Pacific Nickel

ASX ANNOUNCEMENT

1 February 2023

Kolosori Nickel Project Definitive Feasibility Study Delivers Highly Attractive Economics

Pacific Nickel Mines Limited (ASX Code: PNM) ("**Pacific Nickel"** or **"the Company"**) is pleased to advise that the Company has completed a Definitive Feasibility Study (**DFS** or **Study**) for its Kolosori Laterite Nickel Direct Ship Ore (**DSO**) Project ("**Kolosori Nickel Project"** or **"the Project"**) held within Mining Lease ML 02/2022 on Isabel Island, Solomon Islands.

Study Highlights

The DFS is based on a maiden Ore Reserve as set out in Annexure A of the DFS Summary Report forming part of this announcement.

The DFS presents two production cases:

- the first incorporates the ore reserve (97%) and a small proportion of inferred resources (3%), referred to as the "Base Case";
- the second incorporates the reserve (68%) and a larger proportion of inferred resources (32%), referred to as the "Expanded Case".

There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.

The Study indicates that the Project will deliver attractive economic returns:

- Pre-production capital expenditure of US$18.6 million (both cases) excluding working capital (US$ 21.5m including working capital)
- Mining inventory: 3.8 (Base Case) to 6.1 (Expanded Case) million wet metric tonnes (wmt) of ore
- An average nickel grade of 1.57% (Base Case) to 1.51% (Expanded Case) over the life of mine
- Production of up to 1.5 million wmt (both cases) DSO per year based on port throughput
- Post-tax NPV of US$64 million (Base Case) to $83 million (Expanded Case) (A$91 million to A$118 million) at a discount rate of 8.0%
- Post-tax IRR of 156% (Base Case) to 170% (Expanded Case)
- Capital payback less than one year in both cases

Pacific Nickel CEO Geoff Hiller commented:

"We are very pleased with the outcome of the Definitive Feasibility Study which confirms the strong economic viability of the Kolosori Nickel Project. Capital payback in under 12 months is certainly impressive for a project which holds relatively low technical risk."

"Based on these results we are confident that we will soon be able to draw upon the financing facilities being offered by Glencore International which will see construction commence in earnest".

"With the continued support of local landowners, local contractors and relevant Government Authorities we anticipate being in a position to deliver the Kolosori Nickel Project in the current year".

"Pacific Nickel Mines is committed to delivering a high quality nickel operation in the Solomons for the benefit of all stakeholders. The Company is committed to maintaining the highest possible environmental standards during the mining operation."

Pacific Nickel Mines Limited ABN 86 075 613 268
Level 4, 283 George Street, Sydney NSW 2000, Australia
PO Box 20480, World Square NSW 2002 Australia
Email: info@pacificnickel.com www.pacificnickel.com

Summary of DFS

Pacific Nickel is pleased to announce the results of a DFS for the development of its 80% owned Kolosori Nickel Project in the Solomon Islands.

Located on Isabel Island the Project is expected to generate strong financial returns while also delivering significant social and economic benefits to the landowners (who hold a 20% carried interest in the Project), local communities and the provincial and federal governments.

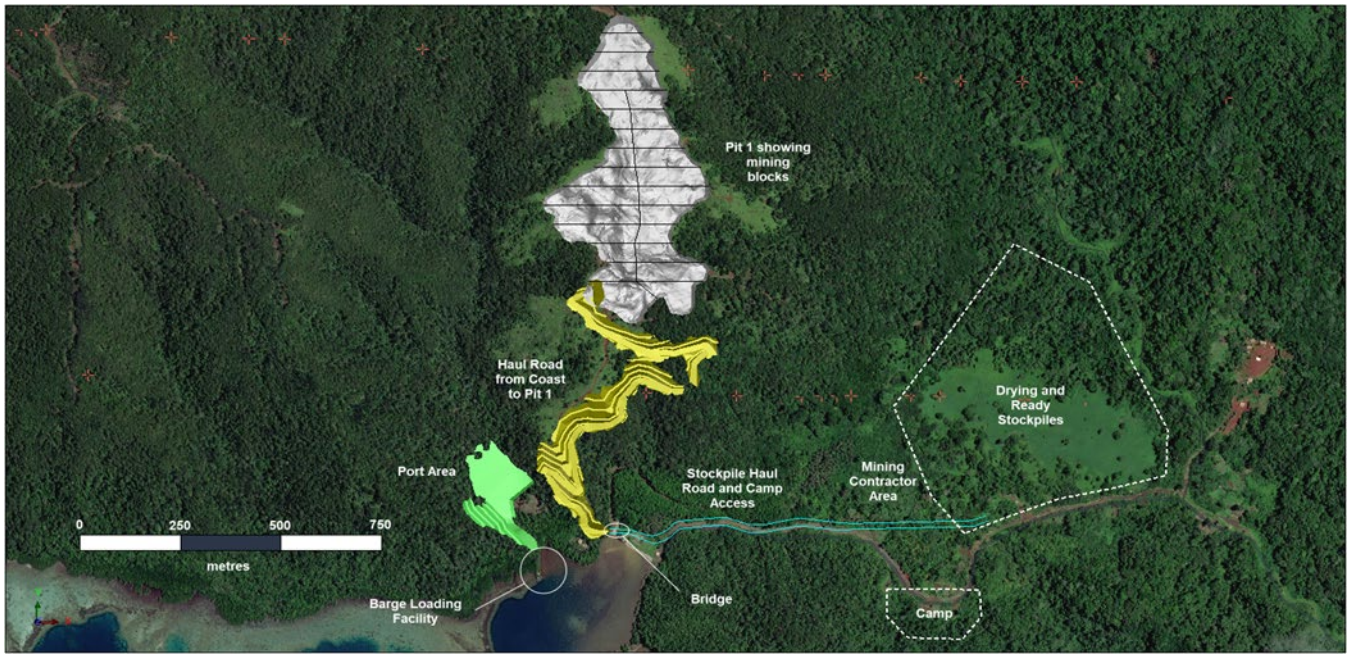
The DFS has been prepared by Maxwell Energy and Resources with inputs provided from a group of leading independent consultants from Australia and Indonesia including Australian Mine Design and Development (AMDAD), Mining One Consultants (Mining One), and Resindo Resources & Energy Group (Resindo), overseen by in-house Pacific Nickel personnel who are experienced in mining projects in the region.

Two production scenarios have been provided by AMDAD. The first incorporates the ore reserve (97%) and a small proportion of inferred resources (3%) – referred to as the "Base Case". The second incorporates the ore reserve (68%) and a larger proportion of inferred resources (32%) – referred to as the "Expanded Case". The Expanded Case includes inferred resources which either naturally fit within open pits as part of the Base Case or have sufficient continuity to be included in stand-alone pits.

The Company engaged HBS PNG Pty Ltd, a well-established PNG mining contractor, in an early contractor involvement arrangement who provided actual mining contractor rates for incorporation into the DFS.

The key elements of the development of the Project include:

- Haul road
- Wharf and port facilities including small stockpile area
- Main Stockpile Area to the east of the wharf
- 200-Man Main Camp
- 50-man Construction Camp.
- Contract Mining Facility
- Road access from haul road to eastern stockpile area and main camp
- Small bridge to cross creek from bottom of haul road to main stockpile and camp



When the DSO loadout wharf and haul road to the mining area are in place, and the mining contractor mobilised, the Kolosori Nickel Project is expected to ramp up to full production (approx. 1.5 million wet metric tonnes per annum of direct shipping nickel ore) during 2023. Mining DSO operations are expected to commence in late Q3 2023 subject to financing and contractor mobilisation.

Key Study Parameters

The key parameters of the Study were as follows:

- Shallow open pit mining operation
- No processing or tailings dams required (as it is a direct ship ore)
- Initial haul road from first pit to the port area around 1.5 km
- Stockpile management a key to moisture control and loading DSO onto barges
- Barging ore less than 1km to 50,000 to 60,000 tonne geared ships for export
- Production of up to 1.5 wet mtpa based on port throughput.
- Saprolite shipped to China for the RKEF plants for the end use in the stainless steel industry

Key Study Assumptions and Results

The key outcomes to emerge from the Study are as follows:

Base Case:

- 3.8 million wet metric tonnes of ore.
- An operating mine life of 3 years
- An average nickel grade of 1.57% over the life of mine.
- Initial capital expenditure of US$ 21.5 million including working capital
- Post-tax NPV of US$ 64 million (A$ 91 million) at a discount rate of 8.0%
- Post-tax IRR of 156%
- Total Operating Costs of US$ 31 per wmt of ore
- Operating Margin of US$ 22 per wmt of ore
- Capital payback less than one year

Expanded Case:

- 6.1 million wet metric tonnes of ore.
- An operating mine life of 5 year and 8 months
- An average nickel grade of 1.51% over the life of mine.
- Initial capital of US$ 21.5 million including working capital
- Post-tax NPV of US$ 83 million (A$118 million) at a discount rate of 8.0%
- Post-tax IRR of 170%
- Total Operating Costs of US$ 31 per wmt of ore
- Operating Margin of US$ 18 per wmt of ore
- Capital payback less than one year

The Company proposed to develop the mine on the basis of a contract operator model with two key contractors to operate the mine:

- A mining contractor – supplies, operates and maintains the mining, stockpiling and barge loading fleet.
- A barging and stevedoring contactor – supplies, operates and maintains barges, tugs and cranage on the bulk carrier.

