Copper intercepts & exploration update

Surprise Copper Prospect

Key Highlights:

- **Phase one reverse circulation (RC) drill program concluded at the Surprise Copper Prospect**
  - **High-grade intervals up to 12% Cu returned in pXRF review of drill chips**
  - **Assay results are expected by the end of January 2025**
- **Geophysical surveys planned for the next phase of exploration activities**

NickelSearch Ltd (ASX: NIS) (**NIS** or the **Company**) is pleased to announce that it has concluded its initial RC drilling program at the recently acquired Mt Isa North Project in Queensland. This drill program aimed to confirm historical drilling while testing extensions of the copper mineralisation and achieved this goal within the confines of the physical conditions experienced by the campaign.

The Surprise Copper Prospect has historical drill intercepts identifying high-grade copper mineralisation and the historic Surprise copper-gold mine produced[1]: approximately 5,600t of material, grading 10-22% Cu and 2-4g/t Au while operating.

The Company is also pleased to provide shareholders with insight into future activities planned for the Surprise prospect in the coming weeks.

Chief Executive Officer, Johan Lambrechts, commented:

"Over the past few weeks, I visited the Surprise Prospect and others in our Mt Isa North project. The visit confirmed my view of the high potential of the project and that it is screaming for targeted modern exploration activities to unlock what has been awaiting discovery for so long.

Our maiden drill program at Surprise has been concluded; however, we did not complete all the planned holes due to several large bushfires in the area. As a precaution, we pulled our crew ahead of a fire that burnt through the Surprise mine. The reduced drilling program nonetheless achieved its objectives and will help drive our strategy when we regroup to recommence the next exploration season.

To help with advanced targeting, we are also preparing to complete 3DIP and magnetic surveys over the Surprise prospect. These should identify buried targets for future drilling programs away from the Surprise mine and will help grow the volume and scope of this exciting prospect."

[1] Refer to ASX announcement 'Transformational Mt Isa Cu U Acquisition' released 28 August 2024

Phase One RC Drilling - Surprise Mine

Drilling targeted the 3m to 10m thick mineralised calcite vein extracted historically that recorded historical production of ~5,600 tonnes grading at between 10 % to 22 % Cu and 2 to 4 g/t Au with significant silver. Some historical drilling intercepts include[2]: **23.77m @ 4.67% Cu** from 51.21m in SH30 and **3.66m @ 9.53% Cu** from 22.25m in hole SH37.

The original plan for the maiden drill program was to complete 1,500 m of RC drilling; however, several seasonal bushfires ignited by lightning strikes plagued the area.

Figure 1 was taken from the driller's camp and shows the fires that resulted in the call to demobilise. Only about half of the program was completed when the program was stopped.

Figure 1: Photo of fires taken from the drilling camp

Drilling Update:

Six holes (768m) were completed before the decision to suspend the drilling was made. Three holes encountered interpreted well-mineralised intervals, while three holes encountered less mineralised quartz veins that seem to have replaced the calcite.

Table 1: Drill collar table for the holes completed at the Surprise Mine

Hole ID	East	North	RL	Depth	Dip	Azi
ASRC001	395516	7769983	207.2	120	-55	255
ASRC002	395518	7769950	206.8	72	-55	255
ASRC003	395537	7769941	205.6	132	-55	255
ASRC004	395415	7769924	200	168	-55	75
ASRC005	395405	7769959	200	234	-55	75
ASRC006	395489	7769876	205	42	-55	75

A field reconnaissance visit identified that the mineralisation is hosted either in quartz or calcite at mineralised outcrops along strike, further north of Surprise. The relationship between the calcite and the quartz is not yet understood, but the mineralised unit is clearly identifiable in contrast to the host through the highly ferruginous matrix and general metal content.

The drilling program intersected several encouraging intervals. Figure 2 represents a single interval from ASRC002, estimated to contain about 12% copper from pXRF data collected at the rig. (NOTE: The interval was analysed twice with the pXRF and both times the result was above 12% Cu) The samples from all six holes have been submitted for lab analysis, and the assay results are expected in mid-January 2025.

