# **ASX ANNOUNCEMENT 20 SEPTEMBER 2023**



## STEP-OUT HOLE INTERSECTS WIDE SULPHIDE **ZONE WELL BEYOND CURRENT RESOURCE AT HOTINVAARA PROSPECT**

Drilling along 2km magnetic feature intersects substantial disseminated sulphide zone, including 7.5m of net-textured and semi-massive sulphides 500m south of the current MRE.

### **HIGHLIGHTS**

- Drilling continues to demonstrate significant potential to expand the current Mineral Resource Estimate (MRE) and intersect sulphide-rich zones.
- Step-out hole HOT026, located 500m south of the MRE boundary, but along strike of the main Hotinsaajo 2km long, NE-SW striking magnetic anomaly, has intersected disseminated sulphides over a width of 123.8m from 306.5m downhole (based on visual logging), greatly expanding the mineralised footprint and enhancing the prospectivity of this magnetic feature.
- Net-textured and patches of semi-massive sulphide mineralisation was logged<sup>1</sup> over a downhole length of 7.5m<sup>2</sup> from 313.2m, highlighting the potential of this area to host higher grade zones as intersected in the northern extent of the Hotinsaajo magnetic anomaly.
- Based on visual logging, four of the six holes completed since drilling resumed after the summer break have intersected at least minor occurrences of nettextured and semi-massive sulphides, and each of the six holes has intersected the pervasive disseminated sulphides that continue to be intersected in all drilling at the Hotinvaara Prospect.
- Diamond drilling continues at Hotinvaara with 15,482m completed across 28 holes. Additional holes planned for September will test the central and southern parts of the Hotinsaajo magnetic feature adjacent to HOT026.
- Assays pending for 20 holes, with assay turnaround times now substantially reduced, resulting in significant news flow over the coming months.
- Updated MRE on track to be completed by the end of this year.

Nickel sulphide explorer Nordic Nickel Limited (ASX: NNL; Nordic, or the Company) is pleased to advise that recent diamond drilling at the flagship Pulju Nickel Project (the Project) in the Central Lapland Greenstone Belt (CLGB) of northern Finland has continued to significantly expand the mineralised footprint of the key Hotinvaara Prospect.

<sup>&</sup>lt;sup>2</sup> True thickness estimated to be 60-80% of downhole thickness.







<sup>&</sup>lt;sup>1</sup> In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of sulphide and oxide material abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory assay results are required to determine the widths and grade of the visible mineralisation reported in preliminary geological logging. The Company will update the market when laboratory analytical results become available.



Diamond drilling resumed at Hotinvaara following the summer break in early August and has continued to intersect substantial widths of sulphides both within and outside the current Hotinvaara Mineral Resource Estimate (MRE) of 133.8Mt at 0.21% Ni and 0.01% Co.

A total of 28 holes for 15,482m have now been completed throughout the duration of the Company's maiden drilling campaign, with assays reported so far for seven holes (*Figure 1*; *Table 1*). Up to three holes are planned to be completed by the end of September.

The drillholes completed as part of the maiden drill program have been designed to test a combination of targets, including specific electromagnetic **(EM)** targets, magnetic and gravity anomalies, as well as to extend the overall footprint of the MRE.