The Company will be seeking to increase the mine life of the Project via further exploration to convert current inferred resources of approximately 2 million tonnes (that are not included in the financial model)

into indicated resources and carrying out drilling on the new areas identified in the exploration resource target of 2.5Mt to 4.0Mt at 1.2% - 1.6% Ni assessed by Mining One[1].

Key Licences and Approvals

- Mining Lease ML2/2022 granted
- Environmental and Social Impact Assessment approved
- Development consent granted
- Mining Agreement executed
- Surface Access Right Agreement with landowners executed
- Business Licence granted
- Export Permit to be sought once sales contract with off-taker executed.

Funding

To achieve the outcomes indicated in the DFS, pre-production funding of US$21.5 million will be required. The Company has employed Blackbird Commodity Partners Pty Ltd as its corporate advisor, to arrange project financing for the Kolosori Nickel Project.

Blackbird has managed a competitive process which resulted in the mandating of Glencore International AG (**Glencore**) on a non-binding indicative basis to provide a US$22m senior secured debt facility to the Project with a three year repayment term. This debt facility is subject to Glencore completing its final due diligence, receipt of all internal approvals and full documentation. The selection of Glencore was the result of a competitive process with several proposals from perspective debt providers being received by the Company. This level of interest by a range of potential financiers is taken as support for the attractive nature of the Project.

Social Responsibility and Sustainability

- Landowners have a 20% carried interest in the Project.
- Exploration team is over 50 people all of whom are Solomon Islanders
- Environmental and bathymetric studies have been carried out by local contractors
- Early work program using local contractors to build test pit, test stockpile and 50 man camp
- Company will endeavour to use and train as many of the local workforce as possible
- Provincial and Federal Governments are very supportive of the Company's approach.

Next Steps

- Pacific Nickel will seek to execute a US$22m debt funding arrangement with Glencore as contemplated in the non binding heads of agreement executed in 2022;
- Enter into contracts with a mining contractor and a barging contractor;
- Seek an Export Permit from the Solomon Islands Government as soon as practicable;
- Finish the 50 man construction camp in mid February 2023; and
- Commence preliminary earthworks with a local contractor to enable the mining contractor to commence mining operations as soon as practicable.

Cautionary Statement

The Study outcomes, production target and forecast financial information referred to in this announcement are based on accuracy levels for technical and economic assessments that are sufficient to support an estimation of Ore Reserves.

An updated JORC compliant Mineral Resource Estimate (**MRE**) for the Project was released on 23 November 2022. The initial Ore Reserve Statement for the Project dated 31 January 2023 is appended to the DFS Summary Report attached. Pacific Nickel confirms that it is not aware of any new information or data that materially affects the information included in these releases. All material assumptions and

[1] ASX Announcement - Updated Kolosori JORC Mineral Resource Estimate delivers a significant increase in contained Nickel, 23 November 2022

technical parameters underpinning the MRE and the Ore Reserve continue to apply and have not materially changed.

The Mineral Resources and Ore Reserves underpinning the production target in the Study have been prepared by competent persons in accordance with the requirements of the JORC Code (2012).

Further information on Pacific Nickel is available at www.pacificnickel.com.

Authorised by the Board.

For further information please contact:

Mr. Geoff Hiller
Executive Director & CEO

Mr. Andrew J. Cooke
Company Secretary
Email: acooke@pacificnickel.com

Please visit the company's website at www.pacificnickel.com

Pacific Nickel
MINES LIMITED

Kolosori Nickel Project Definitive Feasibility Study Summary Report for ASX release

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1 Executive Summary

The following document outlines the technical and financial parameters underpinning the proposed Kolosori Nickel Project which is an open current direct shipment of ore, Nickel laterite mining project located on the Kolosori bay of Santa Isabel Island in the Solomon Islands.

The project proposes a maximum of the following:

- An operating mine life of 5 year and 8 months
- 6.1 million wet metric tonnes of ore.
- An average nickel grade of 1.51% over the life of mine.
- Post-tax NPV of USD 83million
- Post-tax IRR of 170%

The mine will be implemented utilizing a contract operate model and as such Pacific Nickel propose to engage two key contractors to operate the mine:

- A mining contractor – supplies, operates and maintains the mining and barge loading fleet.
- A barging and stevedoring contactor – supplies, operates and maintains barges, tugs and cranage on the bulk carrier.

Engagement with the local contracting market has substantially commenced and wherever possible Pacific Nickel are sourcing local contractors to partner with and deliver the project.

The project consists of the following key built infrastructure features:

- Mining pits – a total of 10 pits have been identified that can be commercialized.
- A main haul – connects the pits to the port and stockpiling area
- A drying stockpile area – for pre-shipment drying and stockpiling
- Camp – suitable for up to 200 people
- Mine Infrastructure area – for fleet maintenance and operations
- Jetty – a 3 berth barging jetty
- Transshipment point – a location identified for transfer of ore from the barge to the bulk carriers.

2 Introduction

The purpose of this document is to provide an executive summary of the current Kolosori Direct Shipment Ore project financial analysis for the purposes of release to the ASX.

3 Background

The Project is for the development of mining with supporting facilities for the export of nickel ore. The development is located at the Kolosori Bay area near the Havihua Village. The villages in the area have provided strong support for the development and form an integral part of the Company's development and Community strategy moving forward. The traditional landowners have a 20% carried interest in the Project.

In October 2020, Pacific Nickel Mines Limited ("PNM") executed a Share Purchase Agreement to acquire an 80% interest in what is now Pacific Nickel Mines Kolosori Limited ("PNMKL"), a company incorporated in the Solomon Islands, with the remaining 20% of PNMKL held by traditional landowners. PNMKL holds mining lease ML 02/22, which contains the Project and is located at the southern end of Isabel Island.

The Project, located on Isabel Island in the Solomon Islands is a direct shipping ore ("DSO") nickel laterite project with transitional and saprolitic ores as saleable products.

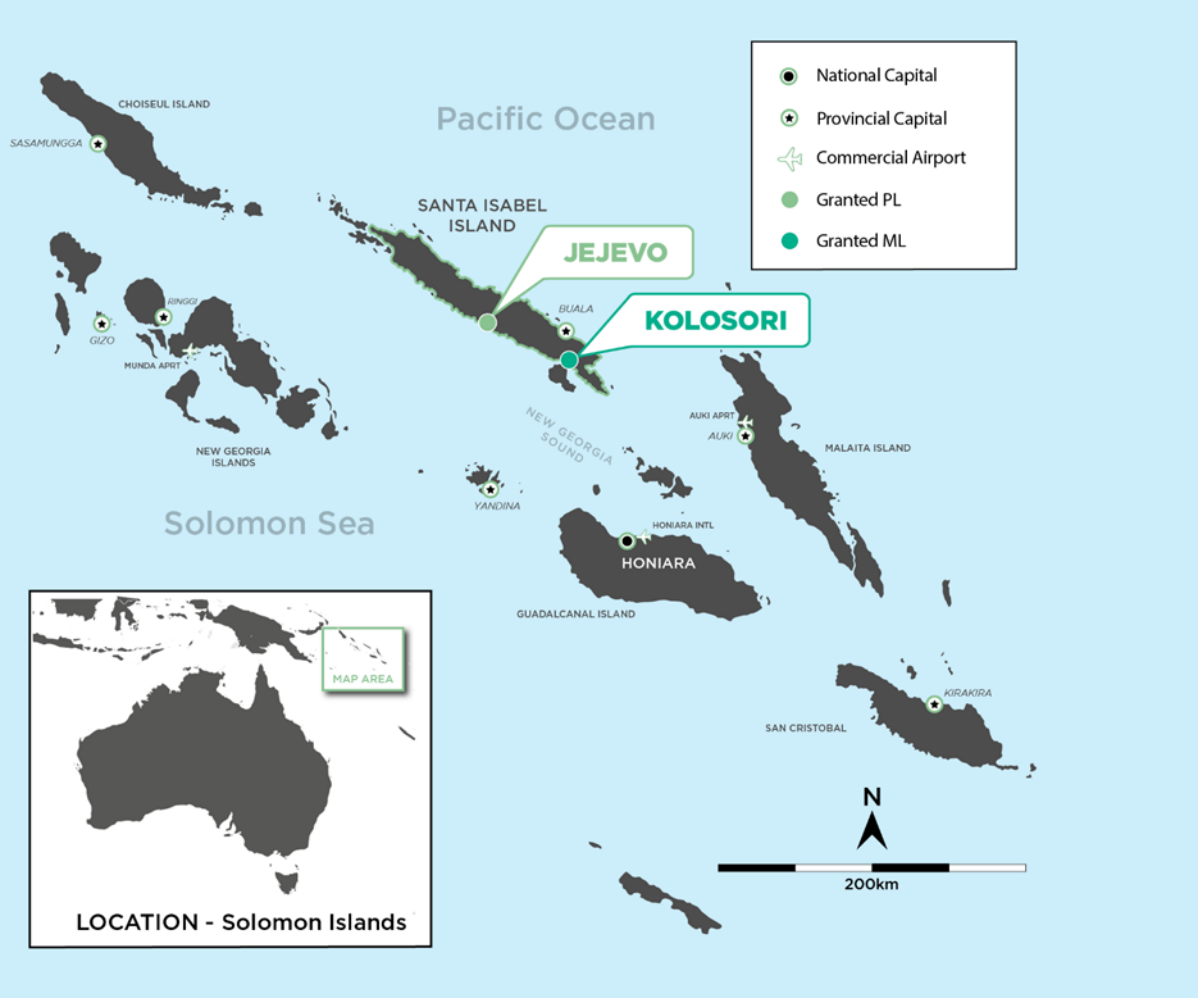


Figure 1 Kolosori Nickel Project Location

3.1 Mining Lease Area Description

The description of this parcel of land, with coordinates, is shown in the following Figure 2 Kolosori Mining Lease Boundary and in Table 1 ML 02/22 Co-ordinates below. The total area of the lease is 15.13square kilometres.

