

## Metallurgical Engineering delivers improved results for Wingellina

### Highlights

Recent bench scale metallurgical testwork has delivered improved results and the production of a nickel-cobalt Mixed Hydroxide Precipitate ("**MHP**") from Wingellina ore. Recent testwork identified:

- Improved leaching kinetics;
- Confirmation of high metallurgical recoveries;
- High nickel and cobalt recoveries are achievable with a greater than 10% reduction in acid consumption;
- An improvement in head grade of up to 10% through the ore preparation circuit is achievable;
- Quicklime produced from the nearby Lewis calcrete deposit results in 99% precipitation of nickel and cobalt and will significantly reduce operating costs;
- A low impurity saleable MHP product was produced and conditions for targeting specific Ni:Co:Mn ratios have been identified.

### Managing Director Comment

Nico's Managing Director, Jonathan Shellabear said:

*"As we continue to finesse the metallurgical processes and progress the Wingellina Project towards DFS we continue to receive improved results from the PFS which will have a positive economic outcome on the project over the long term. Wingellina is a quality ore and has many positive attributes which make it ideally suited to processing by HPAL. The unique characteristics of the Wingellina ore being predominantly ultrafine high-iron low-magnesium limonite sets the project apart from WA's Eastern Goldfields laterites. The technological advances of recent times coupled with the resultant lower capital, lower operating costs and decreased development risks auger well for the future development of this massive project.*

*Our next focus is on the completion of a detailed updated Mineral Resource Estimate built not just around cut-off grades but rather detailed geo-metallurgical domains within the orebody which will enable the further refinement of mine planning and processing and uncomplicate the various metallurgical aspects associated with varying ore feed. We continue to press forward in readiness for the eventual production and we firmly believe that the Wingellina project will be able to effectively compete with the lower cost production from Indonesian laterites that has rapidly flooded into the nickel market in recent times.*

*Wingellina remains one of last major undeveloped oxide-type nickel-cobalt deposits in the world and we are excited about the opportunities that the development of this project will provide to all our stakeholders."*



## Introduction

Nico Resources Limited ("**Nico**" or the "**Company**") (ASX: NC1) is the owner of the Wingellina Nickel-Cobalt Project ("**Wingellina**" or the "**Project**") located in Western Australia. Wingellina is a world-class oxide-type nickel cobalt deposit located in the Musgrave Ranges of WA, approximately 100 kms east of BHP's West Musgrave Project. Wingellina hosts an initial reserve of 1.56 million tonnes of contained nickel<sup>1</sup> capable of producing approximately 40,000t of nickel and 3,000t of cobalt in a Mixed Hydroxide Precipitate ("**MHP**") for at least 42 years with low operating costs.

A detailed pre-feasibility study<sup>2</sup>, ("**PFS**") completed on the Project in December 2022, confirmed Wingellina as a globally significant Tier 1 asset, characterised by its long life, low cost and high operating margins. The Project has EPA approval (extension granted in June 2024) and a Project Agreement is in place with the Traditional Owners which was registered as an **ILUA** ("Indigenous Land Use Agreement") in October 2011.

The MHP product contains essential critical minerals used in batteries and energy storage systems required for the global energy transition. Wingellina will play a critical role in the Australian Government's strategy to create resilient and diverse supply chains, build Australian's sovereign capability in critical minerals processing and create significant economic opportunities for regional and First Nations communities.

## Ongoing Metallurgical Work Programs

Nico is pleased to provide an update on its current metallurgical testwork program. The latest works are part of a comprehensive program of Metallurgical Engineering aimed at underpinning a Definitive Feasibility Study ("**DFS**") for development of the Project. The ore has characteristics that are ideally suited to processing using High Pressure Acid Leach ("**HPAL**") which results in high metallurgical recoveries and low reagent usage. Recent advancements in HPAL technology and the additional testwork completed confirm that additional operating benefits are likely achievable, which can provide a reduction in both operating and capital costs.

The initial sample preparation and bench scale test programs commenced in September 2023 with the objective of confirming the flowsheet and process design criteria for a pilot plant campaign on a bulk sample. The main test program is being undertaken at the ALS Metallurgy laboratories in Perth.

The results received from this testwork program continue to confirm and enhance previous metallurgical testwork undertaken on Wingellina ore and this announcement contains a number of additional advancements with significant and positive developments for the development of the Project.

## Samples for testwork

Samples for limonite testwork were sourced from a Bauer drilling campaign conducted in 2013. The location of the Bauer holes are shown in Figure 1. During this campaign four, 30 metre deep holes were drilled to generate bulk samples for metallurgical testwork. Holes WPBS003 and WPBS004 were selected as sources of limonite ore for the current program as they represented areas of the deposit that were identified for early processing during prefeasibility studies and are broadly representative of the Wingellina deposit.

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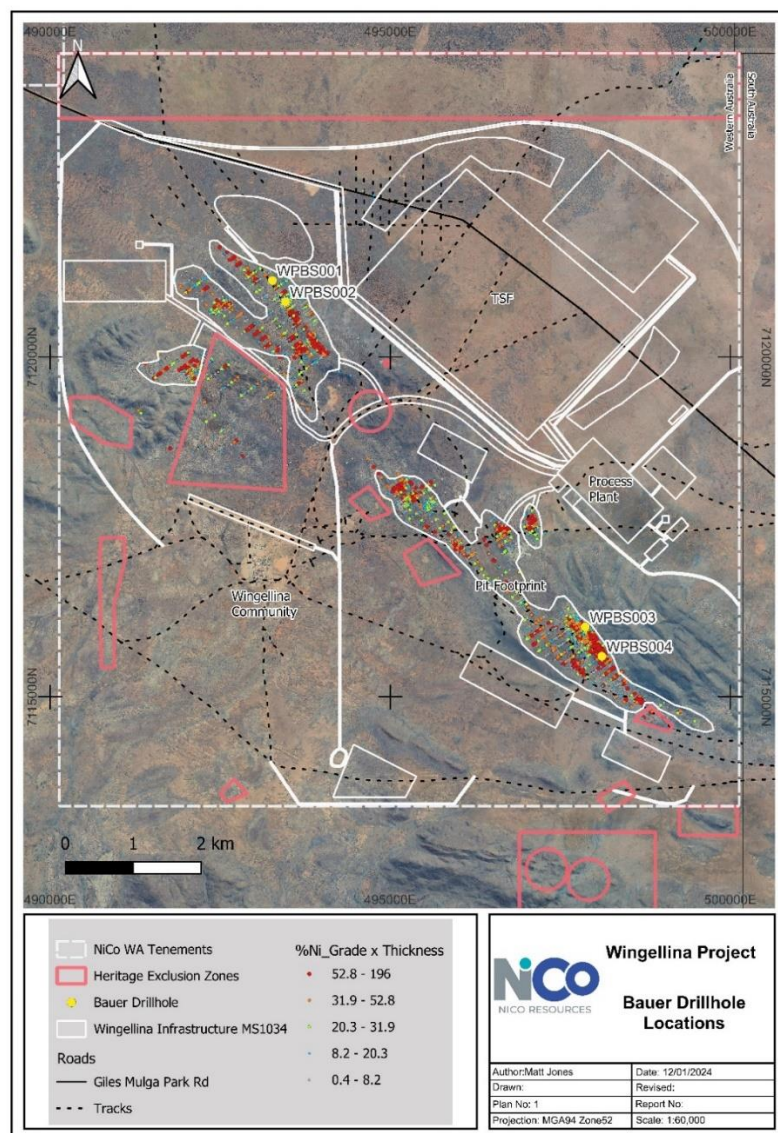
<sup>1</sup> 168.4 million tonnes at 0.93% Nickel and 0.07% Cobalt.

<sup>2</sup> See ASX Announcement 22 December 2022 "PFS confirms Wingellina as a Tier 1 project capable of supplying decades on Nickel and Cobalt".

Representative samples from the nearby Lewis calcrete deposit, located approximately 30 kilometres north of Wingellina, were collected from Reverse Circulation (“RC”) drilling rejects. The representative composite assayed 64% CaCO<sub>3</sub>.

## Outcomes Since Last Announcement

Salient results of the testwork recently conducted are presented below and are in addition to the previous announcements “Wingellina Advances Metallurgical Testwork” released to the ASX on 10 April 2024 and “Wingellina Metallurgical Testwork Update” on 23 January 2024.