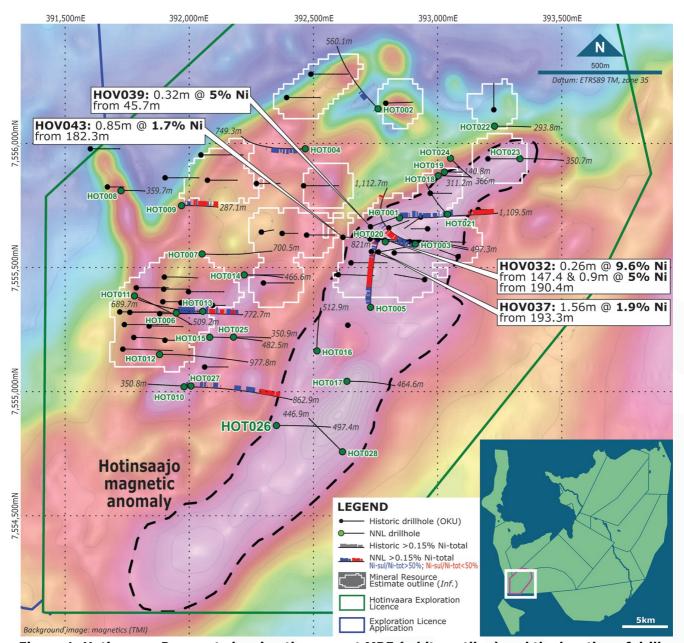


Figure 1. Hotinvaara Prospect showing the current MRE (white outline) and the location of drill-holes completed as part of the current drill program (green dots). Hotinsaajo magnetic anomaly currently being tested highlighted by dashed black line.

Additionally, an untested, linear and relatively contiguous north-easterly to south-westerly striking magnetic anomaly which corresponds to ultramafic packages in the north-eastern portion of this



prominent geophysical feature is currently being drilled. This will enable the Company to assess the continuity of ultramafic packages in the southern extent of the Hotinvaara Exploration Licence.

Nordic is primarily targeting massive Ni-Cu sulphide mineralisation of a similar style to the nearby world-class Sakatti deposit, while also aiming to enhance its understanding of the large mineral system and the extent of disseminated nickel mineralisation, that makes up the bulk of the MRE.

#### **Management Comment**

Nordic Nickel Managing Director, Todd Ross, said: "This is a very exciting result for our team, which reinforces the enormous scale and potential of the Pulju Nickel Project. HOT026 is by far the furthest south we have drilled in the very large nickel system we are defining at Hotinvaara, sitting 500m beyond the current MRE envelope, directly along the prospective magnetic anomaly.

"To encounter a broad zone of potential disseminated sulphide mineralisation this far outside the MRE bounds shows that we are only just beginning to understand the true potential of what we have on our hands at Pulju – especially as Hotinvaara covers just 2% of the total project area.

"With assays pending for 20 holes and additional holes planned to be completed by the end of September, this should pave the way for a very strong period of news flow activity for Nordic as we work towards an updated MRE by the end of this year."

#### **Drilling update**

Visual intersections logged throughout the current drilling program have highlighted the potential to expand the current MRE, while also enhancing Nordic's geological knowledge in order to vector to interpreted high-grade zones\*.

\* In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of sulphide and oxide material abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory assay results are required to determine the widths and grade of the visible mineralisation reported in preliminary geological logging. The Company will update the market when laboratory analytical results become available.

Additionally, the mineralised ultramafic packages have often been correlated to distinct ground-based gravity and/or magnetic anomalies, expanding the ultramafic footprint and also providing a robust tool to map ultramafic units throughout the Pulju Project, in litho-stratigraphically prospective areas.

Furthermore, through the use of partial leach assays, the Company has been actively developing an understanding of nickel deportment throughout the system, allowing the exploration team to vector into the more prospective nickel sulphide zones, assign geochemical markers and utilise these packages to guide targeting and drill planning.

A particularly exciting recent visual observation was logged in the basal section of step-out drill-hole HOT026. Importantly, HOT026 was designed to assess the continuity of mineralised ultramafic material intersected in the north-eastern portions of the Hotinvaara Prospect area towards the south directly along the 2km long Hotinsaajo magnetic feature (*Figure 1*). Geological logging of this hole has provided very encouraging indications that both the mineralisation, and importantly, the conditions required for re-mobilisation of massive sulphides, continues to the south.