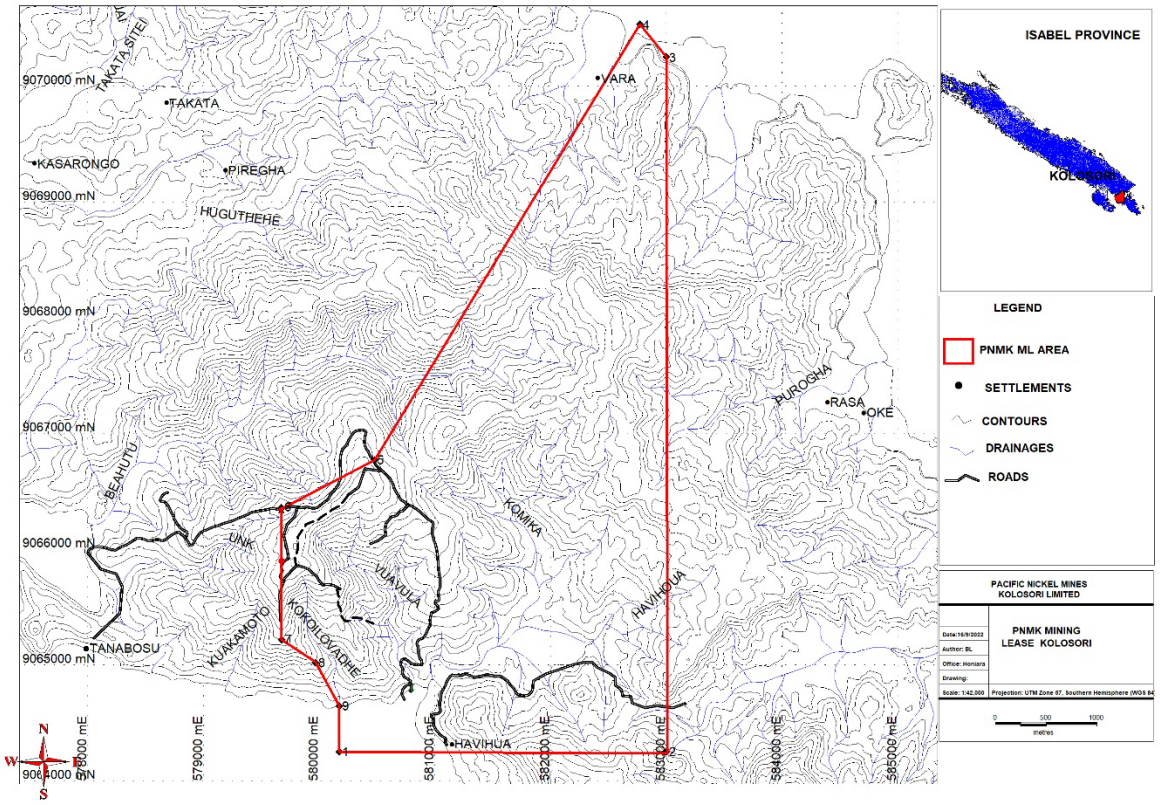


Figure 2 Kolosori Mining Lease Boundary

Table 1 ML 02/22 Co-ordinates

PACIFIC NICKEL MINES KOLOSORI LTD ML 02/22		
Point	**Easting**	**Northing**
1	582780	9070250
2	583000	9070250
3	583000	9064249
4	580175	9064249
5	580175	9064647
6	579966	9065019
7	579674	9065219
8	579674	9065900
9	577914	9065900
10	579730	9067600
11	581010	9067570

CO-ORDINATE: UTM WGS 84, ZONE 57 SOUTHERN HEMISPHERE

3.2 Intent & Objectives

PNM's intent and objective is to develop a successful mining and nickel ore export business in the Solomon Islands. Best practice mining methods for the Solomon Islands, within the Project area would be engaged for the works, safety and environmental management.

The development of the Project would provide employment and training for the immediate village areas as well as the greater region in the Solomon Islands. This will also enable local businesses to develop and grow to support the mining operation. Wherever possible local building products would be utilised wherever possible for design and construction.

The Company has a second nickel project, the Jejevo Project (refer Figure 1 - Kolosori Nickel Project Location), which it intends to develop once this Project has been brought into production. The Jejevo Project is similar in size and grade and the development approach will be consistent with this Project.

4 Definitive Feasibility Study

The DFS has been prepared by Maxwell Energy and Resources with inputs from external consultants AMDAD, Mining One, and Resindo with assistance from the Company's technical management team.

The DFS has been prepared in accordance with:

- Mining and resources - Forward-looking statements (ASIC)
- ASX Listing Rules, in particular, Chapter 5, and ASX Listing rules – guidance note 31
- JORC 2012.

The basis of the DFS is the reserve statement prepared by AMDAD which incorporates measured and indicated resources. Two production scenarios have been provided by AMDAD. The first incorporates the reserve (97%) and a small proportion of inferred resources (3%) – referred to as the base case. The second incorporates the reserve (68%) and a larger proportion of inferred resources (32%) – referred to as the expanded case. The second production case includes inferred resources which either naturally fit within open pits as part of the base case or have sufficient continuity to be included in stand-alone pits.

The Company engaged HBS PNG Pty Ltd, a well-established PNG mining contractor, in an early contractor involvement arrangement who provided actual mining contractor rates to be incorporated into the DFS. The Company believes that PNG mining contractors have the most relevant mine pioneering and operating experience in similar geographical and tropical mining conditions. They are able to work in the Solomon Islands, including also being able to work with our existing local contractors.

The key elements of the development of the project include:

- Haul road
- Wharf and port facilities including small stockpile area
- Main Stockpile Area to the east of the wharf
- 200 Man Main Camp
- 50-man construction Camp.
- Contract Mining Facility
- Road access from haul road to eastern stockpile area and main camp
- Small bridge to cross creek from bottom of haul road to main stockpile and camp

