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(22 pages)

SIDUARSI PROJECT ACQUISITION OF 51% AND INITIAL MINERAL RESOURCE

- **Initial JORC 2012 compliant Mineral Resource totalling 52 million dmt of 1.1% nickel and 0.1% cobalt (561 thousand tonnes of contained nickel metal and 31 thousand tonnes of cobalt) has been estimated in just 1,614 ha of the 16,470 ha permit area.**
- **The completion of the acquisition of a 51% interest (increasing to 100%) in the Siduarsri Project for four million shares in Nickel Industries, in-line with the MoA signed in September 2021 (refer ASX announcements dated 2 September 2021, 16 May 2022 and 26 April 2023).**

SIDUARSI PROJECT DETAILS

The Siduarsri Project is a 6th generation Contract of Work (CoW) held by PT Iriana Mutiara Mining (IMM), and is one of only four active nickel CoWs in Indonesia; the other three being Pt Vale Indonesia (which hosts its Sorowako nickel matte processing plant), Weda Bay which hosts the Indonesia Weda Bay Industrial Park (IWIP) where the Nickel Industries Limited's (Nickel Industries or the Company) Angel Nickel rotary kiln electric furnace (RKEF) operations are located, and Gag Island in West Papua, Indonesia.

The Siduarsri Project CoW covers 16,470 hectares (ha) along geo-tectonic strike from the Ramu nickel-cobalt project in neighbouring Papua New Guinea, which reported [165Mt of Resources \(118Mt Measured, 31Mt Indicated and 15Mt Inferred\) at 0.9% nickel and 0.1% cobalt in December 2023 \(cut-off grade 0.5% Ni\)](#), after 12 years of operation.



Map showing the location of the Siduarsri Project in West Papua, Indonesia

INITIAL JORC MINERAL RESOURCE

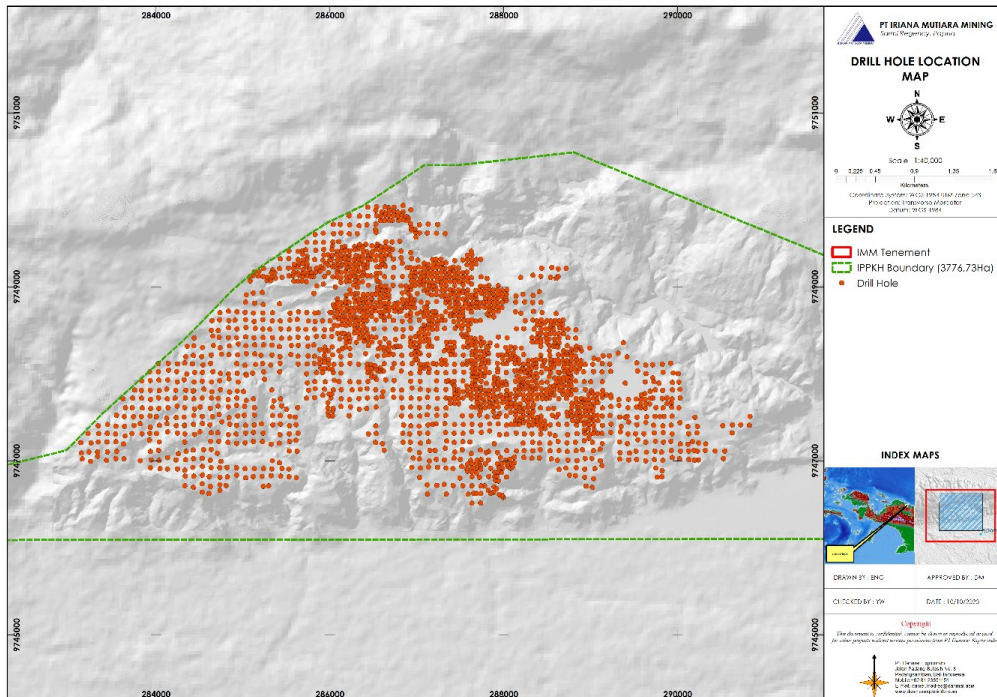
Over 167km of ground penetrating radar (**UltraGPR**) with 200m spacing, covering 1,850ha has been completed to date. The considerable exploration has indicated an average limonite thickness of 3.2m (maximum 18m) and average saprolite thickness of 9.4m (maximum 32m).