HOT026 has also confirmed the presence of a thick and continuous serpentinised dunite unit, situated between 306.50 to 433.29m down-hole, sub-divided by a minor 3m wide granitic dyke, at 380.30m (true widths estimated to be 60-80% of drilled intersect). The Company is currently modelling the upward continuation of this zone to shallower depths for follow-up drilling. Importantly, between 313.2m to 320.7m down-hole, geological logging has confirmed the presence



of blebby and patchy net-textured and semi-massive sulphide mineralisation (Figure 2). highlighting the potential of this area to host higher grade zones as intersected in the northern extent of the Hotinsaajo magnetic anomaly<sup>3</sup>. The Company will utilise borehole EM and 3D modelling to identify favourable sites for additional accumulation of sulphides.



Figure 2. Drillhole HOT026: 312.80m to 322.20m. Serpentinised metaperidotite possessing both intermittent and blebby net-textured and semi-massive sulphide mineralisation (visually, Po>Pn), intimately associated with metasomatic alteration assemblages with, minor, 1-2% disseminated sulphides throughout.

#### **Next Steps**

Drilling will continue at Hotinvaara until the end of September 2023, following which drilling will pause to enable the vast amount of data that has been produced to be reviewed, consolidated and updated.

This will enable the development of a robust geological model to facilitate drill targeting for a significantly expanded exploration program in 2024. The winter drill program will also be able to access certain important prospective areas which could not be accessed during summer.

Batches of samples are being regularly submitted for core cutting and assaying, with turnaround times now substantially improved.

Work has already commenced on an updated MRE for Hotinvaara, with the updated MRE on track to be completed by the end of 2023, assuming assay results continue to be obtained in good time.

<sup>&</sup>lt;sup>3</sup> Complete set of historical drilling results available in the ITAR section of the Company's IPO Prospectus dated 8 April 2022.



#### Authorised for release by: Todd Ross - Managing Director

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#### **Competent Person Statement**

The information in this announcement that relates to Exploration Results is based on, and fairly represents, information and supporting documentation compiled under the supervision of Dr Lachlan Rutherford, a consultant to the Company. Dr Rutherford is a Member of the Australasian Institute of Mining and Metallurgy. He 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 (JORC Code). Dr Rutherford consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

#### **Forward Looking Statement**

This announcement contains forward-looking statements that involve a number of risks and uncertainties, including reference to the conceptual Exploration Target area which surrounds the maiden Hotinvaara MRE described in this announcement. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.



Table 1. Drillhole collar locations and details.