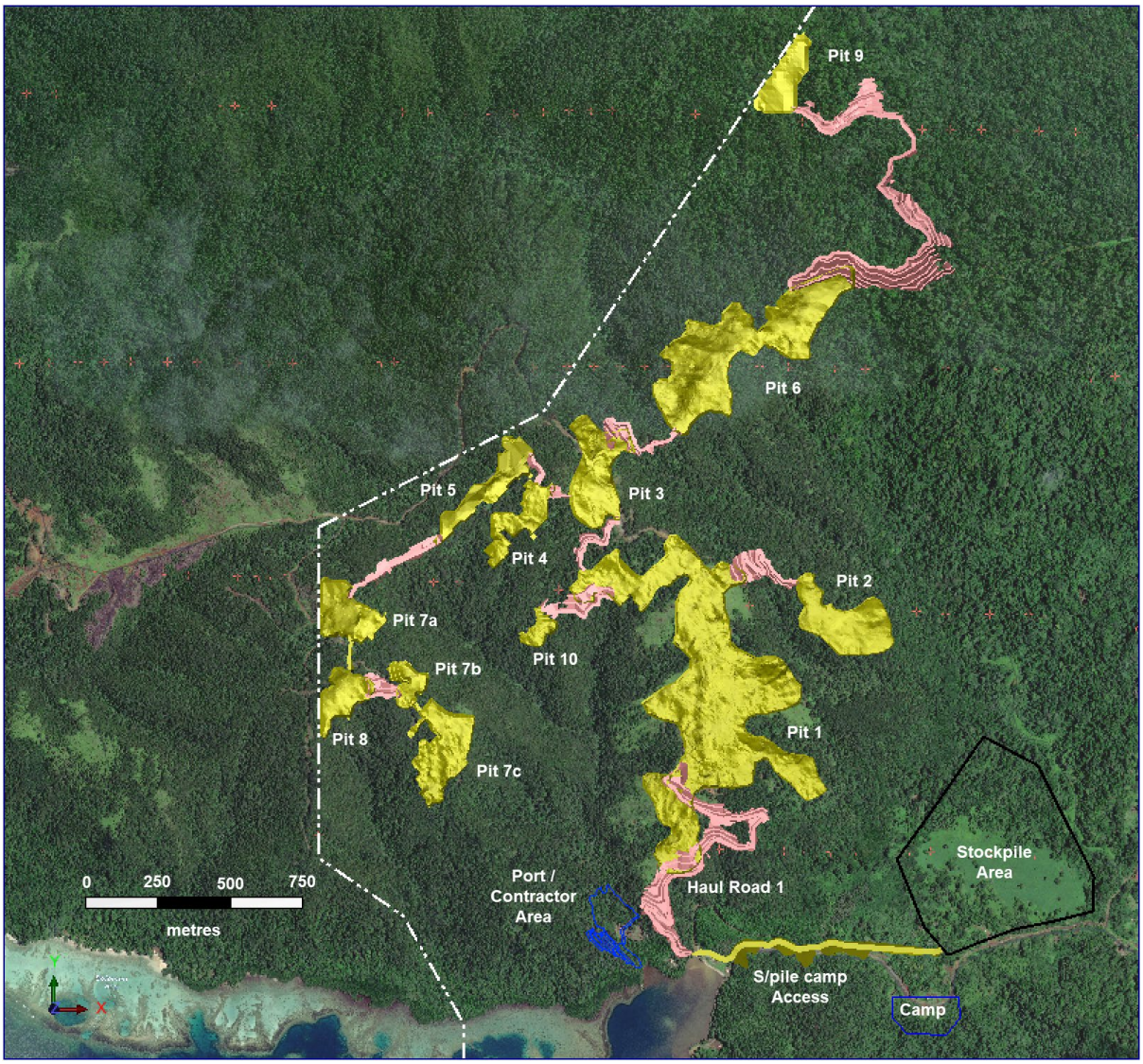


Figure 3 site layout

When the DSO loadout wharf and haul road to the mining area are in place, and the mining contractor mobilised, the Kolosori Nickel Project is expected to ramp up to full production (approx. 1.5 million wet metric tonnes per annum of direct shipping nickel ore) during 2023. Mining DSO operations are expected to commence in late 2023.

One of the key components of the DFS is confirmation of the water content of the DSO ore, which is stockpiled prior to shipping. Laboratory testing by consultants ATC Williams has demonstrated that moisture content of Kolosori ore appears to be consistent with other laterite/saprolite ores mined elsewhere in tropical environments.

The Company has constructed a trial ore stockpile which has been designed to blend ore types and approximate the characteristics of stockpiles expected during DSO production and shipping. This follows previous test pitting and test stockpiles constructed in the Early Works which established that the ore was suitable for commercial DSO shipping.

The Company has recently focused on the construction of the 50-man camp, which will be used to house personnel during the construction of the Project infrastructure. The 50 man camp is expected to be completed in mid-February 2023.

Figure 4 50 person camp

Figure 5 Inside mess building

5 Resource Estimate

5.1 November 2020 JORC 2012 Resource

PNM engaged Mining One Consultants to develop drilling and sampling programs, complete JORC 2012 Mineral Resource Estimates and mine optimisation studies for the Kolosori nickel laterite project located on Isabel Island, Solomon Islands. The JORC 2012 compliant Mineral Resources were reported in November 2020 and were based on 1,821 diamond holes drilled primarily between 2014 and 2016.

5.2 Updated November 2022 JORC 2012 Resource

An updated JORC (2012) Mineral Resource estimate was announced by PNM in November 2022 for its DSO nickel deposit held within Mining Lease ML 02/2022. The Mineral Resources Estimate was carried out by Mining One Pty Ltd (Mining One) an independent consultant to the Company, following a site visit to the Project to review and verify exploration and resource details and provide recommendations to the Company in respect of ongoing exploration programs. Key highlights of the update were as follows:

- The Mineral Resource Estimate (MRE) for the Kolosori Nickel Project has been updated to reflect:
  - The completion of a detailed LIDAR topographic survey over the Kolosori Resource area.
  - The application of in-situ bulk density data totalling 2,957 readings using both the Archimedes and Caliper measurement methods.
- An updated total JORC Mineral Resource now estimated at Kolosori is as follows:
  - 9.21 million tonnes at 1.46 % Ni at a 1.0% Ni cut off (approximately 134,000 tonnes of contained Nickel – an increase of some 21,000 tonnes over the previously reported MRE)
  - 7.08 million tonnes at 1.57 % Ni at a 1.2% Ni cut off (approximately 111,000 tonnes contained nickel – an increase of some 18,000 tonnes over previously reported MRE)
- The updated estimate compares with the previously reported JORC MRE of 6.02 million tonnes at 1.52% Ni at a 1.2% Ni cut off (approximately 93,000 tonnes contained nickel) reported on 29 September 20221.
- The revised MRE provides an increase of 17% in total Mineral Resource tonnages and a 3% increase in nickel grades above the 1.2% Ni cut-off for an approximate 20% increase in contained nickel.
- Mineral Resources are reported using dry in-situ bulk density values. DSO shipping material will have a higher density due to retained moisture. A summary of the dry and wet in-situ bulk densities and associated moisture contents are summarised within Table 2 of this announcement.
- Further drilling is planned in 2023 to further upgrade Inferred Resources and to test extensions to the current deposits.
- PNM confirms that all material assumptions and technical parameters underpinning the estimate of the Mineral Resource at Kolosori in the announcement “Updated JORC Resource Estimate at Kolosori” dated 23 November 2022 continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified.

5.3 Geology and Geological Interpretation

The Kolosori deposit consists of a Wet tropical laterite profile. In-situ chemical weathering of the ultramafic rocks with nickel and cobalt enrichment through both residual and supergene processes. There are five key geological zones that are modelled to form the basis of the Mineral Resource estimate. These are surface the Fe-Cap, Limonite, Transition, Saprolite and weathered Bedrock domains. These domains were built based on a combination of geological logging and multi-element analysis. Ni, Fe, Mg, Ca and Si values were used to guide the boundaries on these domains, boundaries are modelled as hard boundaries in that only data contained within each domain was used to estimate grades into each particular domain.

5.4 Drilling and Sampling

The total Kolosori drilling dataset comprises 1,882 individual drill holes drilled to a 25m x 25m spaced grid in places. The drilling methods used included diamond coring and hand auger with the majority being diamond holes drilled between 2014 and 2016. Pacific Nickel has drilled a total of 216 diamond core holes during 2021 and early 2022, the significant results for these holes were reported in ASX announcement dated 29th September 2022. The Pacific Nickel holes were drilled to provide twin hole confirmation of the historical dataset, metallurgical test samples and to upgrade inferred resources to measured and indicated classification. The location of the Pacific Nickel drillholes is shown in Figure 1 below. Out of the 216 holes drilled, 11 holes were drilled for metallurgical test work and were distributed across the proposed first mining area to ensure a representative sample.

During August 2022 an initial LiDAR survey was completed over the Southern Kolosori license area, namely the Havihua and Havihua South areas. During October 2022 the LIDAR survey was completed over the northern areas of the Kolosori project, the Mineral Resource model has therefore been updated to incorporate the completion of the LIDAR survey.

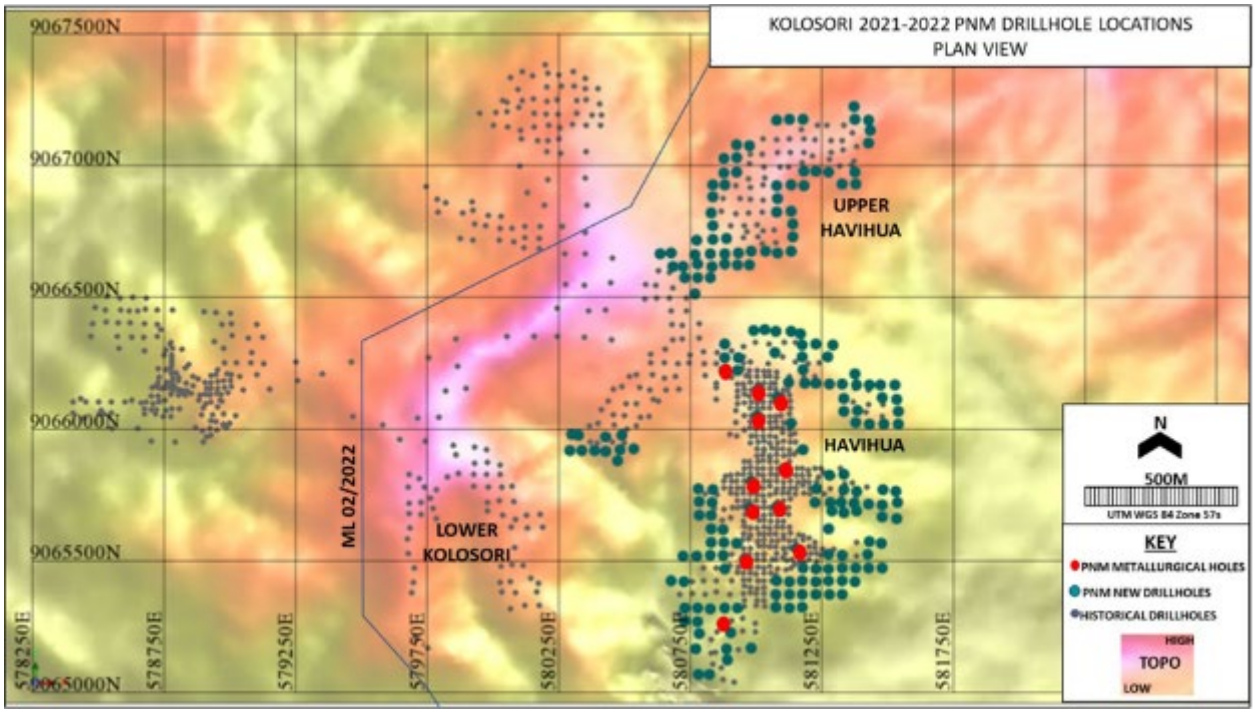


Figure 6 Location of 2021-22 Pacific Nickel Drilling

5.5 Density Information

The Mineral Resource model has also been updated to make use of 2,957 Archimedes and Caliper density measurements that have been collected within each regolith domain of the Kolosori deposit. Ongoing density measurement sampling is also being completed.