[2] Refer to ASX announcement 'Transformational Mt Isa Cu U Acquisition' released 28 August 2024

NOTE: Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factors of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

Figure 2: Copper mineralisation in drill chips during the recent Surprise prospect drill program collected from ASRC002 (44m to 45m down hole). Refer to the disclaimer above regarding visual estimates. The mineral assemblage of the interval is estimated to include 5% pyrite, 35% chalcopyrite and 60% calcite. The host rock for the mineralisation is calcite, which is hosted within a metamorphosed, magnetite and chlorite altered amphibolite.

Geophysical Targeting Activities

The recent field reconnaissance on the Surprise prospect identified the importance of structural control on the mineralisation. It also clarified the contrast between the mineralised unit and the surrounding country rocks. The Company is also aware of the importance of scale in exploration activities and, therefore, understands that identifying additional prospective and potentially mineralised zones in the Surprise trend is vital.

Surface reconnaissance has identified some outcropping extensions, but it may be that the subsurface holds more unexplored potential for the advancement of the Surprise prospect. For this reason, Nickelsearch has concluded that Three Dimensional Induced Polarisation (3DIP) and

magnetic surveys may efficiently identify mineralised zones by contrasting the country rock, the calcite/quartz host and the ferruginous mineralised unit itself.

The commencement of the geophysical surveys is imminent, and the Company looks forward to informing its shareholders of these programs in the coming weeks.

Exploration plan for the Surprise trend

The available data indicates that mineralisation at Surprise is not continuous between the various workings stretching over more than a kilometre, as identified by surface reconnaissance, however we are also aware that there is limited knowledge of the subsurface extensions of the Surprise trend. We believe the appropriate geophysical activities will help identify the "pods" of mineralisation, which in turn will result in more targeted drill programs aimed at enlarging the volume and footprint of the known mineralisation at Surprise.

The current exploration plan, therefore, includes the completion of 3DIP and magnetic surveys over the Surprise mineralised trend. There are other historical datasets that will also be validated by these new datasets and may result in new targets in their own right.

The results for the Phase One drilling are expected in mid-January and will be released as soon as they have been reviewed. The targets generated by the geophysical work will then be tested during the cooler exploration season, which is set to commence in mid to late March 2025.

More activities are also planned for other prospects in the Mt Isa North project area.

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

Johan Lambrechts
Chief Executive Officer
NickelSearch Limited
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Compliance Statement:

The information in this release that relates to previously reported exploration results for NickelSearch is 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 report has been approved by Mr. Johan Lambrechts, a Competent Person who is a member of The Australasian Institute of Geoscientists and is the Chief Executive Officer of Nickelsearch Limited.

Mr Lambrechts has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr Lambrechts consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

About NIS

NIS is a multi-commodity, Australian focused explorer with two strategic district-scale exploration hubs located adjacent to established mine & processing infrastructure.

Mark Connelly
Non-Executive Chairman

Bruno Seneque
Non-Executive Director

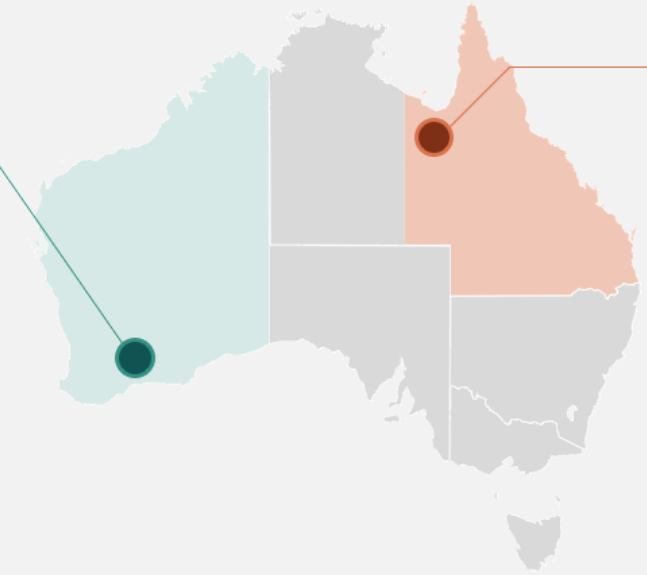
Richard Maddocks
Non-Executive Director

Johan Lambrechts
Chief Executive Officer

Li 3 Ni 28

Ravensthorpe

- South of Forrestania, WA - proximal to mines, infrastructure & Port
- ~10km from Arcadium Lithium's (ASX:LTM) Mt Cattlin lithium mine
- Identified lithium areas of interest & nickel deposits with significant exploration upside
- Confirmed high grade spodumene-bearing pegmatites at the quarry (rock chips up to 5.19% Li_2O)
- Multiple drill ready lithium targets