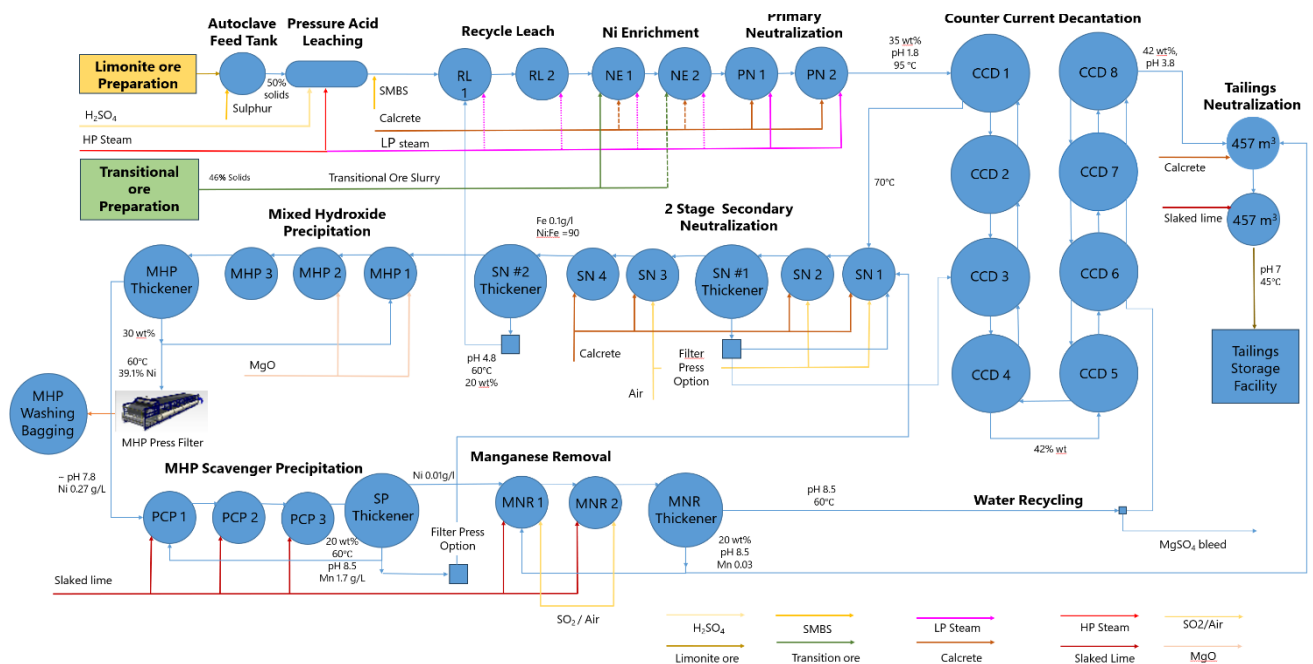


**Figure 1. Bauer Hole location Plan**

## Metallurgical Process Flowsheet

During the second half of 2023, Nico embarked on a testwork program with the objective of generating sufficient data to underpin a continuous piloting flowsheet and engineering design for the Project. Since the PFS a stage of scrubbing and beneficiation has been included to enhance head grade and lower costs. The processing flowsheet consists of ore scrubbing and beneficiation, HPAL, neutralisation, CCD, two-stage secondary neutralisation for iron and aluminium impurity removal, MHP precipitation, tailings neutralisation and storage. The current flowsheet will be further refined upon the completion of a continuous piloting program.

The Wingellina HPAL flowsheet showing major metallurgical processing steps within the nickel extraction process is shown below in Figure 2. Testwork has been undertaken to prove DFS level design data which will allow the metallurgical process and the project to proceed to the next phase.

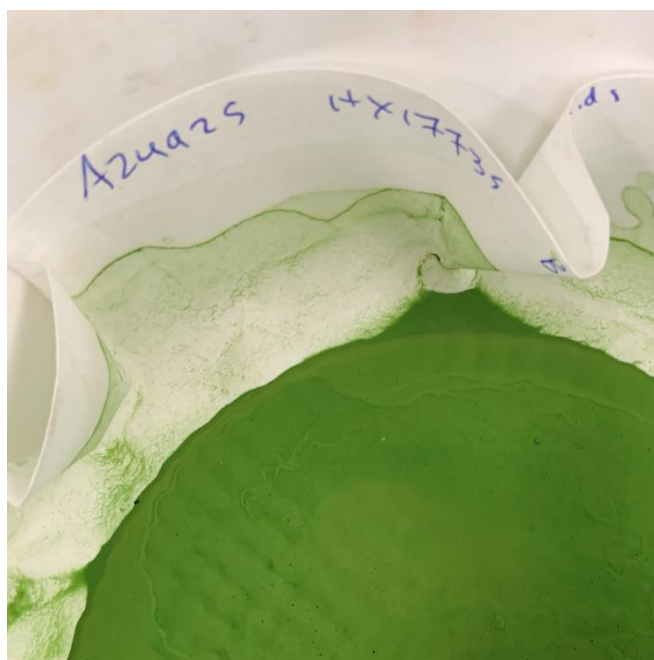


**Figure 2. Wingellina HPAL flowsheet**

## Mixed Hydroxide Precipitation Test Work

In the current quarter, the purified Secondary Neutralisation liquor was treated with calcined magnesia, to precipitate a mixture of nickel, cobalt and manganese as MHP (see Figure 3 below). The objective of the testwork to determine the conditions required to produce a saleable Mixed Hydroxide Product was achieved.

Nico will be able to respond to prevailing market conditions by adjusting manganese content in the MHP according to customer requirements.



**Figure 3. Wingellina MHP Produced at Bench Scale**

## HPAL Optimisation Test Work

HPAL conditions with 12% lower acid consumption than that assumed<sup>3</sup> in the December 2022 Pre-feasibility study and high Ni and Co extractions have been achieved.

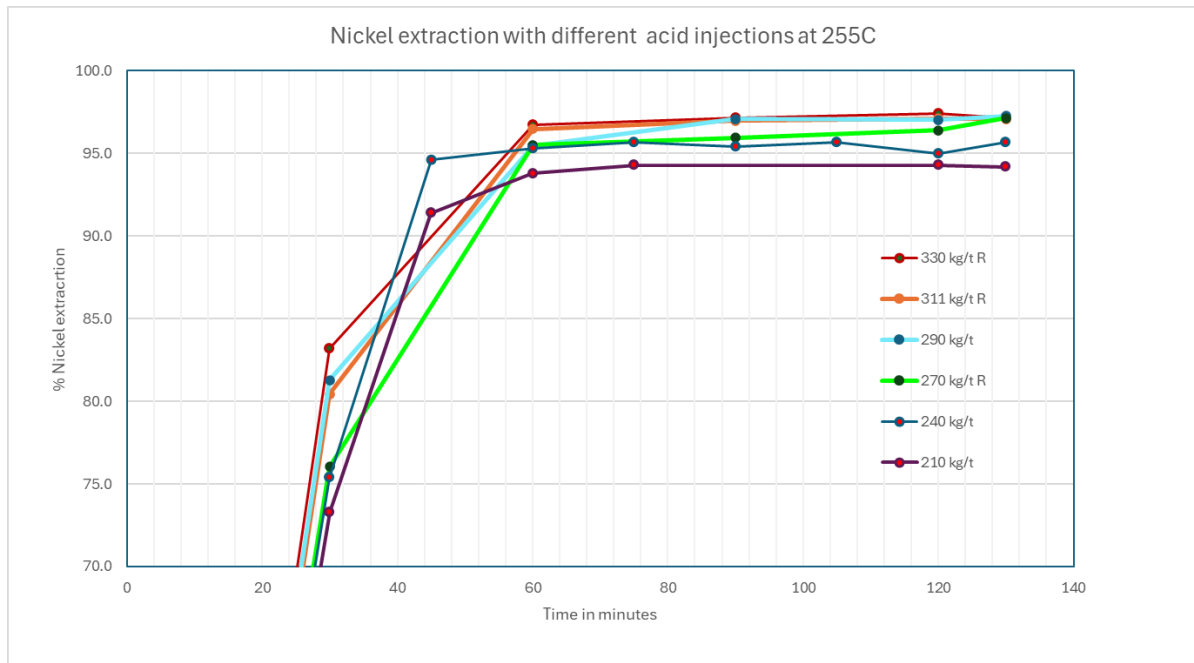
Nico are committing time and resources to validate these findings and incorporate the revised HPAL conditions into the future plant design. This will further enhance the project's value by minimising acid addition which in turn reduces ongoing operating expenditure. A decline in acid usage of 12% can result in a material reduction in total annual operating costs for the project.

Nico have determined acid doses higher than 210kg/t ore provide greater than 94% nickel extraction. Under laboratory conditions, nickel extraction kinetics for acid doses from 210kg/t to 330kg/t indicate maximum extraction is achieved after 60 minutes. At HPAL conditions of T=255°C and 240 kg H<sub>2</sub>SO<sub>4</sub>/t ore, nickel extraction of 95%, cobalt extraction of 93% and free acid concentration 39 g H<sub>2</sub>SO<sub>4</sub>/L was achieved (Figure 4).

<sup>3</sup> Acid usage of 300kg/tonne of sulphuric acid per tonne of ore treated was assumed in the PFS.



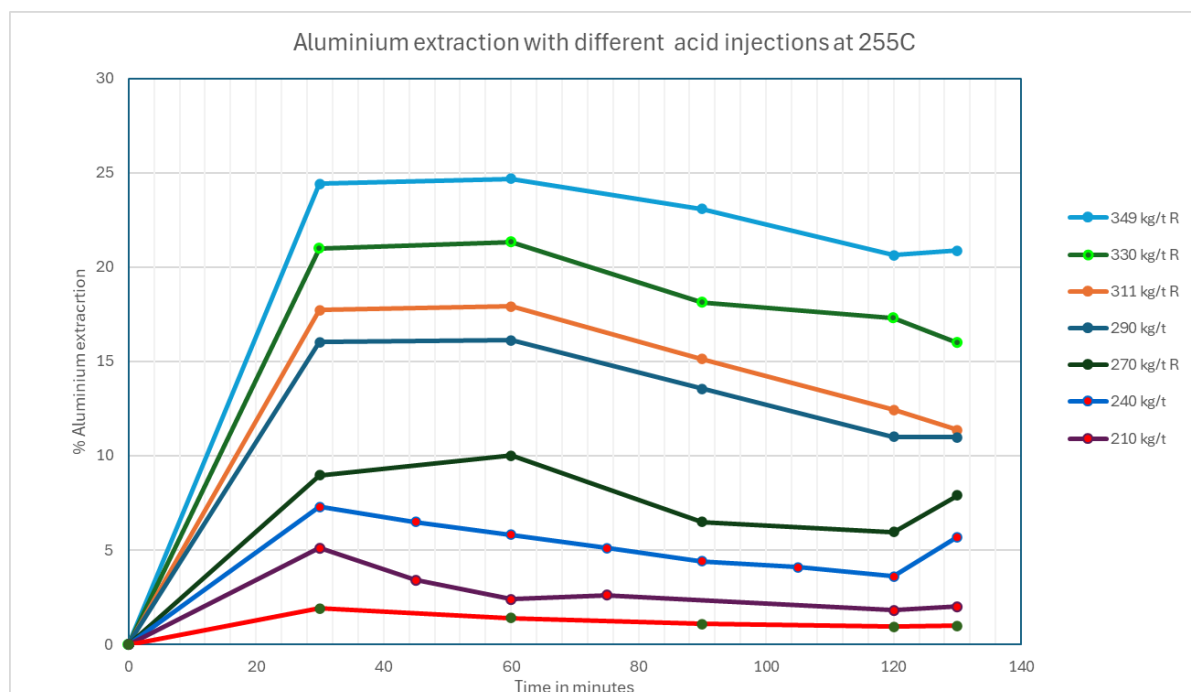




**Figure 4. Nickel extraction versus acid dose**

Aluminium extraction was found to have high sensitivity to acid addition. At 349 kg  $\text{H}_2\text{SO}_4/\text{t}$  ore aluminium extraction was nearly 25% while at 210 kg  $\text{H}_2\text{SO}_4/\text{t}$  ore it was less than 5%. Aluminium extraction kinetics for acid doses from 210 kg/t to 330 kg/t indicate aluminium reprecipitates after 60 minutes of residence time at HPAL conditions. However, a reduction in acid dose has more impact on reducing aluminium extraction than residence time (see Figure 5).