The MRE is reported on a dry in-situ bulk density basis, tonnage is reported excluding the moisture content. The bulk density values used for dry tonnage are the result of material that has been dried for in an oven for 24 hours at 105oC to remove the moisture content. DSO shipping tonnages will be higher given they represent material that contains moisture.

A summary of the average wet and dry density values and moisture contents used for the updated Kolosori Model are summarised in Table 2 below.

Table 2 Kolosori Density Measurement Summary

Domain	Total Measurements		Data		
	Archimedes	Caliper	Average Wet Density (g/cm^3)	Average Moisture (%)	Average Dry Density (g/cm^3)
Fe Cap	-	3	1.68	28	1.21
Limonite	48	43	1.76	33	1.18
Transition	26	410	1.8	39	1.1
Saprolite	68	873	1.66	28	1.2
Bedrock	520	69	2.32	15	1.97

The Kolosori resources are reported on a dry metric tonnes basis. The approximate conversion from dry to wet metric tonnes is around 1.3 times or 30% more wet than dry tonnes.

5.6 Resource Estimation Methodology

The Mineral Resource was constructed using 3D models representing the key regolith surfaces namely the base of saprolite, base of transitional, base of limonite and base of the iron cap/overburden. Nickel, cobalt and other elements were estimated in the block model using the regolith surfaces as hard boundaries. Ordinary kriging was used for grade estimation.

5.7 Resource Classification

The resource is classified based on the average drill spacing and the results of the variogram analysis. The variograms provided ranges averaging 35m for the major structure. Wireframes were constructed to code the model for resource class. In general terms measured blocks are informed where drill spacing is 25m or less, Indicated where drill spacing is between 25m and 50m and inferred where spacing is between 50m and 150m.

The classification criteria is assessed as appropriate in relation to the style of mineralisation and the average drill spacing through the deposit area.

Resources were reported above a 1.0% and 1.2% nickel cut-off. The cut-offs used deliver an average global resource grade between 1.46% and 1.56%, application of the current nickel prices ($33,900/t) therefore values the material at the cut-off grades of between $339 and $407 USD/t.

5.8 Mining and Metallurgical Modifying Factors

The potential mining method will be open pit. The block model has been constructed with parent and sub cell sizes to account for this. The deposit occurs from surface down to a maximum depth of

50m. Given the shallow nature of the reported mineral resources and the value per tonne ascribed to the blocks the criteria of the reasonable prospects for eventual economic extraction are met.

The block model contains grade estimation of nickel and cobalt and all elements (compounds) that effect the metallurgical processing of the nickel laterite ore. The resources are therefore reported to enable assessment of the processing amenability of the material.

5.9 Mineral Resource Estimation Results

The updated MRE contains a 17% increase of tonnage and 3% increase in grade compared to the Mineral Resource reported on 29 September 2022.

The previous JORC MRE for the Kolosori Project was 6.02 million tonnes at 1.52% Ni at a 1.2% Ni cut off based on historical drilling was reported to the ASX on 29 September 2022. The updated Mineral Resource estimate contains 7.06 million tonnes at 1.57% Ni at a 1.2% Ni cut-off. See below for details.

Table 3 Kolosori JORC (2012) Resource Estimate (November 2022)

KOLOSORI JORC MINERAL RESOURCES > 1.0 % Ni				
LITHOLOGY	**RESOURCE CATEGORY**	**Dry Kt ('000)**	**Ni %**	**Co%**
TRANSITIONAL	MEASURED	127	1.81	0.08
	INDICATED	583	1.52	0.07
	INFERRED	1,300	1.33	0.07
	SUB TOTAL	**2,009**	**1.51**	**0.07**
SAPROLITE	MEASURED	893	1.73	0.02
	INDICATED	2,264	1.48	0.02
	INFERRED	4,040	1.42	0.02
	SUB TOTAL	**7,197**	**1.48**	**0.02**
TOTAL (M+I+I)		**9,206**	**1.46**	**0.03**

KOLOSORI JORC MINERAL RESOURCES > 1.2 % Ni				
LITHOLOGY	**RESOURCE CATEGORY**	**Dry Kt ('000)**	**Ni %**	**Co%**
TRANSITIONAL	MEASURED	127	1.81	0.08
	INDICATED	469	1.62	0.07
	INFERRED	812	1.48	0.06
	SUB TOTAL	**1,408**	**1.56**	**0.07**
SAPROLITE	MEASURED	846	1.77	0.02
	INDICATED	1,833	1.57	0.02
	INFERRED	2,989	1.53	0.02
	SUB TOTAL	**5,668**	**1.58**	**0.02**
TOTAL (M+I+I)		**7,076**	**1.57**	**0.03**

5.10 Exploration Targets

Exploration Targets of 2.5Mt to 4.0Mt at 1.2% - 1.6% Ni have been identified in the proximity of the current Mineral Resource envelope. This target range reflects a potential quantity and grade and is conceptual in nature only as there has been insufficient exploration to prepare an MRE. It is uncertain if further exploration will result in the estimation of a Mineral Resource. This is an increase over the previously reported extensional targets of 1.94 to 3.19 Mt at 1.2% - 1.6% Ni2.

These exploration targets typically represent extensions to the known nickel mineralisation along topographic highs within the project areas. These topographic highs are interpreted to consist of similar nickel bearing regolith profiles as seen within the resource areas. Planned work for these areas includes continued inspection of surface exposures, XRF readings of the Fe Cap material and then drilling to confirm targets. The target areas are shown in Figure 2 below.

The target tonnage and grade ranges were derived using a volume calculation from string boundaries and then applying an average thickness of 4m. A dry in-situ bulk density of 1.2 was also applied. These targets are based on areas where drilling has not been completed, rather they are based on favourable topographic and interpreted geological extensions of the currently defined mineralisation at Kolosori.

Total exploration targets have been revised upward to 2.5Mt to 4.0Mt at 1.2% - 1.6% Ni (previously 1.94 Mt to 3.19Mt at 1.2% to 1.6% Ni).This Target range reflects a potential quantity and grade and is conceptual in nature only as there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

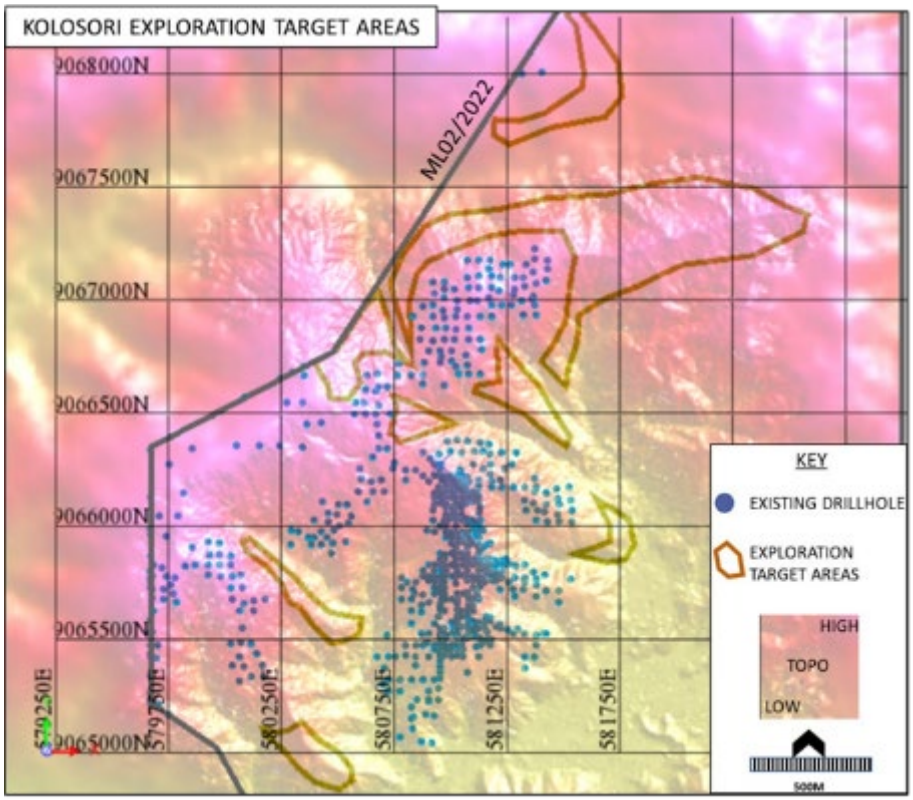


Figure 7 Location of Exploration Target Areas

6 Mining

6.1 Mine Plan Cases

Steep topography and dense vegetation cover make it difficult to drill the entire target area at a close enough spacing to support Indicated or Measured resource categories. As a result, a substantial portion of the resource is classified as Inferred. It is important to include the Inferred in mine planning to understand the possible material movements, haul roads and disturbed areas. However, inferred resources cannot be included in an Ore Reserve under the JORC Code 2012. For this reason, two mine plans were prepared:

- Base Case – Pit optimisation and designs consider Measured and Indicated resources but not Inferred. A small portion of the scheduled tonnes are Inferred included in the pits but the amount is not material.
- Expanded Case – Pit optimisation, designs and production schedules include Measured, Indicated and Inferred resources.