Cu 29 U 92

Mount Isa

- 2,003km^2 of prime tenure at Mt Isa, adjoining Mt Isa Operations (Glencore)
- Neighbours also include 29 Metals (ASX:29M), Fortescue (ASX:FMG), Austral (ASX:AR1) & Paladin (ASX:PDN)
- Right geology for world class deposits of Cu, Zn-Ag-Pb, U_3O_8 & REE
- Only superficially explored 1950s to 2010s
- NIS will apply modern exploration model and methods

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.	• All samples from this drilling campaign were submitted for lab assay. The announcement refers to one interval (See text for reference to specific DH), the grade of which has been quoted based on pXRF readings collected from the drill chips. • An image of drill chips collected from a single one meter (1m) interval is displayed (ASRC002). To comply with ASX requirements, the copper grade of the interval depicted is estimated in the announcement. • The copper grade estimated for the interval is derived from a pXRF measurement of the interval.
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.).	• The drill program mentioned in this announcement is reverse circulation (RC)
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	• The sample recovery for intervals relating to this drill program were evaluated by the geologist on site at the time of drilling. Sample recoveries are deemed appropriate. One drillhole ASRC002 encountered a void from 46 to 48 meters, which is interpreted to be an old underground working. No samples were collected from the void, and the void was taken into account when determining sample depths.

Criteria	JORC Code Explanation	Commentary
	sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
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.	• All drill chips where geologically 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.	• No sub-sampling techniques have been used
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.	Relating to the result quoted from the pXRF: • The interval was tested twice after the internal calibration of the instrument was completed. The results obtained by both readings were of similar order and represents positive correlation and appropriate duplication. (126000ppm Cu and 125937ppm Cu) The instrument used is a: Vanta M Series Handheld XRF Analyzer including rhodium (Rh) anode 50 kV X-ray tube and large area SDD (Silicon Drift Detector). Method: 30 Second - GeoChem (2 beam) with onboard Calibration for Vanta M Series, rhodium anode analysers.

Criteria	JORC Code Explanation	Commentary
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.	• No verification has been completed yet
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.	• Collars were surveyed using a handheld GPS and down hole surveys were collected by a Gyro.
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 spacing of the holes drilled during the current program was based on historical drill intercepts and potential extension. The data is not currently being used for resource estimation.
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 intercepts achieved an appropriate intersection angle due to the steep nature of the mineralized target.
Sample security	The measures taken to ensure sample security.	• Samples were collected and recorded by the geological personnel on site and couriered to 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 in this section apply to all succeeding sections.)

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 results reported here are located on EPM 28297 held by Bacchus Resources Pty Ltd. NickelSearch has exercised a purchase option agreement to acquire the tenement from Bacchus. There are no material encumbrances such as royalties or other agreements.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• The Competent Person considers all previous exploration work to have been undertaken to an appropriate professional standard notwithstanding the age of some of the historical rock chip and drilling datasets for which sundry data is scant. Previous explorers effectively delineated numerous targets and several of these were drilled and shown to contain encouraging indications of base metal mineralising systems. The Surprise mine itself has been drilled (RC drilling) historically which includes several mineralised intercepts.
Geology	Deposit type, geological setting and style of mineralisation.	• Base metal deposits targeted within the tenure include magmatic-hydrothermal Cu-Au styles (IOCG and ISCG). The project is located in the Proterozoic Mount Isa Inlier, a site of long- lived sedimentation, igneous activity, and deformation that persisted from ~1900 to 1350 Ma.
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	• Drill collar data.

Hole ID	East	North	RL	Depth	Dip	Azi
ASRC001	395516	7769983	207.2	120	-55	255
ASRC002	395518	7769950	206.8	72	-55	255
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ASRC006	395489	7769876	205	42	-55	75

Criteria	JORC Code Explanation	Commentary
	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.	
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.	• Relevant figures are included in the body of the announcement.
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 samples from this drill program have been submitted to the laboratory for assay. They will be released as soon as possible after being received by the Company.

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.	• There is no other substantive exploration data to 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.	• Plans for further work are outlined in the body of the announcement.