A JORC-compliant Mineral Resource of 52 million dmt at 1.1% nickel and 0.1% cobalt (561 thousand tonnes of contained nickel metal and 31 thousand tonnes of cobalt) within a 1,614ha area has been estimated, comprising 28 million dmt of saprolite at 1.1% nickel and 24 million dmt of limonite at 1.0% nickel.

There has been 31,066m of drilling in 2,078 holes completed and 33,182 sample assays received from the Siduarsi CoW. The drilled areas include peak grades of 3.7% nickel and 0.8% cobalt.

Project-ID	Lithology	Mineral Resource Category	M wmt	M dmt	Ni (%)	Co (%)	Fe (%)
Siduarsi Project CoW (CoG 0.8%)	Limonite	Indicated	11.9	7.0	1.1%	0.1%	43.9%
		Inferred	28.5	16.8	1.0%	0.1%	42.9%
		Total	40.5	23.9	1.0%	0.1%	43.2%
	Saprolite	Indicated	13.4	8.7	1.2%	0.0%	12.2%
		Inferred	29.9	19.4	1.1%	0.0%	12.2%
		Total	43.3	28.1	1.1%	0.0%	12.2%
Total	Indicated	25.3	15.7	1.1%	0.1%	27.2%	
	Inferred	58.4	36.3	1.1%	0.1%	27.2%	
	Total	83.7	52.0	1.1%	0.1%	27.2%	