The Expanded Case including Inferred is the basis of the Feasibility Study. The Base case is used as the basis of the Ore Reserve. Both cases use the same mining and ore handling systems, the same infrastructure and the same production rates. The only difference is that the Base case has less tonnage available and so has a shorter mine life.

The following sections describe the methodology used to define the pits and the mining, stockpiling and barge loading systems. These are common to both cases. The production schedules for the cases are then presented separately.

6.2 Pit Optimisation

The target pit areas were defined using Whittle™ pit optimisation software with the following inputs:

Input Parameter	Units	Value	Source	Comments
Spatial Data				
Resource Block Model		kolosori_jan23_bm.mdl	S Hutchin, Mining One	
Topography Surface		Kolosori Hybrid DEM_20221026.dtm	PNM Lidar & Photogrammetry	
Mining lease boundary		ml_bdy202212.str	PNM Lidar & Photogrammetry	
Resource Categories				
Base Case		Measured + Indicated + Inferred	S Hutchin, Mining One	
Ore Reserves Case		Measured + Indicated	S Hutchin, Mining One	
Mining Adjustments				
Mining Recovery		95%	AMDAD	Same as 2021 model
Mining Dilution		5%	AMDAD	Same as 2021 model
Pit Wall Slopes		35°	AMDAD	Shallow walls at angle of repose.
Production Rate	Mtpa (wet)	1.3	PNM	
Conversion Factors				
lb/kg		2.20462		
Currency		USD		
AUD/USD		0.73	PNM	
Operating Costs				
Mining - waste	USD/wet tonne	5.45	PNM	Based on local contractor wet hire rates
Mining - ore	USD/wet tonne	8.63	PNM	Based on local contractor wet hire rates
Non-mining	USD/wet tonne	15.60	PNM	
Shipping	USD/wet tonne	15.09	PNM	PNM Kolosori Financial Model_v1.5_RfP.xlsx
Revenue				
Nickel Price	USD/lb	9.00		
Price adjustments				
Ni grade	IF(NI.G<1.41,(1.51-NI.G)*100*-1+5,IF(NI.G>1.51,(NI.G-1.51)*100*0.95,(1.51-NI.G)*100*-0.5))			PNM Kolosori Financial Model_v1.5_RfP.xlsx
Moisture	IF(H2O<33,(33-H2O)*0.5,IF(H2O>35,(H2O-35)*-0.5,0))			PNM Kolosori Financial Model_v1.5_RfP.xlsx
Payability	10*rounddown(NI.G,1)+16			PNM Kolosori Financial Model_v1.5_RfP.xlsx
Royalties				
Central Government	% of sales	3.0%		
Export Duty	% of sales	6.0%		
Discount Rate		8.0%		

Figure 8 Pit Optimisation Inputs

Nickel mineralisation at Kolosori occurs as a thin layer generally 1 to 8 metres thick overlain by soil and limonite overburden generally 1 to 5 metres thick. The target ore zones tend to follow ridge lines bounded by steep drop offs into deep erosional valleys or against steep hill sides.

Value across the deposit is determined by:

- The nickel grade,
- The waste to ore ratio (deep overburden and thin ore is less valuable), and
- Haul distance from the coast.

Sequencing of the pits is determined by access along the ridges as well as value.

In this context the pit optimisation is used to determine the potential lateral extent of mining by defining all areas which can be mined profitably, subject to further assessment against practical mining criteria. This is determined by the shell with the highest undiscounted operating cash flow, or Revenue Factor 1 shell in Whittle™ terminology.