| Hole ID | Easting (mE) | Northing (mE) | Elev. (m)       | Azi (°) | Dip (°) | Depth (m) |
|---------|--------------|---------------|-----------------|---------|---------|-----------|
| HOT001  | 392,847      | 7,555,700     | 298.9           |         |         | 1,109.5   |
| HOT002  | 392,760      | 7,556,140     | 285.2 315 -60.0 |         | 560.1   |           |
| HOT003  | 392,910      | 7,555,595     | 301.1           | 290     | -75.0   | 1,112.7   |
| HOT004  | 392,467      | 7,555,979     | 278.6           | 270     | -70.0   | 749.3     |
| HOT005  | 392,730      | 7,555,340     | 294.1           | 0       | -70.0   | 821.0     |
| HOT006  | 391,947      | 7,555,317     | 256.4           | 90      | -70.0   | 772.7     |
| HOT007  | 392,052      | 7,555,555     | 259.1           | 90      | -65.0   | 700.5     |
| HOT008  | 391,725      | 7,555,810     | 260.1           | 90      | -75.0   | 359.7     |
| HOT009  | 391,969      | 7,555,750     | 259.8           | 90      | -60.0   | 287.1     |
| HOT010  | 391,979      | 7,555,020     | 254.9           | 90      | -70.0   | 862.9     |
| HOT011  | 391,779      | 7,555,386     | 253.5           | 110     | -60.0   | 509.2     |
| HOT012  | 391,880      | 7,555,150     | 252.9           | 90      | -70.0   | 977.8     |
| HOT013  | 392,054      | 7,555,324     | 261.5           | 270     | -70.0   | 689.7     |
| HOT014  | 392,221      | 7,555,471     | 269.6           | 90      | -70.0   | 466.6     |
| HOT015  | 392,082      | 7,555,219     | 262.3           | 90      | -65.0   | 482.5     |
| HOT016  | 392,514      | 7,555,164     | 304.0           | 0       | -70.0   | 512.9     |
| HOT017  | 392,635      | 7,555,042     | 308.3           | 90      | -65.0   | 464.7     |
| HOT018  | 393,002      | 7,555,870     | 312.4           | 90      | -65.0   | 311.2     |
| HOT019  | 393,027      | 7,555,885     | 313.5           | 90      | -60.0   | 140.8     |
| HOT020  | 392,789      | 7,555,604     | 291.1           | 87      | -51.0   | 497.3     |
| HOT021  | 393,040      | 7,555,715     | 315.8           | 315     | -70.0   | 437.9     |
| HOT022  | 393,229      | 7,556,070     | 310.9           | 90      | -60.0   | 293.8     |
| HOT023  | 393,332      | 7,555,939     | 316.4           | 90      | -60.0   | 350.7     |
| HOT024  | 393,052      | 7,555,941     | 312.3           | 135     | -70.0   | 366.0     |
| HOT025  | 392,178      | 7,555,220     | 273.3           | 90      | -65.0   | 350.9     |
| HOT026  | 392,351      | 7,554,864     | 280.2           | 90      | -65.0   | 497.4     |
| HOT027  | 392,007      | 7,555,023     | 255.6           | 270     | -60.0   | 350.8     |
| HOT028  | 392,617      | 7,554,758     | 294.9           | 315     | -65.0   | 446.9     |

Datum: TM35FIN.



# APPENDIX 1 JORC Code, 2012 Edition – Table 1 report Section 1 Sampling Techniques and Data

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

| Criteria               | JORC Code explanation   | Commentary  |
|------------------------|---|---|
| Sampling<br>techniques | <ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul> | <ul> <li>Main sampling method has been diamond coring. 51 historic drillholes were completed by Outokumpu Oy. In total, 9,621.45m of drilling was completed by Outokumpu Oy. As of 19th August 2023, 24 drillholes have been completed by NNL for a total of 13,836.6m.</li> <li>Drill collar locations have been provided by Outokumpu Oy. Collar locations were re-checked by NNL in June 2021 and surveyed using a SatLab SLC6 RTK-Receiver DGPS. It was noted that there was a consistent 95m NW shift in true collar locations relative to the Outokumpu collar table. Corrections were made to account for this shift. Collar locations for the NNL drilling were determined using a SatLab SLC6 RTK-Receiver DGPS and elevations by DEM.</li> <li>Mineralisation was determined using lithological changes. All core has been logged in detail and assayed by NNL. The 41 historic drillholes that exists in the Finnish National drill core archive in Loppi have been relogged by NNL. Measurements were also made with a pXRF, Susceptibility and density measurements taken for each lithology.</li> </ul> |
| Drilling<br>techniques | <ul> <li>Drill type (eg core, reverse circulation, open-hole hammer,<br/>rotary air blast, auger, Bangka, sonic, etc) and details (eg<br/>core diameter, triple or standard tube, depth of diamond<br/>tails, face-sampling bit or other type, whether core is<br/>oriented and if so, by what method, etc).</li> </ul>   | <ul> <li>Historic diamond drilling contractors: Maa ja Vesi Oy (HOV001 HOV008); Rautaruukki Oy (HOV009-HOV027); contractor unknown for remaining holes (HOV028-HOV051).</li> <li>Historic diamond drill core is 32mm in diameter.</li> <li>Historic core is not oriented.</li> <li>All historic drilling in Hotinvaara was commissioned and managed by Outokumpu Oy.</li> <li>Diamond drilling contractors for NNL drilling are Kati Oy.</li> <li>NNL diamond drill core is NQ sized (32mm diameter).</li> <li>NNL drilling was commissioned and managed by NNL.</li> </ul>   |



| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| Drill sample<br>recovery                                | <ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>   | <ul> <li>Core loss was measured for each drilling run and recorded.</li> <li>Recoveries were determined to be very good.</li> <li>There was no evidence of sample bias or any relationship between sample recovery and grade.</li> </ul>  |
| Logging   | <ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>   | <ul> <li>The core was logged to a level consistent with industry standards and appropriate to support Mineral Resource Estimation.</li> <li>Logging is both qualitative and quantitative.</li> <li>100% of the drill core sampled by the NNL drilling has been logged.</li> </ul>   |
| Sub-sampling<br>techniques<br>and sample<br>preparation | <ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | <ul> <li>Samples were selected by NNL geologists for assaying.</li> <li>Core is logged in Kittilä and taken to Sodankylä for cutting and sampling at Palsatech Oy.</li> <li>Half core samples were selected for composite sampling and assaying. Sample sizes range between 0.3 – 4.35m (average 2.25m).</li> <li>Control samples (duplicates, blanks and standards) were submitted with the NNL samples to industry standards.</li> <li>Samples sizes are considered appropriate for the grain size and style of the mineralisation and host lithologies.</li> </ul> |
| Quality of<br>assay data<br>and laboratory<br>tests     | <ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether</li> </ul>  | <ul> <li>Assays for drillholes HOT001-006 &amp; 010 were completed at Eurofins in Sodankylä. Assay methods employed include:         <ul> <li>Four acid digestion to determine total Ni (Eurofins code ICP-MS, 304M or ICP-OES, 304P), Au, Pd, Pt (Eurofins code 703P) and occasionally XRF (175-Xa).</li> <li>Partial leach (Ni-in-sulphide; Eurofins code 240P) completed on any samples &gt;1,500ppm Ni (total).</li> </ul> </li> <li>Assays for the remaining drillholes were completed at ALS Global in Sodankylä. Assay methods employed include:</li> </ul>    |



| Criteria                              | JORC Code explanation  | Commentary   |
|---------------------------------------|--|--|
|                                       | acceptable levels of accuracy (ie lack of bias) and precision have been established.   | <ul> <li>Four acid digestion to determine total Ni (ALS code ME-MS61).</li> <li>Partial leach (Ni-in-sulphide; ALS code ICP05) completed on any samples &gt;1,500ppm Ni (total).</li> <li>Instruments and techniques used:         <ul> <li>Handheld XRF measurements were done with Thermo Scientific Niton Xlt3 XRF analyser, Mining Cu/Zn mode, in 38 holes; a total of 378 measurements were taken. Measurements were done separately for rock matrix (duration 60s) and sulphides (duration 10-20s).</li> <li>Susceptibility measurements were made with GF instruments SM20 from 41 holes with 1 or 2m intervals.</li> <li>Density measurements are made periodically using Archimedes' principle (measuring dry and wet weight (g) of drill core in air and water). Density measurements were done with whole core with intervals and depths recorded.</li> </ul> </li> </ul> |
| Verification of sampling and assaying | <ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>                    | <ul> <li>No external verification done.</li> <li>No specific twin holes were drilled.</li> <li>Drill logging data is entered in Excel spreadsheet templates.</li> <li>Logging is completed in-line with industry standards</li> <li>No adjustments have been made to the assay data</li> </ul>   |
| Location of<br>data points            | <ul> <li>Accuracy and quality of surveys used to locate drill holes<br/>(collar and down-hole surveys), trenches, mine workings and<br/>other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>  | <ul> <li>Drill hole collar locations were determined by DGPS (SatLab SLC6 RTK-Receiver accurate to +/- 2 cm (using correction service Leica Geosystems HxGN SmartNet).</li> <li>Elevations were determined from GTK's LiDAR digital terrain model (DEM).</li> <li>All collar locations are in ETRS89 Zone 35, Northern Hemisphere.</li> <li>Downhole surveys are made following completion of drilling using a DeviGyro instrument.</li> </ul>   |
| Data spacing<br>and<br>distribution   | <ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul> | <ul> <li>Historic drill traverses were completed on nominally 50m spacing. NNL drilling is either infill or extensional to historic drilling.</li> <li>Historic individual drill holes spaced nominally 100m apart within each traverse. NNL drilling is either infill or extensional to historic drilling.</li> </ul>   |



| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
|   |  | <ul> <li>It is considered that the spacing of samples used is sufficient for the evaluation of a MRE (JORC, 2012).</li> <li>No sample compositing has occurred.</li> </ul>   |
| Orientation of data in relation to geological structure | <ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul> | <ul> <li>Historic drillholes were predominantly oriented 90° (E) with dips of -45° to -60° to get as near perpendicular to the lode orientation as possible and collect meaningful structural data.</li> <li>NNL drilling orientations and dips provided in Appendix 1.</li> <li>The mineralisation is generally dipping at 30°-40° to the northwest.</li> <li>Historical true thicknesses average 86% that of the downhole thickness. Estimates on true thicknesses of NNL's drilling are outlined in the body of this report.</li> <li>Drilling orientations have not introduced any sampling bias.</li> </ul> |
| Sample<br>security                                      | The measures taken to ensure sample security.  | <ul> <li>Core is couriered to Palsatec Oy in Sodankylä for core cutting.</li> <li>The samples were bagged with hard plastic bags and then tied off with zip ties and then shipped to Eurofins Labtium lab in containers by courier.</li> <li>Sample security of blanks and standards was managed by the Company, by bagging them in zip lock bags and taking them directly to the laboratory in Sodankylä.</li> </ul>  |
| Audits or<br>reviews                                    | The results of any audits or reviews of sampling techniques and data.  | <ul> <li>Independent consultant resource geologist and mining<br/>engineer Mr Adam Wheeler audited sampling techniques and<br/>data on site in May-June 2023. Mr Wheeler is a professional<br/>fellow (FIMMM), Institute of Materials, Minerals and Mining.</li> </ul>   |