Minimising aluminium extraction has several positive financial impacts on the project, such as a reduction in acid consumption, calcrete usage and a reduction in slurry disposal equipment size.



**Figure 5. HPAL Aluminium extraction at various acid doses**

## Supplementary Nickel Recovery Test Work

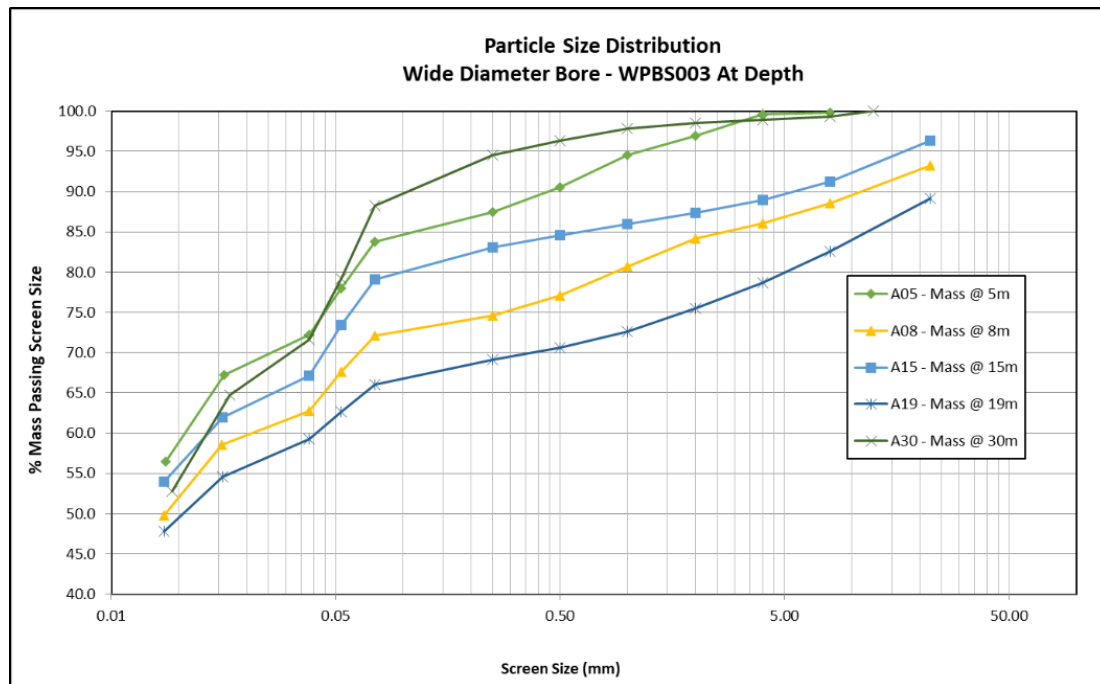
In the current quarter testwork was undertaken to recover nickel and cobalt from waste streams that are directed to tailings. Up to 60% of the nickel was recovered from the Secondary Neutralisation Stage 1 ("SN1") precipitate that is directed to tailings. This has the potential to increase overall plant nickel recovery by a further 1%.

## Ore Assay Results

Ore assays were completed for each meter of depth from the 750mm wide diameter bores down to a depth of 30m (roughly the water table level) in Bauer holes WPBS003 and WPBS 004 and assays by size were completed for each particle size range from 0.008 mm to 22 mm.

The results confirm the ore is very fine in-situ yet does vary at different depths within the profile. For bore hole WPBS003, from 75 to 98 wt% of the ore is less than 2.0 mm in size. Bore hole WPBS004 has similar variability in particle size distribution ("PSD") with 81 to 98 wt% of the ore being less than 2.0 mm in size. Figure 6 shows the ore particle size analysis at various depths.

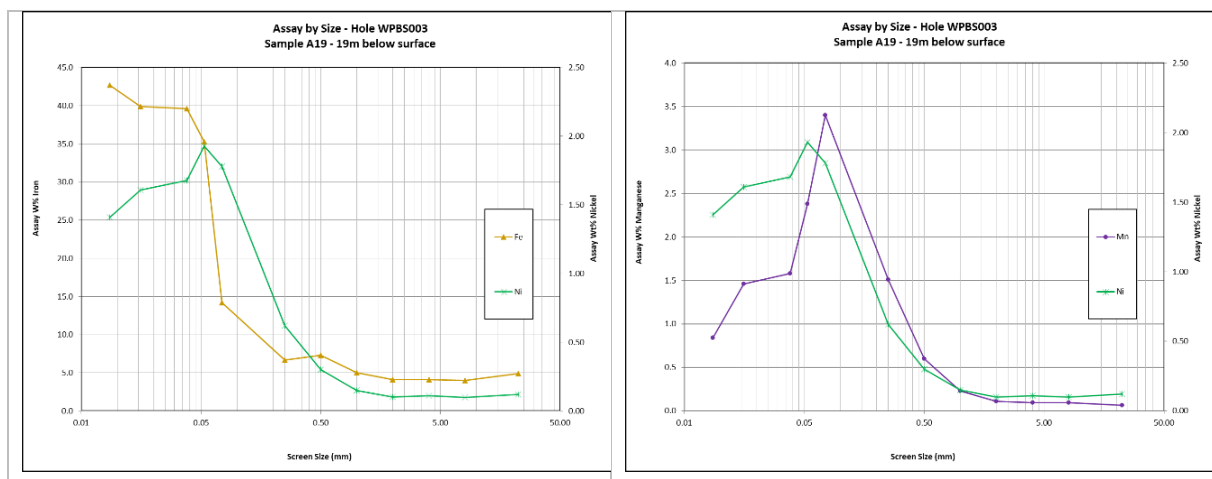
Understanding this ore particle size distribution is important to define milling capacity to reduce all the nickel rich ore to a fine particle size. A particle size below 150µm (0.15mm) will allow an optimum nickel extraction in the HPAL allowing for an extraction time of one hour.



**Figure 6. Typical Particle Size Distributions at various depths through the bore hole profile**

Below is a summary of results for nickel and cobalt concentration within the bore hole profile.

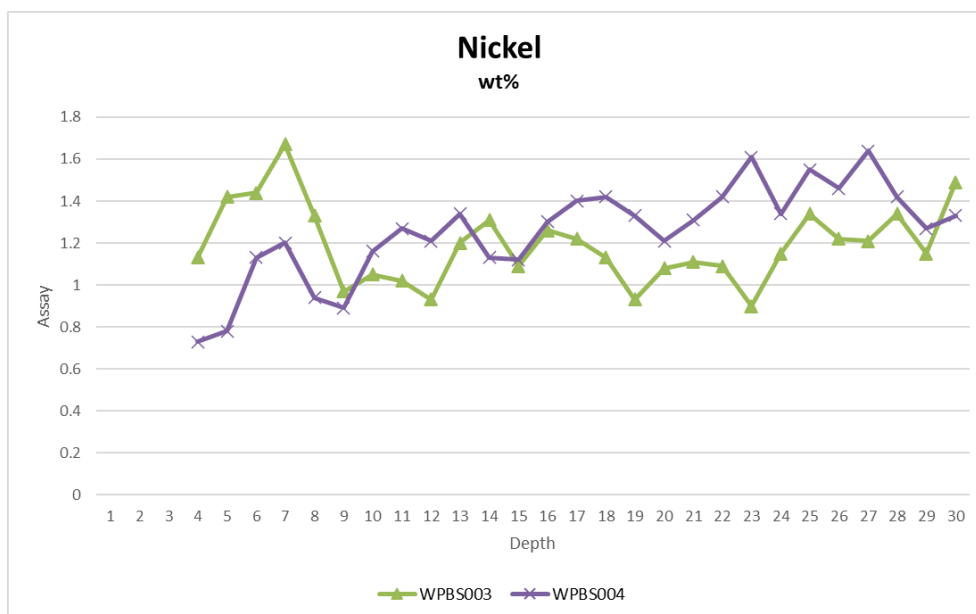
Assay results for nickel indicate the expected close correlation with iron and manganese which can be interpreted as nickel being substituted within the goethite mineral matrix and nickel (and cobalt) being substituted within the asbolane mineral matrix (Figure 7).