Initial Mineral Resource at the Siduarsi Project



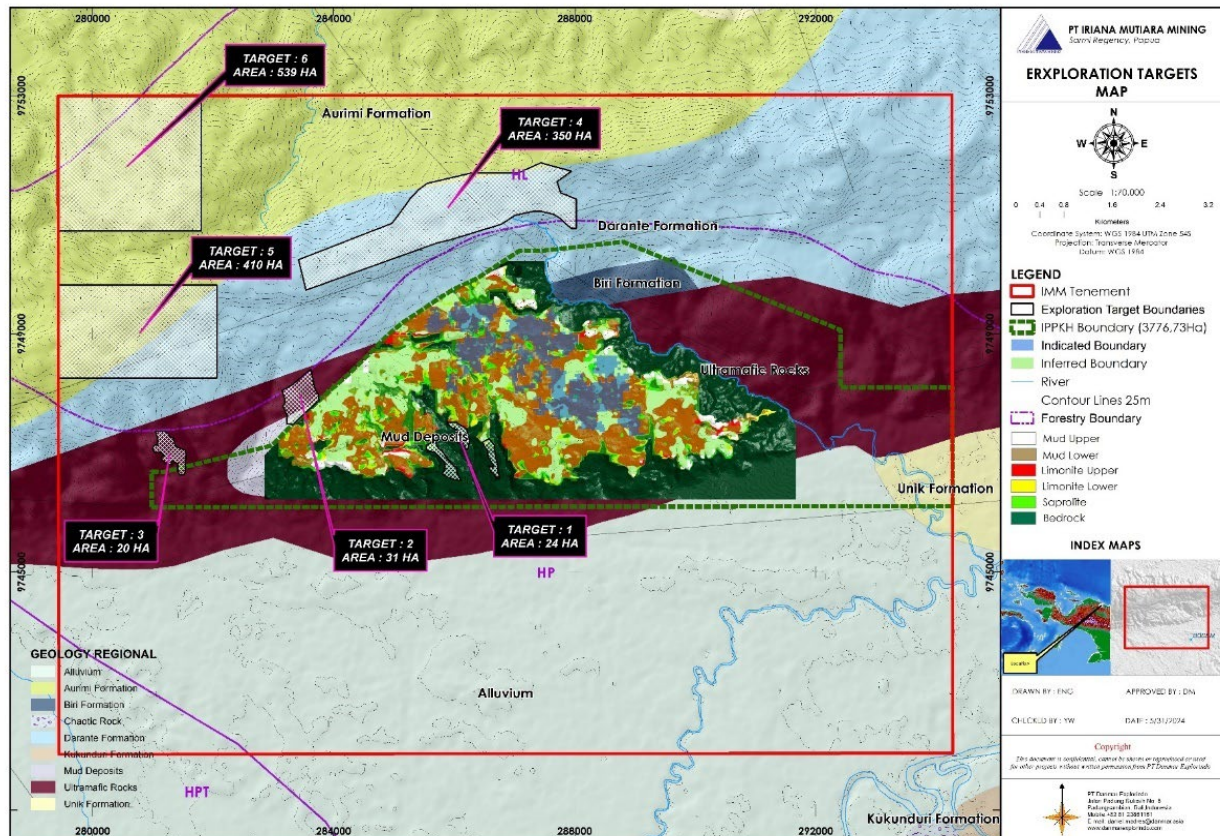
Map showing drill hole location

Exploration Targets

IMM has completed widespread geological mapping. The results suggest 1,374ha of potential laterite areas which represents an Exploration Target between 22 and 110 million wet metric tonnes (wmt) with nickel grades ranging from 0.7% to 1.1%. Potential thickness and grades are based on exploration results at the Siduarsi Project to date. Although the potential quantity and quality is conceptual in nature, as there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource, the historical mapping in these areas gives confidence that further exploration may upgrade some of these areas for future Resource estimates. Target blocks 1, 2 and 3 are planned to be drilled when the mining lease and forestry permits are renewed. The drill program is expected to take 6 months, whilst target blocks 4, 5 and 6 are currently in a protected forest area that can only be accessed if the forestry status is downgraded.

Exploration Target	Target Area (ha)	Laterite Thickness Assumptions		Potential Target	
		Min (m)	Max (m)	Min (M wmt)	Max (M wmt)
Target 1	24	0.4	1.9	0.4	1.9
Target 2	31	0.5	2.5	0.5	2.5
Target 3	20	0.3	1.6	0.3	1.6
Target 4	350	5.6	28.0	5.6	28.0
Target 5	410	6.6	32.8	6.6	32.8
Target 6	539	8.6	43.1	8.6	43.1
Total	1,374	22.0	109.9	22.0	109.9

Exploration target areas at the Siduarsi Project



Map showing the exploration target areas

Project Development

The Siduarsi Project is well advanced with several bulk samples totalling more than 5wmt of limonite and 300kg of saprolite sent for metallurgical testing. Initial results have confirmed the suitability of the Siduarsi Project's limonite ore for HPAL processing and saprolite ore for RKEF processing.

Nickel Industries has submitted a feasibility study to the Indonesian Mines department for approval. The feasibility study proposes a three million wmt direct shipping operation for delivery by bulk carriers or self-propelled barges to the IWIP. Upon acceptance of the feasibility study, the CoW will move to a 30-year mining operation license and Nickel Industries will increase to 80% ownership (increasing to 100%).

Commercial terms

Under the terms of the MoA, the Company can acquire up to 100% of the Siduarsi CoW by meeting the following key conditions:

- payment of A\$500,000 upon signing of the Definitive Agreement. **COMPLETED**

To acquire 51% ownership of PT IMM:

- expenditure of A\$5 million in agreed exploration on the Siduarsi CoW over 24 months to earn a 51% interest **COMPLETED**; and
- milestone payment of 4 million Nickel Industries shares upon delineation of a JORC compliant resource of not less than 50 million dry metric tonnes at 1.1% nickel. **COMPLETED**

To increase to 82.5% ownership:

- completion of a feasibility study that is accepted by the Indonesian mining department, to allow the CoW to move into the next phase of its life cycle which is production/operation. **IN PROGRESS**

To increase to 100% ownership:

- to be determined by an agreed third-party valuation on the economic value of the Siduarsi resource to Valmin Code 2015 standard (the Valuation); the vendors may elect to take this consideration as 50% cash and 50% shares based on the 30-day VWAP of Nickel Industries shares on the ASX; and
- existing aggregate shareholder loans of no more than US\$9 million to be paid out as 50% cash and 50% Nickel Industries shares (calculated on the 30-day VWAP on the ASX prior to the announcement of the Valuation).