**Section 2 Reporting of Exploration Results** (Criteria listed in the preceding section also apply to this section.)

| Criteria                                | JORC Code explanation   | Commenta   | у                                     |                                  |                            |                             |                                       |                                     |                      |                |
|---|---|--|---------------------------------------|----------------------------------|----------------------------|-----------------------------|---------------------------------------|-------------------------------------|----------------------|----------------|
| Mineral                                 | Type, reference name/number, location and   | Name   | Area Code                             | Tenement<br>type                 | Status                     | Applic                      | Application date                      | Grant date                          | Expiry<br>date       | Area<br>km²    |
| tenement and                            | ownership including agreements or material issues   | Tepasto  |                                       | Reservation                      | Valid                      | PMO                         | 31/10/2022                            |                                     |                      | 245.89         |
| land tenure                             | with third parties such as joint ventures,  | Holtinvaara  | ML2013:0090                           | Exploration                      | Application                | PMO                         | 04/11/2013                            |                                     |                      | 14.99          |
|   | · · · · · · · · · · · · · · · · · · ·   | Mertavaara1  | ML2013:0091                           | Exploration                      | Application                | PMO                         | 04/11/2013                            |                                     |                      | 11.88          |
| status                                  | partnerships, overriding royalties, native title  | Aihkiselki   | ML2013:0092                           | Exploration                      | Application                | PMO                         | 04/11/2013                            |                                     |                      | 15.75          |
|   | interests, historical sites, wilderness or national   | Kiimatievat  | ML2019:0102                           | Exploration                      | Application                | PMO                         | 11/11/2019                            |                                     |                      | 24.21          |
|   |   | Hotinvaara   | ML2019:0101                           | Exploration                      | Valid                      | PMO                         | 11/11/2019                            | 24/01/2020                          | 24/01/2024           |                |
|   | park and environmental settings.  | Rööni-Holtti   | ML2022:0009                           | Exploration                      | Application                | PMO                         | 09/03/2022                            |                                     |                      | 18.65          |
|   | <ul> <li>The security of the tenure held at the time of</li> </ul>  | Saalamaselkä   | ML2022:0010                           | Exploration                      | Application                | PMO                         | 09/03/2022                            |                                     |                      | 6.02           |
|   | •   | Kaunismaa  | ML2022:0011                           | Exploration                      | Application                | PMO                         | 09/03/2022                            |                                     |                      | 1.68           |
|   | reporting along with any known impediments to   | Juoksuvuoma  |                                       | Exploration                      | Application                | PMO                         | 31/10/2022<br>31/10/2022              |                                     |                      | 26.53<br>11.37 |
|   | obtaining a licence to operate in the area.   | Kermasaajo   |                                       | Exploration                      | Application<br>Application | PMO<br>PMO                  | 31/10/2022                            |                                     | -                    | 15.49          |
|   | obtaining a necrice to operate in the area.   | Kolmenoravanmaa  |                                       | Exploration                      |                            | PMO                         | 31/10/2022                            |                                     | +                    | 19.42          |
|   |   | Koppelojänkä<br>Kuusselkä  |                                       | Exploration<br>Exploration       | Application                | PMO                         | 31/10/2022                            |                                     | +                    | 17.63          |
|   |   | Lutsokuru  |                                       | Exploration                      | Application<br>Application | PMO                         | 31/10/2022                            |                                     | +                    | 11.33          |
|   |   | Mariantieva  |                                       | Exploration                      | Application                | PMO                         | 31/10/2022                            |                                     |                      | 11.86          |
|   |   | Salmistonvaara   |                                       | Exploration                      | Application                | PMO                         | 31/10/2022                            |                                     | +                    | 18.23          |
|   |   | Vitsaselkä   |                                       | Exploration                      | Application                | PMO                         | 31/10/2022                            |                                     | +                    | 9.28           |
| Exploration<br>done by other<br>parties | Acknowledgment and appraisal of exploration by other parties.   | The Hotin completed  | the 1980s<br>vaara area<br>d 6 diamor | and 199<br>was lat<br>nd drillho | 90s (51 der held bles and  | drillho<br>oy Ang<br>regior | les compl<br>glo Americ<br>nal bottom | eted).<br>can (2003<br>n-of-till sa | 3 - 2007<br>ampling. | ) who          |
| Geology                                 | Deposit type, geological setting and style of<br>mineralisation.  | <ul> <li>The main commodity of economic interest at Hotinvaara is nickel. Minor copper has also been intersected. The main economic minerals are pentlandite and chalcopyrite. The bulk of the mineralisation occurs as disseminated sulphides but there is also semi-massive to massive sulphi veins with high nickel grades.</li> <li>The main mineralised rock types are komatiites, dunites, serpentinites a metaperidotites (ultramafic cumulates). Also, some mineralisation is hosted by ultramafic skarn.</li> <li>The Pulju greenstone Belt is located in the western part of the Central Lapland greenstone Belt. The Pulju Belt covers an area of ~10km x 20km</li> </ul> |                                       |                                  |                            | s<br>Ilphid<br>es an<br>al  |                                       |                                     |                      |                |
| Drill hole<br>Information               | <ul> <li>A summary of all information material to the<br/>understanding of the exploration results including<br/>a tabulation of the following information for all<br/>Material drill holes:</li> </ul> | <ul><li>Drillhole i</li><li>All drill ho</li><li>No inform</li></ul>   | les were d                            | diamond                          | cored.                     | able 1                      | of this re                            | lease.                              |                      |                |