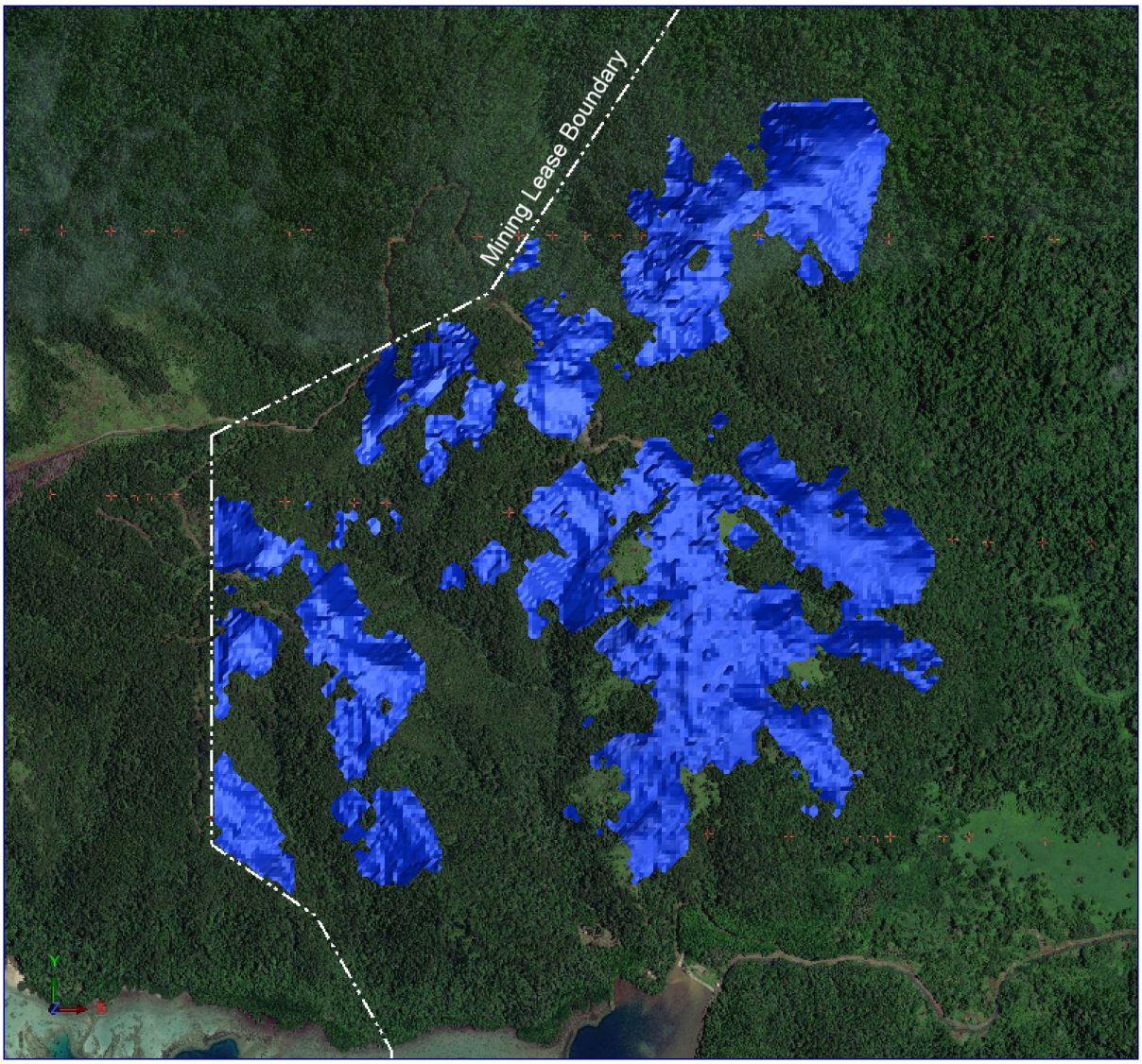


Figure 9 Optimised Pit Shells

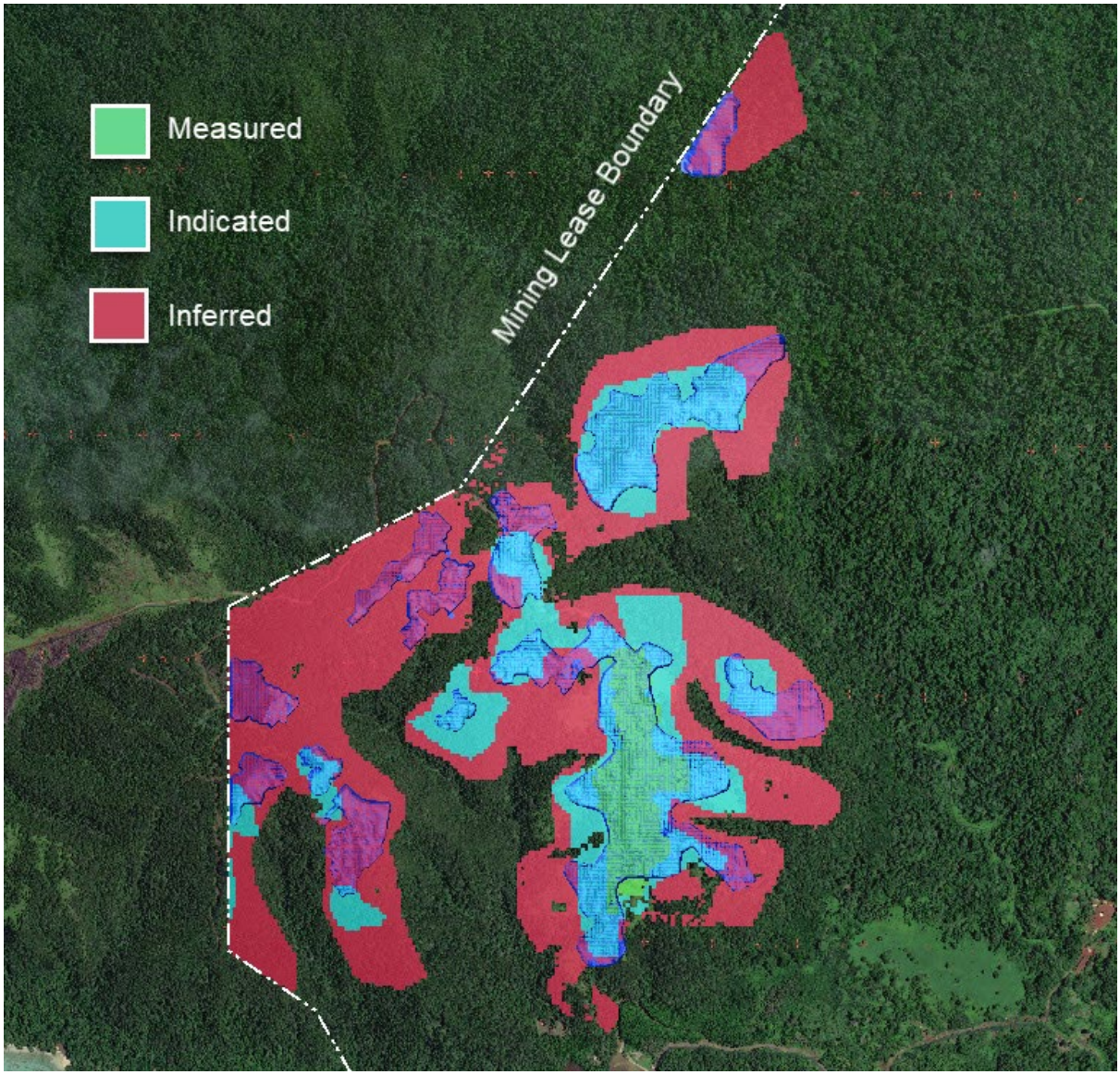


Figure 10 Optimised Pit Shells Overlaid with Resource Categories

6.3 Pit Design

The pit optimisation defined areas of the Mineral Resource which could potentially be mined profitably. Final pit selection was determined by applying three practical mining constraints to the areas of the resource including in the optimised shell:

- Nickel grade >=1.4% - Under the current take off agreement shipments can be refused if the grade is less than 1.4% Ni. While it is possible to some extent to blend from lower and higher grade areas to stay above 1.4% Ni, this strategy is limited in practice by steep terrain affecting access, high rainfall and limited area to stockpile ore. Pit selection avoided areas of the optimised shell where the combined grade of the saprolite and limonite is less than 1.4% and there is no higher grade immediately adjacent to blend. Some areas of lower grade were included where it was necessary to mine through to access higher grade ore.
- Thickness >= 1 metre – Both topography and the floor of the mining horizon can be very steep and undulating. Areas with combined saprolite / transition thickness less than 1 metre were avoided as it is considered operationally difficult to cleanly mine thin zones.

- Areas of steep floor dip – Areas where the saprolite floor is very steep (nominally steeper than 1 in 5) were excluded because the excavator / truck fleet cannot work on these grades. Some isolated steep areas were left within the pits where it was considered possible to access the top and bottom of the slope from other parts of the pit.

6.4 Mine Layout

The mining pits are located north of the loadout wharf, with a main central haul road connecting the drying stockpile and infrastructure areas with the mining pits. Additional connection haul roads were designed to access the pits beyond Pit 1.