Commenting on the Siduarsi Project acquisition, Managing Director Justin Werner said:

“We are very pleased to announce a maiden JORC resource for the Siduarsi CoW following a successful exploration program which confirms the projects prospectivity and potential to be of a similar size and scale to the nearby Ramu deposit which was one of the World’s earliest successful HPAL projects, upon which the initial Indonesian HPALs have been based.

Whilst our initial focus will be on the direct shipping of limonite ore to the IWIP, initial metallurgical test work has demonstrated the ore to be very amenable to HPAL processing. With ore shortages emerging in Indonesia and significant premiums now being paid, we have again managed to secure a highly prospective project on very favourable terms.”

Mineral Resource Estimation Data and Methodology

Geology and Geology Interpretation

The Siduarsi Project is located on the northern part of the New Guinea Orogen. Ultramafic and basic igneous rocks, as well Pliocene sedimentary rocks, occur in the area. Laterite enrichment of nickel, cobalt and other minerals has occurred over the ultramafic bedrock areas. The same gross tectonic setting occurs for similar laterite deposits in the northern parts of New Guinea mainland at Sentani, Ramu, Lake Trist, Wowo Gap and the islands of Wageo and Gag. The New Guinea Orogen was possibly initiated in the Late Mesozoic with the onset of island arc and continental collision resulting in the obduction of the ophiolite belt. Oblique convergence between the Australian Plate and the oceanic Pacific Plate continues until today. This is evidenced by the consistent seismic activity of the area, that has resulted in the formation of the Central Highlands of the island of New Guinea. North of the Central Ranges, including where the Siduarsi Project is located, the northeast mainland of Papua is a structurally complex region, comprising terrane fragments of mantle and crustal rocks of both plates within a matrix of variably disrupted Tertiary clastic and calcareous sediments. Collectively this mega-breccia is known as the North Coast Basin.

The area is structurally dominated by the Mamberamo Thrust Belt which is up to 100km wide extending southeast from the Mamberamo River Delta to the Papua New Guinea border. Arc normal faults have facilitated the emplacement of fault blocks containing island arc volcanics and ultramafic rocks such as the Siduarsi and Cyclops Ranges. Both Siduarsi and the Sentani laterite deposits are developed on these prominent horst blocks containing basement ultramafic rocks forming isolated mountain massifs in the Siduarsi and Cyclops Ranges. Another feature of the Mamberamo Thrust Belt is the widespread occurrence of mud-volcanoes, formed by diapirism, which are also the result of this tectonically active structural geology.

Drilling Techniques

The drills used are Dexdrill 200 units and full coring was applied. All cores were photographed for future reference. The drills are ideally suited to laterite core drilling as they are lightweight and portable. They have the added advantages of providing local people employment for manual moving between drill locations and have low environmental impact with no need for road access or dozer support.

Sampling and Subsampling Techniques

With the core boxes in position, in a level place, with no cover, in consecutive order, core photos can take place. Checks are carried out to make sure that the depth labels are clearly visible and in position at the bottom of each core run. Cores with swelling or core loss are clearly marked. The well site geologist checks to make sure the core box label shows the correct Hole Identification, sequential arrangement, depth interval, date of start and finish drilling, EOH (end of hole), initials of the wellsite geologist and the rig identification number. When this is ready photos are taken in good light conditions making sure to minimize shadows and reflections.