**Figure 7. Nickel assay by size and iron and manganese content**

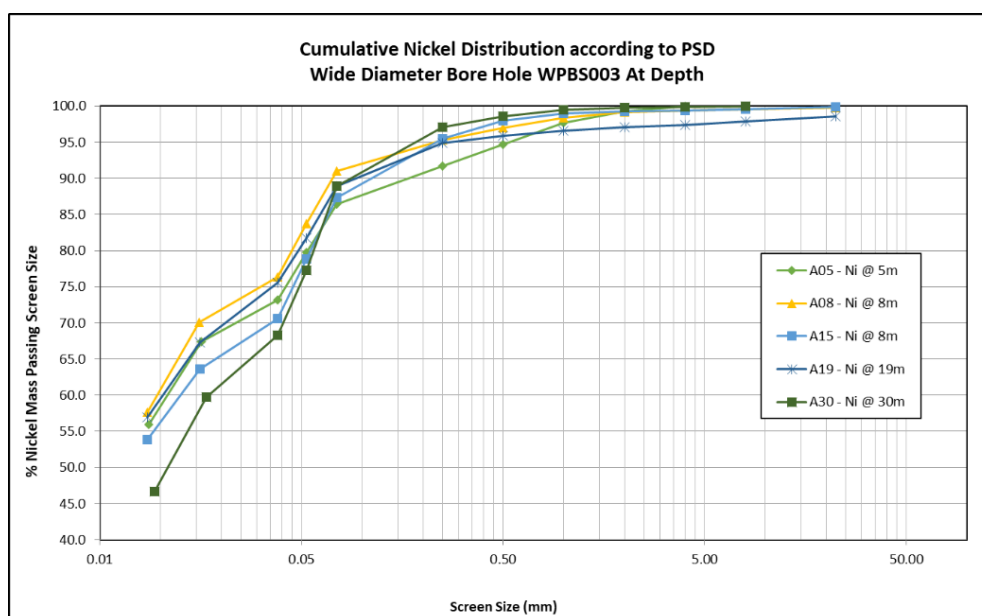
The nickel distribution from the surface down to 30 m depth shows that the nickel values are independent of depth and vary from 0.8 wt% to 1.6 wt% (Figure 8).



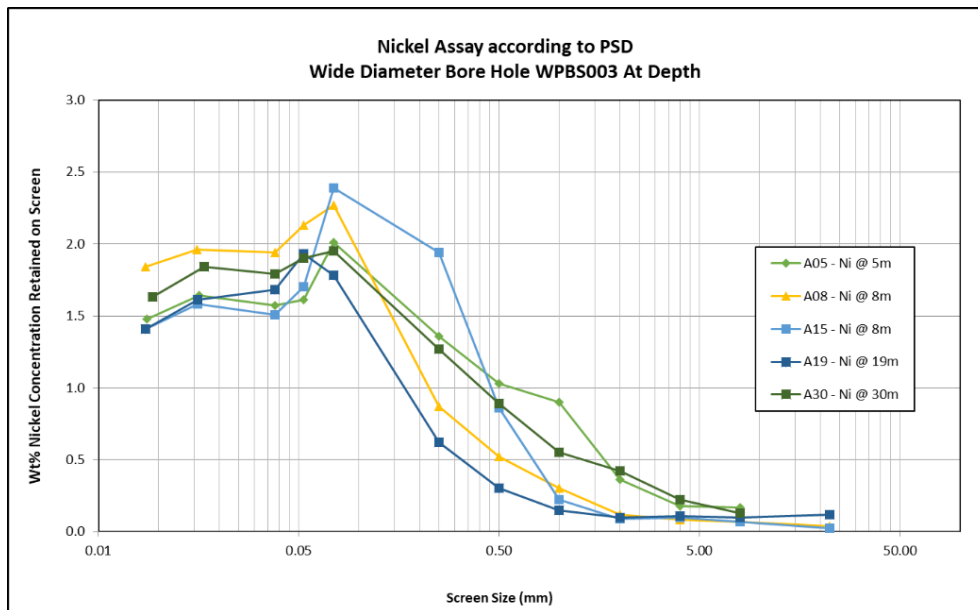


**Figure 8. Nickel assay by depth from surface**

A review of nickel distribution by size fraction shows that 90% to 95% of the nickel content is present in size fractions less than 0.5 mm and the oversize fraction contains very little nickel (Figure 8). The nickel content by size fraction does not vary considerably with depth (Figure 10).



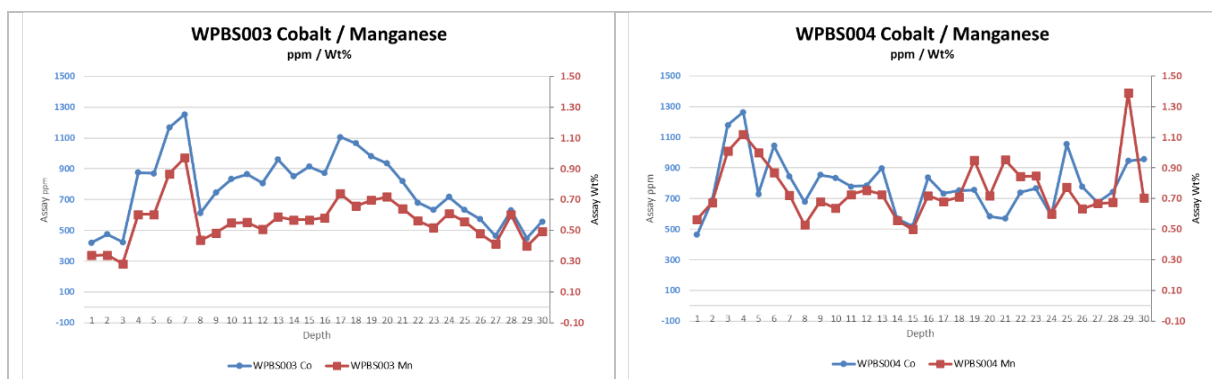
**Figure 9. Nickel distribution according to particle size distribution**



**Figure 10. Nickel assay according to particle size distribution at depth**

It has been concluded that coarse fractions are increasingly depleted in nickel, cobalt and enriched in acid consumers aluminium, magnesium and calcium. This analysis has implications for ore preparation whereby the coarse material can be rejected (which contains unwanted elements) and the fine material fed into the autoclave, with an increase in nickel grade and a decrease in the grade of deleterious elements. It is envisaged that the ore preparation plant will be designed to enable rejection of coarse fractions at different screen sizes, which allows for optimization for the ore variability and enhancement of nickel and cobalt feed grade whilst resulting in an increase in acid efficiency. A cut-off size between 0.50 mm and 2.0 mm will recover ore containing greater than 0.5 wt% nickel.

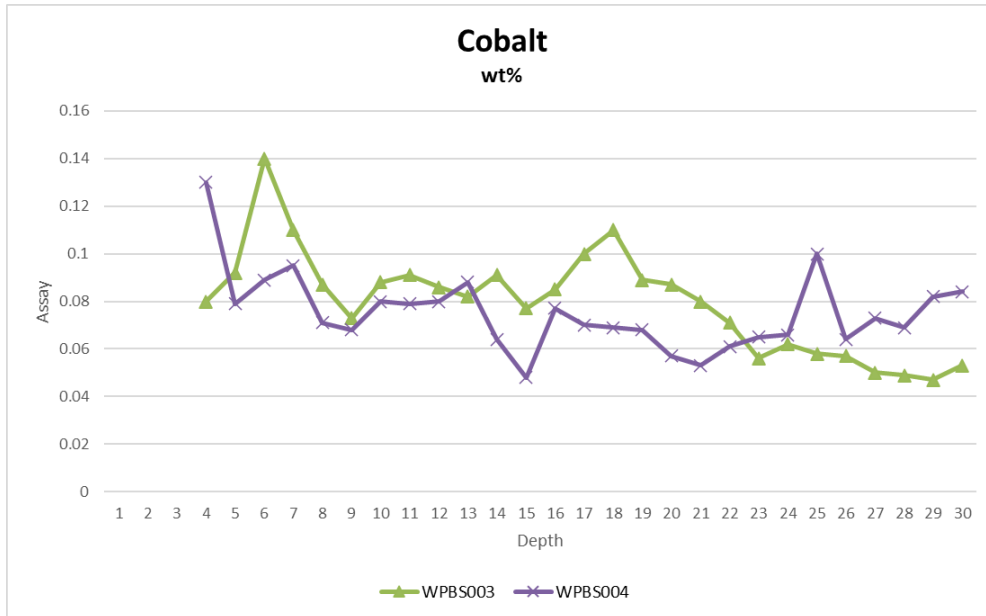
Removing this top size fraction will assist to increase the nickel content of this ore by around 10%. The ore feed into the plant will be on average be 10% higher in nickel and beneficiation will also increase the plant throughput by an equivalent 10%.



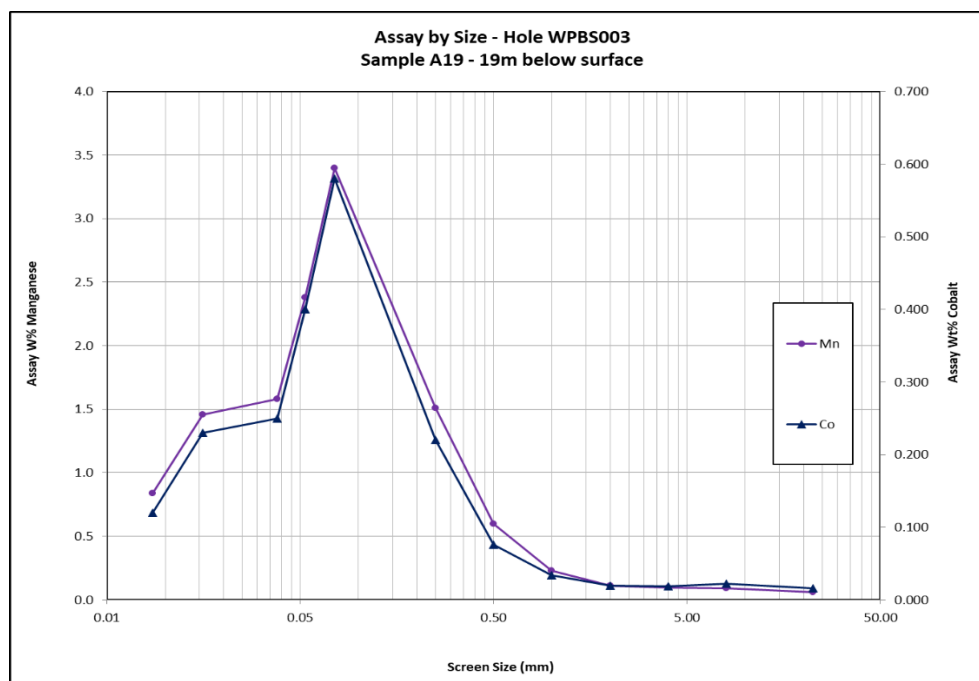
**Figure 11. Cobalt assay typically following trend in manganese assay**

Assay results for cobalt indicate a strong positive correlation with manganese, which can be interpreted as cobalt being substituted within the asbolane mineral matrix (Figure 11). Assay by size results indicate cobalt

and manganese are very well correlated on a particle size basis further confirming the validity of the observation.