| Criteria  | JORC Code explanation   | Commentary  |
|---|---|---|
| Data<br>aggregation<br>methods  | <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul> | <ul> <li>Weighted average grades determined by the following rules:</li> <li>Primary cut-off: 0.15% Ni-total; max. 6m internal dilution.</li> <li>Secondary cut-off: 0.5% Ni-total; max. 1m internal dilution.</li> <li>Ternary cut-off: 1.0% Ni-total.</li> <li>No metal equivalent grades are reported.</li> </ul>  |
| Relationship<br>between<br>mineralisation<br>widths and<br>intercept<br>lengths | <ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>   | <ul> <li>Holes are predominantly inclined to get as near to perpendicular intersections as possible unless orientations of specific targets or topography required otherwise.</li> <li>During MRE modelling, the mineralised drillhole intersections were modelled in 3D in Datamine to interpret the spatial nature and distribution of the mineralisation.</li> <li>In the historical drilling by Outokumpu, true thicknesses of mineralisation average ~86% that of the downhole thickness.</li> <li>The true thickness of mineralisation intersected by NNL is outlined in the body of this release.</li> </ul> |
| Diagrams  | <ul> <li>Appropriate maps and sections (with scales) and<br/>tabulations of intercepts should be included for any<br/>significant discovery being reported These should</li> </ul>  | <ul> <li>Figure 1 in this release shows the relative position and trajectory of the<br/>drillholes reported in this release.</li> </ul>   |



| Criteria                           | JORC Code explanation   | Commentary  |
|------------------------------------|---|---|
| Balanced<br>reporting              | <ul> <li>include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> <li>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.</li> </ul>                       | All available relevant information is reported.   |
| Other substantive exploration data | • Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | <ul> <li>Historical gravity data measured by Outokumpu was purchased from GTK in 2020.</li> <li>Ground magnetics was done by Magnus Minerals in 2019 with GEM's GSM-19 (Overhauser) magnetometer and data was processed by GRM-services Oy.</li> <li>BHEM was completed by GRM-Services in 2021 with EMIT's DigiAtlantis survey equipment and data was modelled by NNL. Modelling indicates two target conductors in the vicinity of HOV040.</li> <li>FLEM was completed by Geovisor in December 2021 and January 2022 with EMIT's SMART Fluxgate survey equipment and data was modelled by NNL. Modelling indicates deep-seated conductors at about 400m, 800m and 1500m depths. The conductor at 400m correlates with the deeper plate identified from BHEM.</li> <li>A petrology, geochemical and mineral liberation study was undertaken by Metso:Outotec. Full details of this study are provided in NNL ASX release "Encouraging First Pass Test Work on Hotinvaara Nickel Mineralisation", 22 June, 2022.</li> <li>Ground magnetics was completed by Nordic Nickel Limited in 2023 with GEM's GSM-19 (Overhauser) magnetometer and data was processed by Nordic Nickel Limited.</li> <li>BHEM was completed by Astrock and Magnus Minerals in 2023 with EMIT's DigiAtlantis survey equipment and data was modelled by NNL.</li> <li>UAV magnetic survey completed by Radai Oy over 269km²; survey consisted of 846 lines at 40m line spacing for a total of 7,430 line kilometres; flight speed 13-30 m/s; fluxgate sensor – 3 orthogonal components, noise level ±0.5 μT, dynamic range ±100 μT, sampling freq. up to 137 Hz; base station – 3 component fluxgate magnetometer and barometer, resolution ±0.5 μT, sampling frequency 1 Hz; data processing</li> </ul> |



| Criteria     | JORC Code explanation   | Commentary   |
|--------------|---|--|
|              |   | utilised equivalent layer modelling (ELM).   |
| Further work | <ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul> | <ul> <li>A ~22,000m drill program is progressing as planned to test the source of the modelled conductors and expand the JORC (2012) Mineral Resource Estimate.</li> <li>Mineralisation appears to be open along strike and at depth.</li> </ul> |