Whole samples were packed into plastic sample bags that were double layered to protect the integrity of the samples against accidental contamination, damage or loss. Samples were bagged in 1 metre intervals according to the geological horizon from which they belong with plastic identity labels placed inside. After each core box is emptied the outer layer sample bag is tied with string in a bow so that it can easily be undone at the camp for rechecking and final labeling. During the sampling process, the sample form is continuously filled out so that samples are bagged and recorded. Checks are made to ensure the sample intervals and labels are correct. Rechecks are done so that the sample intervals can be reconciled and there are no gaps in the depth intervals. Samples are then packed in sacks and tied with flagging tape showing the hole identification. If stored in the field, the sacks are covered for protection from the weather. Samples are transported to the field camp on a daily basis. Sample numbers and the depth interval labels are recorded on sampling forms which are photographed and sent to Danmar head office for recording in the IMM database. During this sample labeling process, the condition of the sample bag is checked and changed if damaged. The total number of samples are rechecked against the total number of samples logged in the field at the wellsite.

Sample Analysis Methods

The Siduarsi Project core samples from the exploration drilling program were sent to the PT Geoservices commercial laboratory using ISO 17025-2017 in Jakarta for analysis. At the Sample Preparation Laboratory samples are reduced from raw samples into 200# (75 micron) pulp samples. The Assay Laboratory is where the 200# pulp samples are assayed using XRF Spectrometers to provide a Certificate of Analysis of the drill samples, in particular, the weight percent of nickel, iron, cobalt, silica dioxide, magnesium oxide and calcium oxide.

The Quality Assurance and Quality Control at the PT Geoservices assay laboratory is appropriate, with precision and accuracy within acceptable limits that is suitable for inclusion in this estimation Mineral Resource using the JORC Code. A full QA/QC report is provided in Appendix 5 of the IMM Resource Report.

Wireframing and Surface Gridding

Each lithology in the drill hole data has been coded into distinct geological horizons, based on their chemical composition determined by the assay results. Each contact of the layer has been modeled in a 10 x 10 m grid surface and visually checked by easting and northing cross sections to ensure the surface fit the drill hole data. The topography surface was used to limit the top of mud, limonite, saprolite and bedrock.

The cumulative thickness of the domain layers was compared to the original drill hole data to check the accuracy of the geological model. Geological modeling and Mineral Resource estimation were completed using Leapfrog Geo 2023.2.1.

Assay Data and Compositing

The project area has been divided into three blocks namely, West 100, East 100 and North 50, of extrapolatory data and variography analysis as determined by the average drill hole spacing distribution.

The drill hole samples were composited in 1m lengths. Any composites less 0.5m were added to the previous sample interval. The 1m compositing was selected because it represents the modal length of the samples taken during exploration and would preserve the detail of the information obtained in the samples.

Although some density and moisture measurements were made by the commercial laboratory (PT Geoservices), on some bulk samples from the site, the results appeared to indicate samples had dried during the transportation over a 2-month period to the lab and were no longer representative of the actual moisture condition at the site. For this reason, an assumed density was used for the nickel resource estimate, at this time, based on density and moisture contents at other nickel laterite projects in Indonesia as shown in the Table below.

Laterite Layers	Assumed bulk Density (g/cm ³)
Limonite	1.8
Saprolite	1.6

Table showing Siduarsi Project assumed Density applied to the Mineral Resource

Moisture Content

Only one drill core sample batch had Moisture measurements. Although these are only 63 core samples, they show Moisture Content much higher than the composite bulk sample which indicates a more realistic moisture level. Additional moisture data was subsequently provided by Geoservices which supports the results received in the COA even though these analyses are not formal Moisture Content certificates. The table below summarises the weighted average Moisture Content by laterite type.

Laterite Layers	Moisture Content (%)
Limonite	41%
Saprolite	35%

IMM Project Moisture Content measurements applied to the Mineral Resource

Block Modelling

Three-dimensional block models were constructed for the Siduarsi Project to cover all the interpreted generic lithological layers. A block model size of 25 x 25 x 1m with no rotation has been selected for all blocks by considering the overall drill hole spacing which is mostly a 50m in the North Block and 100m in the West and East blocks.