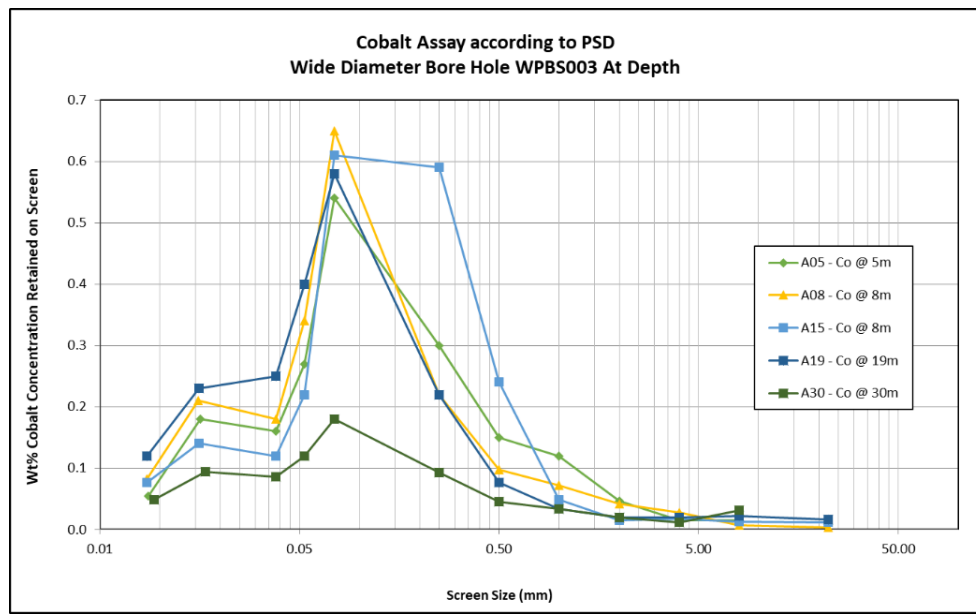


**Figure 12. Cobalt assay by depth from surface**



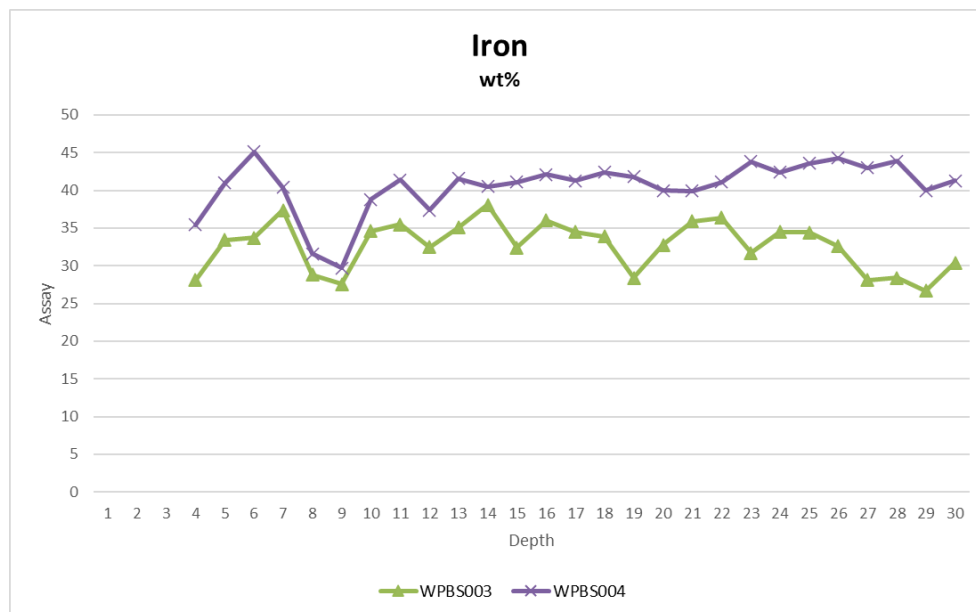
**Figure 13. Strong correlation between cobalt assay and manganese assay with particle size**

A review of cobalt distribution from the surface down to 30 m depth showed that the cobalt values are mostly independent of depth and vary from 0.05 wt% to 0.14 wt% (Figure 12). However, cobalt assay by size are highest in particles less than 2.0 mm (Figure 13). Figure 14 shows that a cutoff particle size of between 0.50 mm and 2.0 mm will recover ore containing greater than 0.05 wt% cobalt.

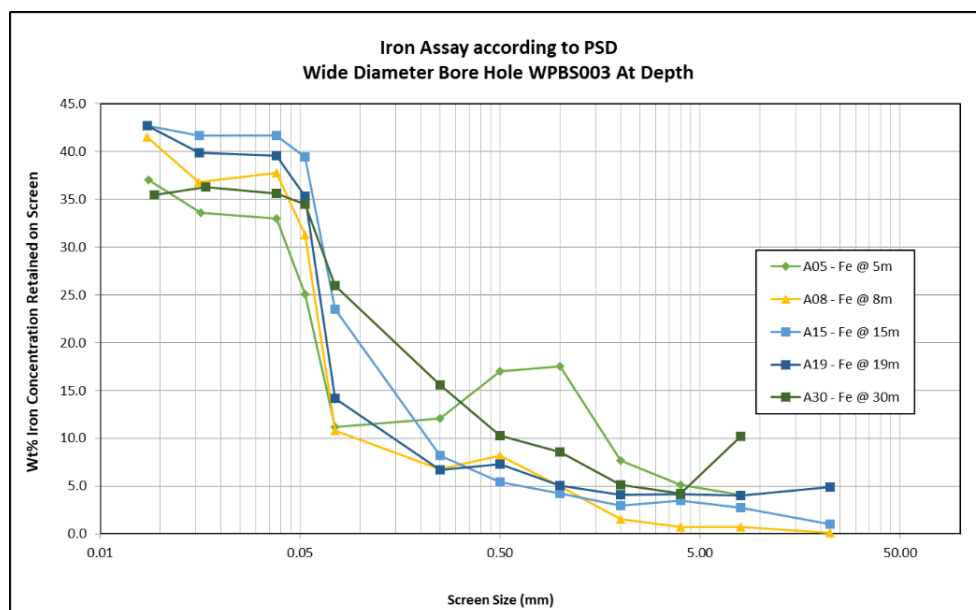


**Figure 14. Cobalt assay according to particle size distribution at depth**

When reviewing iron distribution from the surface down to 30 m depth, iron values are mostly independent of depth and vary from 30 wt% to 45 wt% for hole WPBS003 and vary from 26 wt% to 38 wt% for hole WPBS004 (Figure 15). Iron assay by size however are highest in particles less than 0.075 mm (Figure 16).

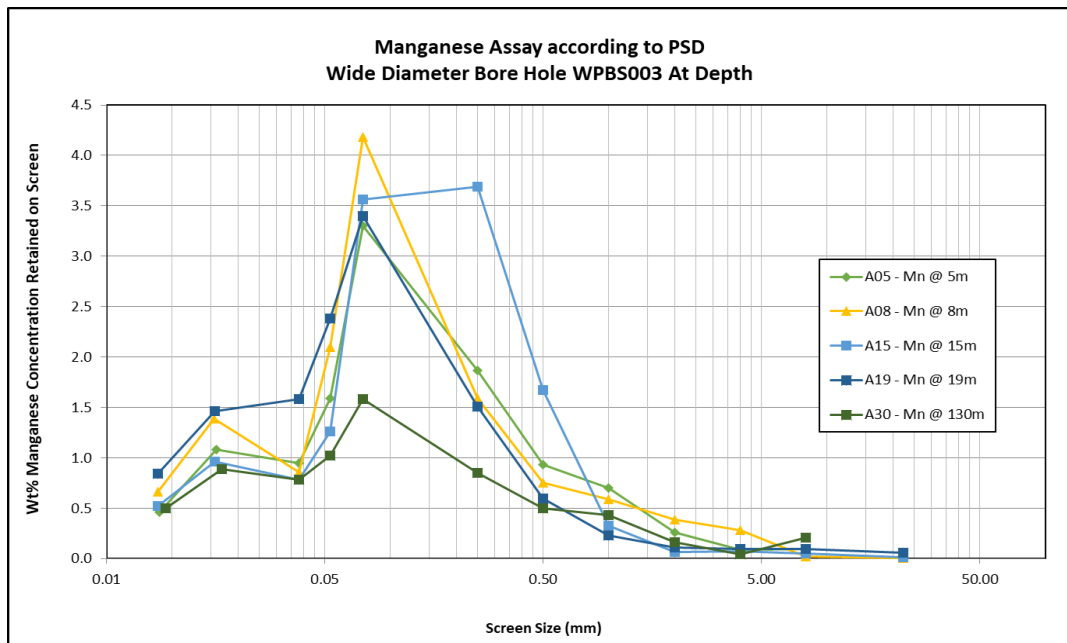


**Figure 15. Iron head assay with depth**



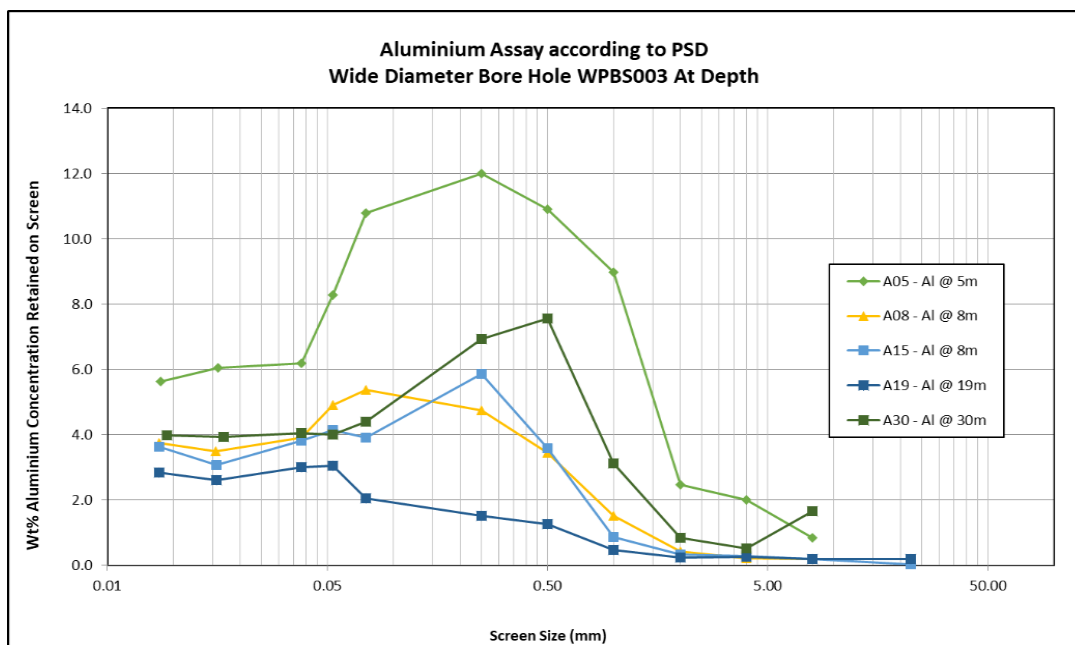
**Figure 16. Iron assay according to particle size distribution at depth**

