were acquired via transactions announced on 12 December 2023. These transfers into the NickelSearch group of companies are awaiting stamp duty assessments.
		• A number of the above tenements overlap private land (including the quarry, namely private land with the following title identifications Volume 2773 Folio 840, Volume 2597 Folio 894, Volume 1335 Folio 848, Volume 2874 Folio 299, Volume 2773 Folio 844 and Volume 2597 Folio 895) for which the Company has consent and compensation agreements in place with the owners and occupiers of the land in order to access the private land for exploration purposes.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• No previous significant lithium exploration work by other parties is known within this area. • The quarry has operated for several years extracting rock and sand primarily for civil engineering applications. It is not currently actively operated.
Geology	Deposit type, geological setting and style of mineralisation.	• NickelSearch's tenements cover the Ravensthorpe Greenstone Belt and adjacent rocks. The geology consists primarily of ultramafic, mafic, and felsic volcanic rocks, along with chemical and detrital sediments of Archaean age. • NE trending dolerite dykes are present in the vicinity of the quarry and throughout the tenure. • The deposit style being investigated is that of LCT pegmatite hosting lithium bearing minerals such as spodumene. The deposit used as an analogue for exploration in this region is the Mt Cattlin Mine operated by Arcadium Lithium, which is situated

JORC Code, 2012 Edition – Table 1

Criteria	JORC Code Explanation	Commentary
		approximately 10km to the west of the quarry. • The area is known to host Li (Mt Cattlin), Ni sulphide (NIS tenure), nickel laterite (NIS and FQM), and gold (MM8 and others), and is also interpreted to be prospective for VHMS mineralisation.
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.	• No drill holes are presented in this 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 metal equivalent reporting has been applied.
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 drill hole results are reported. Mineralisation widths are not reported.
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 the body of this report.
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 soil sample assay results recently received from the sampling campaign completed over the areas indicated in the figures in this announcement have been illustrated in their entirety in those diagrams.

JORC Code, 2012 Edition – Table 1

Criteria	JORC Code Explanation	Commentary

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.	• The results of a Loupe EM survey are presented in this announcement. Loupe is a highly portable time domain EM system. It operates at high frequency and is typically used to conduct high resolution conductivity mapping in the near-surface. Specifications for the survey are as follows:
		  • Base frequency: 75 Hz
		  • Current: 20 A
		  • Peak Transmitter Moment: ~91 ATm^2
		  • Transmitter-Receiver Spacing: 10 m
		  • Sensor: 3 orthogonal component air-cored coils
		  • Line spacing: 10m – 50m
		  • Survey control: GPS, using WGS84 UTM Z51
		• Results were visualised through 2D inversion using a layered earth model, and gridding of the total field response.
		• Consistent with shallow soil cover, the conductivity responses were found to decay rapidly over the crystalline bedrock.
		• Anomalies were observed, the significance and interpretation of which are discussed in the body of the announcement

		• All other relevant exploration data that is known at this stage of the exploration program is presented in the body of the announcement or has been previously reported to the market.
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.	• Plans for further work are outlined in the body of the announcement.