The position of the block model centroid is placed as close as possible to the location of the drill hole collar in each block. No sub-blocking was applied to the parent block to reduce the grade bias in the Resource estimation. The percentages of material in each block from the interpreted geological wireframes has not been applied in the block model.

Grade Interpolation

Ordinary Kriging grade estimate has been applied for Ni, Co, Fe, MgO, SiO₂, Cr₂O₃, and Cr for all domains. The number of samples, search radius and discretisation block for each domain were taken from block size analysis results. For the search radius, the drill hole spacing was considered by taking into account the ratio of the ellipsoid produced from the variography analysis. Several run tests (passes) have been applied to the grade estimate to cover all the laterite domains in the block model. The first search radius (pass 1) was 1.5 times of the average drill hole spacing distance and then multiplied by 2 for the subsequent passes.

Mining and Metallurgical Methods

Nickel laterite sample analyses, along with geological and geotechnical studies, indicate suitability for open cut mining methods at Siduarsi. Preliminary open cut mine plans are based on the current operational experience and mining capability at the HM open pit mine operation in Sulawesi. Initial metallurgical test work results, from bulk samples at the Siduarsi, also confirm suitable acid consumption for limonite processing through the HPAL process and saprolite nickel grades suitable for RKEF plant feed. At this stage the saprolite and limonite mineralisation are sufficiently well defined and suited for the supply requirements for the RKEF smelters and HPAL plants (majority owned by NIC) at the IWIP smelter in Halmahera. This provides reasonable prospects for eventual economic extraction for the Siduarsi Nickel Resource.

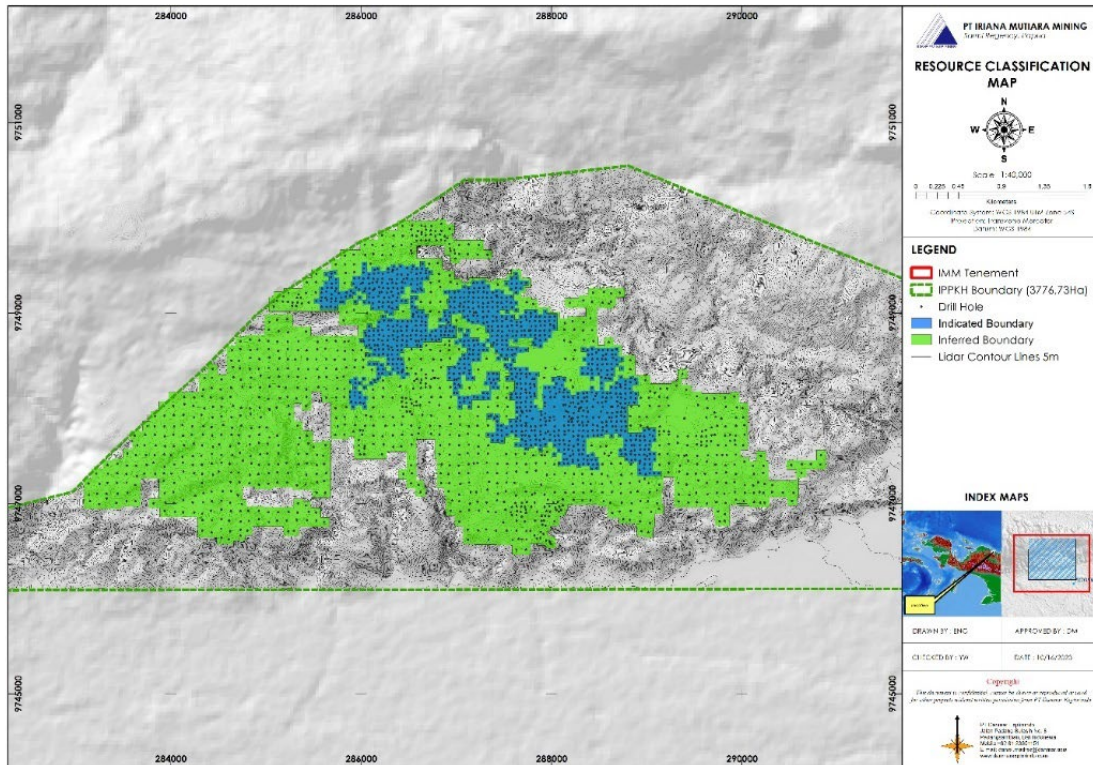
Initial metallurgical test work results, from a Siduarsi limonite bulk sample, confirmed suitable acid consumption using the HPAL process with an acid to ore ratio 250 kg/ ton ore with residence time 1 h. The leachate metal concentration was 4.7 g/L, 0.34 g/L, 2.96 g/L, 4.71 g/L and 0.21 g/L respectively for Ni, Co, Mn, Mg and Cr. Although the result may not be representative, as it came from only one location, it does indicate positive potential for acid leach processing. Further test work will be required to confirm the initial test results.