Manganese assay by size values are also highest in particles less than 2.0 mm (Figure 17). Asbolane ((Co,Ni)<sub>x</sub>Mn(O,OH)<sub>4</sub> nH<sub>2</sub>O) is the predominant manganese mineral and contains elevated nickel and cobalt. Asbolane has a specific gravity of around 9.0 gm/cc and will require preferential concentration in the ore preparation phase to extract the gangue minerals which have specific gravities below 3.0 gm/cc. Gravity and size separation through the use of hydrocyclones is standard operating practice in most HPAL processing plants and Wingellina ore is well suited for the use of hydrocyclones in the ore preparation stage to enhance grade and lower reagent usage.



**Figure 17. Manganese assay according to particle size distribution at depth**

Aluminium assay by size are highest in particles greater than 0.05 mm and less than 2.0 mm (Figure 18) and, as expected, show no preferential enrichment at depth or at surface. This is a similar size range to higher concentrations of manganese and cobalt and a reduction in aluminium in the HPAL feed can be achieved by gravity separation in the ore preparation phase (gibbsite has a specific gravity of 2.35 gm/cc).

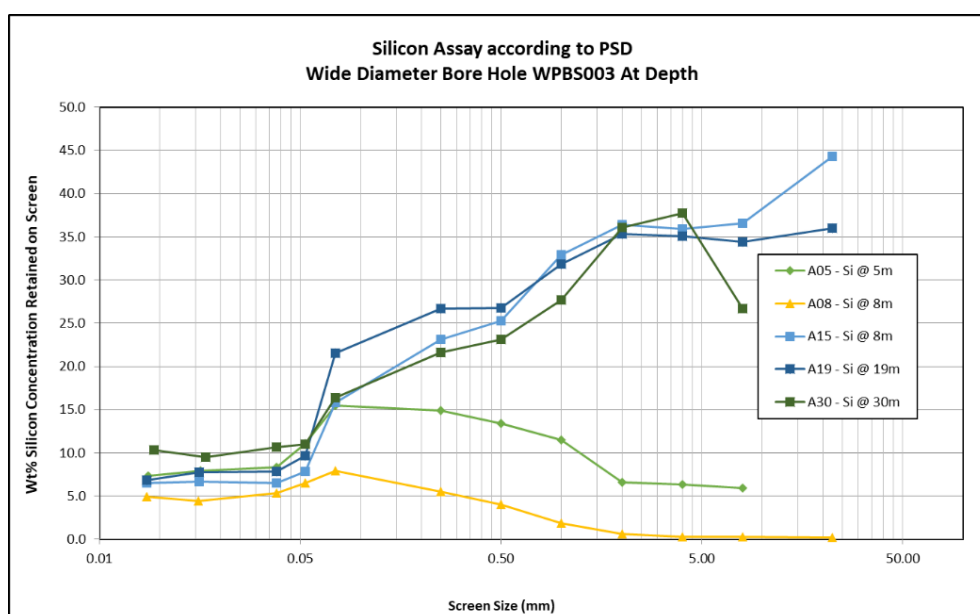


**Figure 18. Aluminium assay according to particle size distribution at depth**

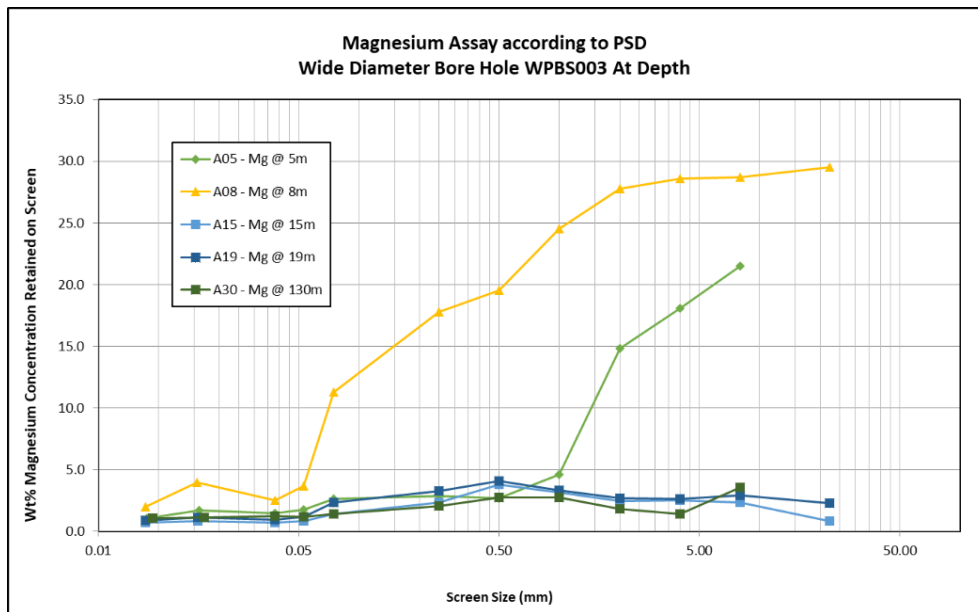


Higher silicon assay grades are in the coarser fractions and are highest in particles larger than 0.05 mm (Figure 19), with the exception being where magnesium is a major impurity. Sample A05 is just below a zone of surface carbonates enriched in magnesium carbonate. Sample A08 is a layer of high magnesium content at 8 m depth seen in both bore holes WPBS003 and WPBS004 (Figure 20).

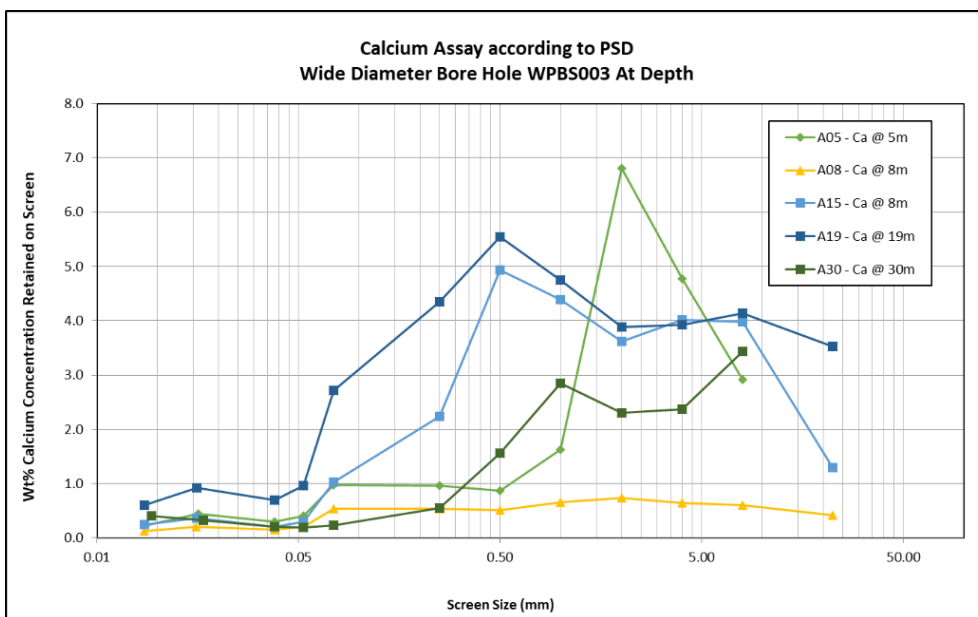
Magnesium impurities will consume acid and report to the HPAL purification circuit although silicon has a negligible impact within the HPAL circuit. The magnesite is seen near surface as part of the weathering profile. Magnesite will be removed as part of the ore preparation process (and selective mining) and will not have an impact of the HPAL process.



**Figure 19. Silicon assay according to particle size distribution at depth**



**Figure 20. Magnesium assay according to particle size distribution at depth**



**Figure 21. Calcium assays indicating calcium is an impurity above 0.05 mm at most depths.**

Calcium assay by size are highest in particles larger than 0.05 mm (Figure 21) with an exception being where magnesium is a major impurity and is substituted for calcium. Sample A08 is a layer of high magnesium content (contained in magnesite) seen in both bore holes WPBS003 and WPBS004 and will be removed prior to processing by both selective mining and the ore preparation plant.

## Ore Preparation – Small Scale Scrubbing Tests

The limonite ore at Wingellina has a fine PSD. Typical PSD for the current testwork indicates that around 70 - 85% of the mass is less than 0.075 mm. Assay by size of the sample indicates that the nickel is mostly associated with goethite and high iron content is in the finest ore size fractions – typically less than 0.075 mm.