Resource Classification

The Mineral Resource has been classified on the basis of drill hole spacing grid, grade continuity with geostatistical considerations such as variogram range, Kriging variance and slope of regression. The vast majority of the deposit is drilled in a 100x100m grid although in the northern part of the CoW, a 50x50m hole spacing grid has been drilled. At this time, the current drill hole spacing grid is considered to be insufficient to support Measured Resource categories.

The Kriging variance and slope of regression has been used to assess the confidence level of the estimation. Kriging variance less than 0.10 and slope of regression more than 0.80 has been considered as high level confidence. A medium level of confidence has a Kriging variance between 0.10 and 0.40 and slope of regression between 0.20 and 0.80 which means coherent and spatially consistent with 50x50m drill spacing. Whereas low level confidence has Kriging variance higher than 0.40 and slope of regression less than 0.20 which means coherent and spatially consistent with 100x100m drill spacing.

The Mineral Resource also has been constrained by a boundary of 25m (half distance of 50x50m grid) from the drill hole location to determine the Indicated Resource category, any extrapolation beyond the boundary is considered as an Inferred Resource up to a maximum extrapolation of 50m.



Resource classification boundaries

Model Validation

The estimated block model was validated visually on the computer screen as well as by the statistical means. The block model was compared with drill hole sample data on cross sections to verify the geological interpretation and estimated grades. Swath plots were used to visualize the statistical mean and magnitude of error between composite samples and the estimated grades.

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Competent Persons Statement

The information in this report that relates to Mineral Resources, the Exploration Target and Exploration Results is based on data compiled by Daniel Madre of PT Danmar Explorindo. Mr Madre is a member of the Australian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activities which are being undertaken to qualify as a Competent Person as defined in the 2012 edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Madre is an independent consulting geologist and consents to the inclusion of the matters based on his information in the form and context in which it appears. Mr Madre has more than 20 years experience in exploration and mining of nickel laterites in Indonesia.

Overview of Nickel Industries:

Nickel Industries Limited (**NIC**) is an ASX-listed company which owns a portfolio of mining and low-cost downstream nickel processing assets in Indonesia.

The Company has a long history in Indonesia, with controlling interests in the world-class Hengjaya Mine, as well as four rotary kiln electric furnace (**RKEF**) projects which produce nickel matte for the electric vehicle (**EV**) supply chain and nickel pig iron (**NPI**) for the stainless-steel industry.

Having established itself as a globally significant producer of NPI, the Company is now rapidly transitioning its production to focus on the EV battery supply chain – recently, the Company has acquired a 10% interest in the Huayue Nickel Cobalt (**HNC**) HPAL project, adding mixed hydroxide precipitate (**MHP**) to its product portfolio.

Nickel Industries is now embarking on its next transformative step, investing in Excelsior Nickel Cobalt (**ENC**), a next-generation HPAL project capable of producing MHP, nickel sulphate and nickel cathode. ENC is expected to produce approximately 72,000 tonnes of nickel metal per annum, diversifying the Company's production and reducing the Company's carbon emissions profile – reflecting the strong commitment to sustainable operations.

To learn more, please visit: www.nickelindustries.com/

JORC TABLE 1