Cobalt is mostly associated with the manganese oxide mineral asbolane with lesser amounts associated with goethite. The asbolane typically reports to the coarser size fractions between 1.0 mm and 0.075 mm.

Due to the fineness of the ore excessive grinding is not required and the leaching kinetics are enhanced by fine particle size. In the ore preparation stage, a simple scrubbing stage followed by sizing and further separation by gravity is envisaged.

Small scale scrubbing tests have highlighted the presence of agglomerates in some samples (Figure 23). Tests using 50 kg of the high agglomerate content material have been used to test the efficiency of scrubbing to reduce agglomerate content. The benchmark for scrubbing efficiency is the complete sizing test where the ore is slurried and manually scrubbed through a series of screens to determine the “real” particle size distribution. Scrubbing of natural ore at 40 wt% solids and natural ore with 1kg of 25 mm diameter ceramic media achieved some scrubbing action but allowed 1.0 wt% of material to remain as agglomerates. To reduce agglomerate content to less than 0.1% of ore feed mass, it was necessary to mimic plant operation where larger lumps will accumulate within the scrubber. Addition of 15 kg of 40 mm quartz pebbles, which matched ore SG and average large particle sizes was successful in scrubbing larger particles and broke up the agglomerated particles (see Figure 24, Figure 25 and Figure 26).



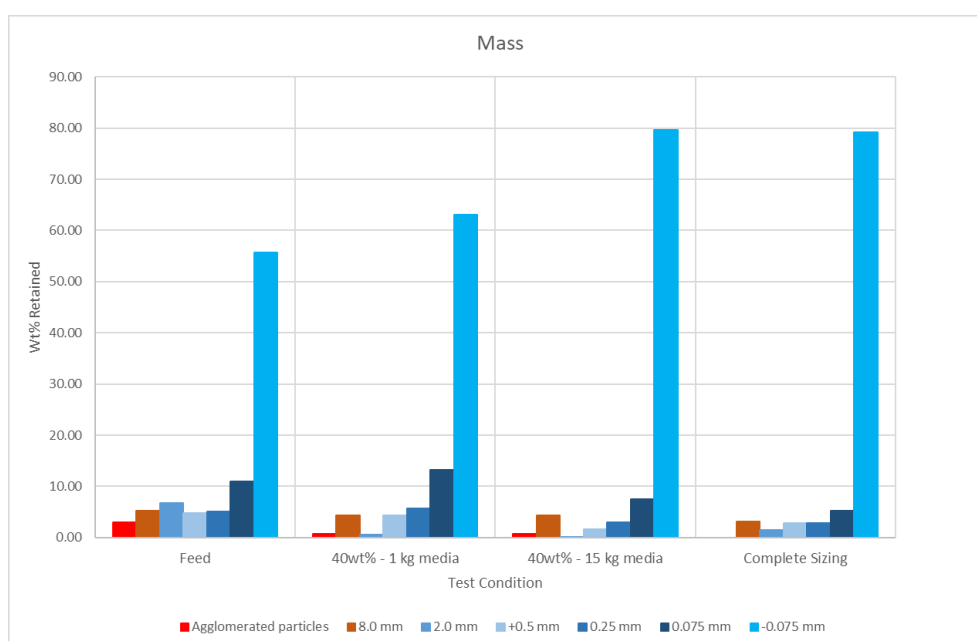
**Figure 22. Operating small scale scrubber**

A measure of the success of this approach is that the -0.075 mm size fraction for this test matched the equivalent size fraction in the complete sizing test.

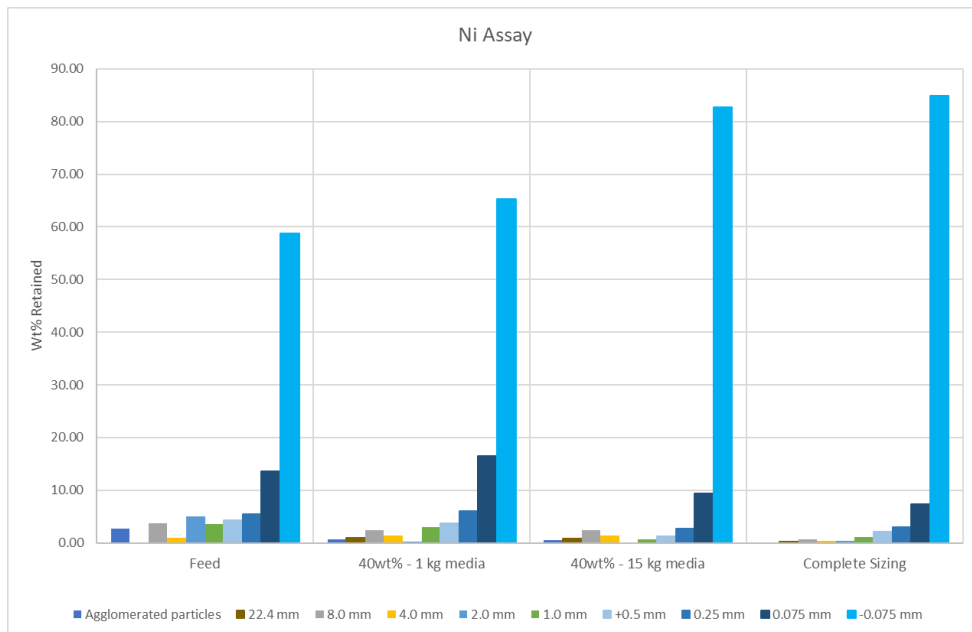
These results will be used to design a continuous ore preparation pilot plant, which will provide feed material for the HPAL pilot plant. Data from the pilot plant scale continuous ore preparation plant will be used for the final plant design.



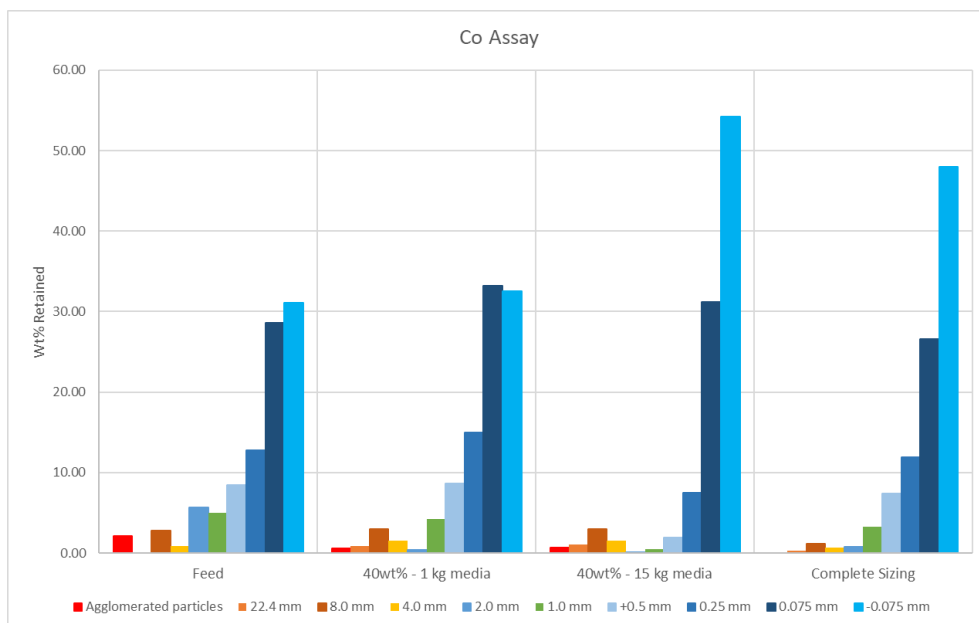
**Figure 23. Batch Scrubbing of ore after 8 minutes. Left photo shows discharge after scrubbing and right side shows agglomerates after hand sorting (larger agglomerates are around 50 mm in diameter).**



**Figure 24. Mass distribution after scrubbing compared to Feed PSD and Complete Sizing PSD**



**Figure 25. Nickel has been effectively scrubbed into the finest particle size range**



**Figure 26. Cobalt has been effectively scrubbed into the finest particle size range**

## Summary Results of Ore Preparation Investigations

Assay by size analysis indicates that within the limonite, the goethite and the majority of the nickel is in the finest fractions – less than 0.05 mm.

Cobalt and the remaining of the nickel is associated with asbolane in an intermediate fraction between 0.05 mm and 2.0 mm. Asbolane has a much higher SG than any of the other minerals contained in the ore and exploitation of this physical property presents a straightforward opportunity to separate an asbolane rich stream from gangue minerals with low impurities and low acid consumption (Table 1).

With the success of the small scale scrubbing tests goethite and asbolane can be liberated from larger particles through the action of a scrubber.

Further Ore Preparation Investigations will:

- Test the recovery of asbolane and goethite by the use of hydrocyclones in the ore preparation circuit; and,
- Test the recovery of asbolane through other gravity separation methods such as spirals, teeter beds or other suitable methods.

### Specific Gravity of major Wingellina Minerals

Mineral	Specific Gravity
Goethite	3.3 to 4.3
Asbolane	8.96
Gibbsite	2.35
Magnesite	2.9 to 3.03
Calcite	2.71
Silicates	2.5 to 3.5

**Table 1. Specific Gravity of minerals within Wingellina Limonite Ore**



*This announcement has been authorised for release by the Board.*

## Contacts

*For more information, please visit our website [www.nicoresources.com.au](http://www.nicoresources.com.au) or email [info@nicoresources.com.au](mailto:info@nicoresources.com.au).*

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## Competent Person's Statement

The information in the report to which this statement is attached relates to Exploration Targets or Exploration Results is based on information compiled by Mr. M Jones, who is full time Employee of the company and also a Member of The Australian Institute of Mining and Metallurgy, with 20 years' experience in the mining industry. Mr. Jones has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which he is undertaking 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 Jones consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Forward-looking statements

This announcement contains certain forward-looking statements. Forward-looking statements are statements that are not historical and consist primarily of projections — statements regarding future plans, expectations and developments. Words such as "expects", "intends", "plans", "may", "could", "potential", "should", "anticipates", "likely", and "believes" and words of similar import tend to identify forward-looking statements. All statements other than those of historical facts included in this announcement are forward-looking statements, including, without limitation, statements regarding plans, strategies and objectives, anticipated production and expected costs and projections and estimates of ore reserves and mineral resources. Indications of, and guidance on future earnings, cash flows, costs, financial position and performance are also forward-looking statements.

Forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, exploration, development and operational risks. No independent third party has reviewed the reasonableness of any such statements or assumptions. None of the Company, their related bodies corporate and their respective officers, directors, employees, or advisers represent or warrant that such Forward Statements will be achieved or will prove to be correct or gives any warranty, express or implied, as to the accuracy, completeness, likelihood of achievement or reasonableness of any Forward Statement contained in this release.

The Company does not undertake any obligation to release publicly any revisions to any forward-looking statement to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. Recipients should form their own views as to these matters and any assumptions on which any of the Forward Statements are based and not place undue reliance on such statements.

## 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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Reverse Circulation (RC) drilling and Bauer Drilling (large diameter auger-type rig) were used for all drilling and sampling reported in this release.</li> <li>RC drilling has been utilised extensively at the Central Musgrave Project (CMP).</li> <li>From 2001 to 2008 drill cuttings were extracted from the RC return via cyclone. The underflow from each interval was transferred via bucket to a four-tiered riffle splitter, delivering approximately three kilograms of the recovered material into calico bags for analysis. The residual material was retained on the ground near the hole. Composite samples were obtained from the residue material for initial analysis, with the split samples remaining with the individual residual piles until required for re-split and duplicates analysis or eventual disposal. Cyclone cone splitter sampling was in use in the 2017, 2019 and 2022 programs</li> <li>RC drilling produced samples that were collected at two-metre intervals using a cone splitter to produce an approximate three-kilogram sample, which is considered representative of the full drill metre. This is considered to be an industry standard. Sampling was guided by qualified field personnel.</li> <li>All samples were sent to Intertek Laboratories (Perth or Kalgoorlie). Samples were analysed for a</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>standard 18 element XRF Ni laterite suite (FB1/XRF - Al<sub>2</sub>O<sub>3</sub>, CaO, Co, Cr<sub>2</sub>O<sub>3</sub>, Cu, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, LOI, MgO, MnO, Na<sub>2</sub>O, Ni, P<sub>2</sub>O<sub>5</sub>, SO<sub>3</sub>, Sc, SiO<sub>2</sub>, TiO<sub>2</sub>, Zn) on all of the samples and an Aqua Regia digestion/ ICP MS (AR25/MS) multi-element suite on approximately half of the samples (Au, Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr).</p>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Bulk sample Nickel Laterite Ore used in the current testwork was sourced from two bulk sample holes drilled in 2013 – WPBS003 and WPBS004. Analytical results from the Wingellina Reverse Circulation drill hole database were scrutinised to locate vertical holes that yielded an average aggregated target grade approximating the overall average feed grade for the first 10 years of the operation. Holes were 780mm in diameter and drilled to a depth of 30m (above the water table). At the time of drilling a grab sample was taken of each metre interval. This was analysed at SGS laboratories using XRF and four acid digest for a standard Nickel Laterite suite (Al<sub>2</sub>O<sub>3</sub>, CaO, Co, Cr<sub>2</sub>O<sub>3</sub>, Cu, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, LOI, MgO, MnO, Na<sub>2</sub>O, Ni, P<sub>2</sub>O<sub>5</sub>, SO<sub>3</sub>, SiO<sub>2</sub>, TiO<sub>2</sub>, Zn). Further confirmatory XRF analysis of homogenised material was conducted at ALS laboratories as part of the 2023/2024 work</li> <li>• The Wingellina 2022 RC drill program at Lewis Calcrete from which calcrete samples for testwork were derived was executed by</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Kennedy Drilling using a Schramm T685WS Rotadrill RC drill rig with a compressor capacity of 1350 / 500 cfm and 2400 / 1000 cfm booster.</p> <ul style="list-style-type: none"> <li>Drilling was carried out using a 146mm RC face sampling hammer.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Overall drilling recoveries were good. No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Geological logging of the drill chips were recorded for all holes, including lithology, mineralogy, texture, weathering, oxidation, colour and other features of the samples. Drill chips were not logged to any geotechnical standard. Logging of RC drill chips is considered to be semiquantitative given the nature of rock chip fragments and the inability to obtain detailed geological information. The drill holes were logged in full to the end of the hole.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>All two-metre splits from the drill holes were passed through a cone splitter to produce a 7.5% representative sample for assaying. Check or repeat samples have been submitted for analysis.</li> <li>Each sample was weighed at the preparation laboratory and the</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>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.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>weights recorded along with analytical results.</p> <ul style="list-style-type: none"> <li>Samples were shipped to Intertek laboratories in Alice Springs or Kalgoorlie for drying, pulverising and splitting to prepare a pulp of approximately 200 grams which was analysed at Intertek Laboratories in Perth, Australia. Analysis included a standard 18 element XRF Ni laterite suite (FB1/XRF - Al<sub>2</sub>O<sub>3</sub>, CaO, Co, Cr<sub>2</sub>O<sub>3</sub>, Cu, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, LOI, MgO, MnO, Na<sub>2</sub>O, Ni, P<sub>2</sub>O<sub>5</sub>, SO<sub>3</sub>, Sc, SiO<sub>2</sub>, TiO<sub>2</sub>, Zn) on all of the samples and an Aqua Regia digestion/ ICP MS (AR25/MS) multi-element suite on approximately half of the samples (Au, Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr). The sample sizes are considered to be appropriate to correctly represent the sought after mineralisation style.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels</i></li> </ul>	<ul style="list-style-type: none"> <li>RC sample weights ranged from 1 – 3kg. Samples were dried, crushed and pulverised to minus 75 microns. Analysis was undertaken using both XRF and Aqua Regia digestion/ ICP MS. Both are considered accepted industry analytical process appropriate for the nature and style of mineralisation under investigation. Blanks and standards were incorporated into the sampling procedure. Intertek undertook their own internal checks and blanks.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>of accuracy (ie lack of bias) and precision have been established.</i>	
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Results of standards and field duplicates are within acceptable ranges. No independent or alternative company has yet been engaged to verify results.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Each drill hole location (easting and northing) was set out using a handheld GPS. Locations will be surveyed using a Real Time Kinematic GPS. This measures X, Y and Z to sub-centimetre accuracy in terms of the MGA 94, Zone 52 metric grid.</li> <li>• Final surveyed locations are expected to be within 5 metres of the handheld GPS locations</li> <li>• Topographic control is generated from a combination of remote sensing methods and ground-based surveys. This methodology is adequate for the resource in question.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole spacing at CMP is generally on a 120m x 50m spacing. 2022 drilling has typically infilled the local areas to 60m x 25m and 30m x 25m.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Drilling intersections are nominally designed to be sub-normal to the orebody.</li> <li>It is not considered that drilling orientation has introduced an appreciable sampling bias.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are delivered to a third-party transport service, who in turn relay them to the independent laboratory contractor. Samples are stored securely until they leave site.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have yet been conducted on the exploration data presented in this release.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known</li> </ul>	<ul style="list-style-type: none"> <li>The CMP comprises five granted exploration leases and one granted miscellaneous lease. Native title interests are recorded against the CMP tenements. The CMP tenements are held by Austral Nickel Pty Ltd (South Australia) and Hinckley Range Pty Ltd (Western Australia). Nico has</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>impediments to obtaining a licence to operate in the area.</i>	100% ownership of both companies. One third party royalty agreement applies to the tenements at CMP, over and above the state government royalty. Hinckley Range Pty Ltd and Austral Nickel Pty Ltd operate in accordance with all environmental conditions set down as conditions for the grant of the leases. There are no known issues regarding the security of tenure. There are no known impediments to continued operation.
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The CMP area has an exploration history which extends to the 1960's, with significant contributors being Southwestern Mining Limited (INCO 1950's and 1960's), Nickel Mines of Australia (1970's), Acclaim Exploration Limited (2001 – 2004) and Metals X Limited (2005-2021).</li> <li>On balance, more recent work since 2001 has generally confirmed the veracity of historic exploration data.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Musgrave Block is an east-west trending, structurally bounded mid- Proterozoic terrane some 130,000km<sup>2</sup> in area, straddling the common borders of Western Australia, South Australia and the Northern Territory. Deep weathering of olivine-rich ultramafic units aided by shearing has resulted in the concentration of nickel mineralisation. The olivine in</li> </ul>

Criteria	JORC Code explanation	Commentary
		the ultramafic units has background values of about 0.15% Ni to 0.3% Ni. The almost complete removal of MgO and SiO <sub>2</sub> to ground waters during the weathering of olivine in the ultramafic units resulted in extreme volume reductions and consequent significant upgrading of other rock forming oxides (Fe <sub>2</sub> O <sub>3</sub> , Al <sub>2</sub> O <sub>3</sub> ) and metal element concentrations in the weathered profile.
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <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> </ul> </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> </ul>	<ul style="list-style-type: none"> <li>Excluded results are non-significant and do not materially affect understanding of the Wingellina deposit.</li> <li>Specific hole locations are not relevant as this report details metallurgical results of sample composites designed to represent typical material of the Wingellina and Lewis Calcrete Deposits</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades)</li> </ul>	<ul style="list-style-type: none"> <li>Data aggregation methods are not relevant to the metallurgical results reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>and cut-off grades are usually Material and should be stated.</p> <ul style="list-style-type: none"> <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>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Interval widths are downhole width unless otherwise stated.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable to the metallurgical results reported.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The accompanying document is considered to represent a balanced report. Further evaluation into the significance of these results is ongoing.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk</li> </ul>	<ul style="list-style-type: none"> <li>Other exploration data collected by the Company is not considered as material to this report at this stage. Further data collection will be</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	reviewed and reported when considered material.
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration and mine planning assessment continues to take place at the CMP.</li> </ul>