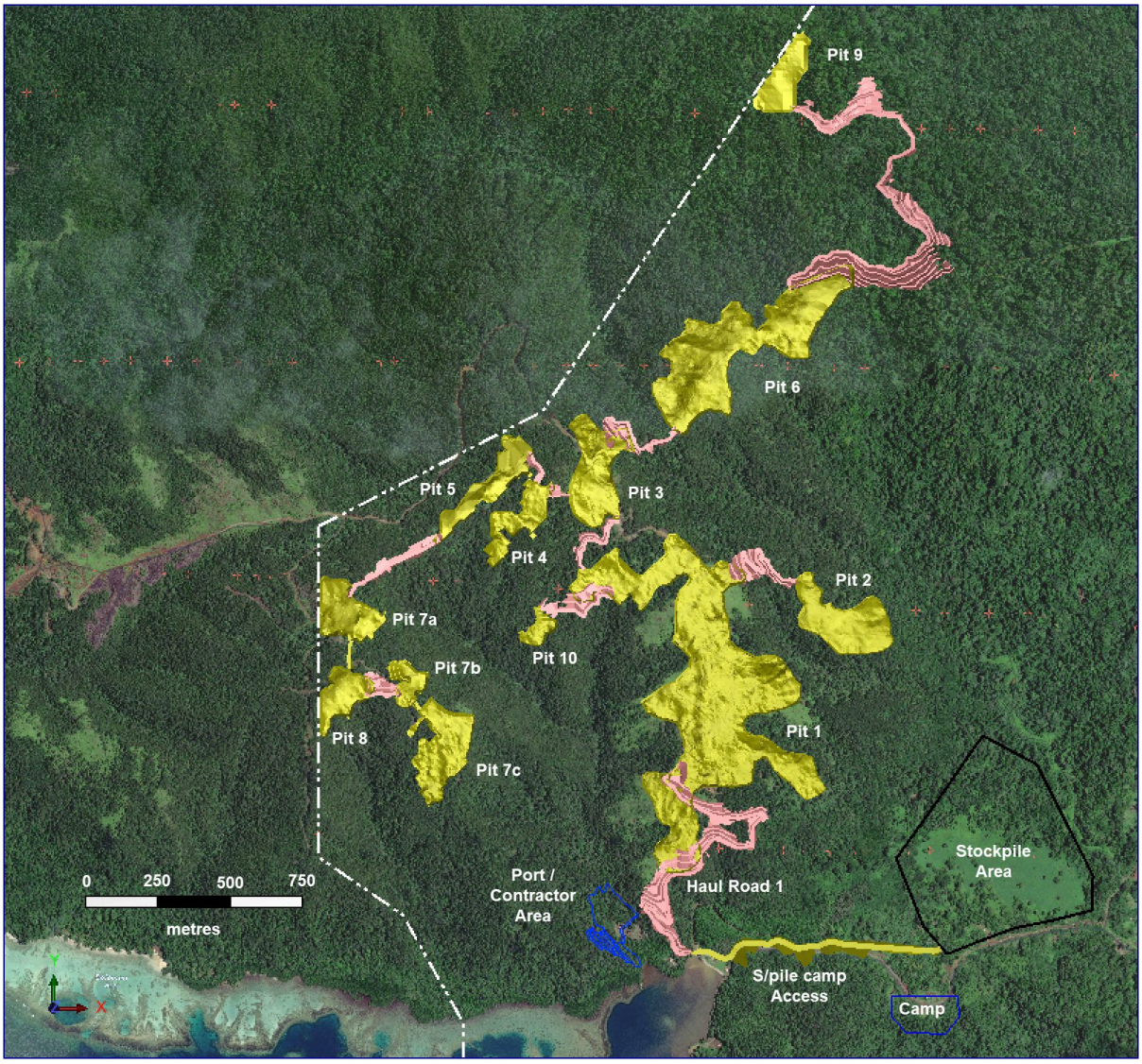


Figure 11 Mine Layout Expanded Case

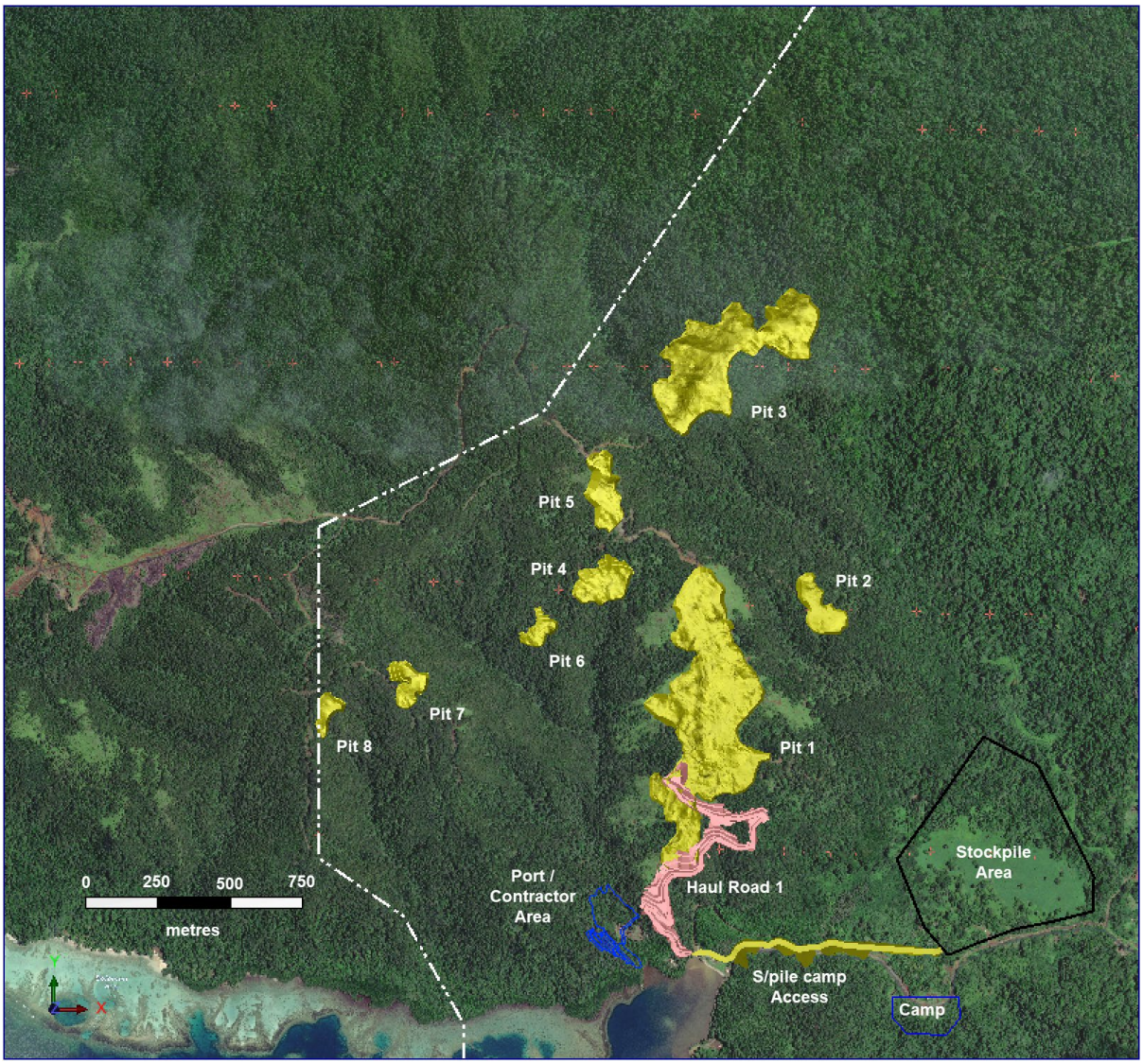


Figure 12 Mine Layout Base Case

6.5 Mining Operations

Following completion of early works to construct the DSO loadout wharf and haul road to the mining area, the Kolosori Nickel Project mining DSO operations are expected to commence in the second half 2023. Ramp up to full production (around 1.45 million wet metric tonnes per annum of direct shipping nickel ore) is expected late in 2023.

Lateritic nickel ore at Kolosori has a moisture content generally in the range of 20% to 40%. Ore can only be safely shipped if it is below the transportable moisture limit (TML) which is defined as 90% of the flow moisture limit (FML). Test work during 2022 indicates the TML for Kolosori is around 32%. Current modelling of moisture in the saprolite and limonite indicate that over 50% of the ore will be below the TML, although further work is progress to confirm this. Ore mined at below the TML can be hauled directly to barges or a ready stockpile for trans-shipment. Ore above the TML will be placed in a drying stockpile for six weeks during which time it will be rehandled at least twice to promote drying. It will then be blended back with low moisture ore on the ready stockpile prior to trans-shipment.

The primary drying stockpile has been located approximately 1km east of the wharf loading area, with the close proximity ensuring fewer haul trucks for loading barges are required and potential interruption risks are mitigated. As mining progresses to further inland pits, additional stockpiles will be established near the pits to optimise the use of the different truck types; pit haulage (ADT's) and road haulage (rigid body dump trucks).

During rainfall events, prepared dried stockpiles may typically be covered with tarpaulins to assist maintaining moisture levels ready for loading onto the barges. A weighbridge will measure the weight of loaded ore onto the barges, with a loaded barge survey to verify the volume shipped. This is then validated by the geared vessel when loading at the transhipment point.

Raised areas within the stockpile area will be ripped and dozed out across lower areas to form a regular surface suitable for stockpile placement and drainage management. A layer of compacted select sheeting material will form eth stockpile base. Drainage channels will be formed to collect ore drainage water into sediment ponds. Storm water within the stockpile will also directed to the sediment ponds for settlement. Stormwater from the surrounding natural area will be diverted around the stockpile area and dispersed to the environment as it would occur naturally.

6.6 PNM Operations and Mining Contractor

6.6.1 PNM Operations

PNM will engage contractors to complete construction and mining operations, whilst retaining key functions on site that includes management, geological and laboratory services, HSE management, port operations and general administration. The breakdown of resources can be found in section 12Human Resources.

6.6.2 Mining Contractor

During the DFS study, mining contractor HBS has assessed the project initial development and initial 2-year mining schedule to determine preliminary equipment, fleet and manning requirements. These will be assessment during formal negotiations but have been used to size infrastructure requirements. The preliminary manning can be found in section 12Human Resources and the mining fleet summary is indicated in Table 6 Mining Fleet and Support Equipment.

Table 4 Mining Fleet and Support Equipment

Description	No.
MOBILISATION	
All workshop & offices	
Genset's, 33T Exc, LV's, fuel truck, etc	
Hyundai 30t excavator	1
Workshop Manitou 4t	1
PHASE 1 - INITIAL DEVELOPMENT WORKS - 5 MONTHS	
Dozer D85 swampy	1
Dozer D85 - normal	1
Hyundai 50t excavator	1
Hyundai 30t excavator	1
RokBak 40t articulated dump truck	2
Astra HHD9 rigid dump truck	4
Water truck - water tanker with tipper	1
John Deere 770 grader	1
Ammann ARS200 roller	1
Service truck	1
Fuel truck	1
PHASE 2 - TRANSITION MINING - 6 WEEKS	
Hyundai 50t excavator	2
Hyundai 780 loader	1
Astra HHD9 rigid dump truck	5
PHASE 3 - FULLTIME MINING - 12 MONTHS	
Hyundai 780 loader	1
Astra HHD9 rigid dump truck	7

6.7 Pit Access

A significant cut must be excavated into the ridge line for the main haul road access linking mining pits with the wharf and drying pad areas. This will be the main focus of early works once the mining contractor has mobilised, with excavated material to be hauled to the mining operations area, access road and drying stockpile area as required. Plan and sections have been assessed based on available geotechnical data, with ongoing material testing the laboratory to confirm material properties to support final designs.

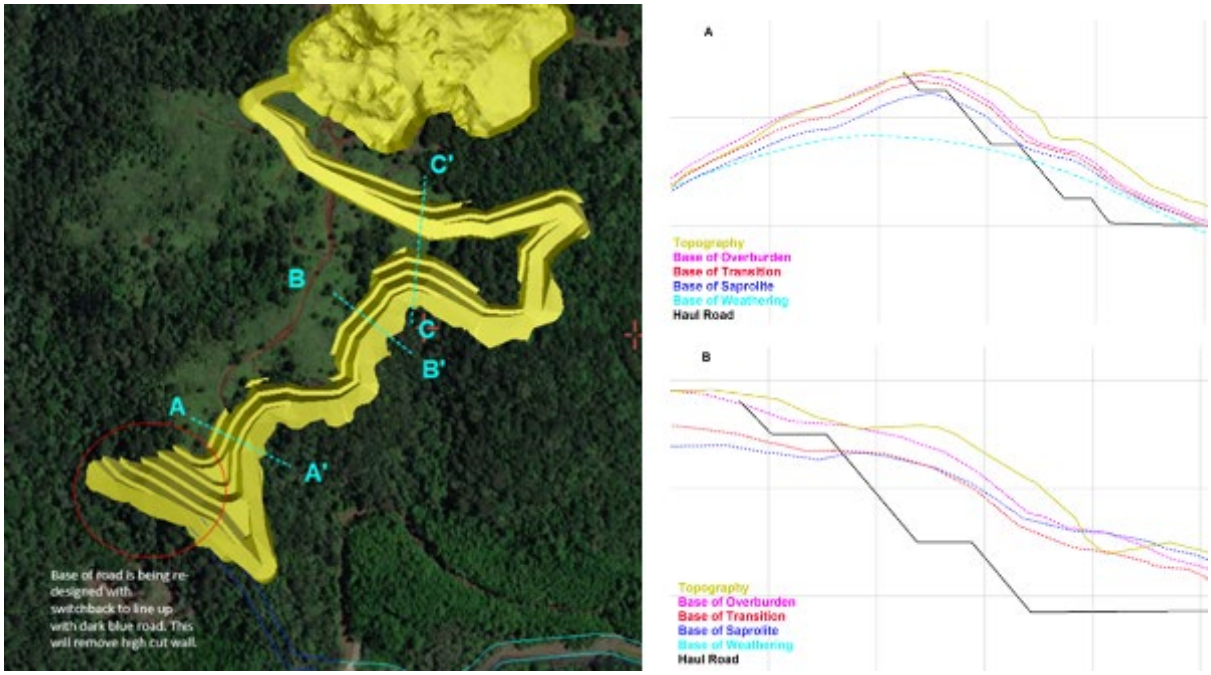


Figure 13 Maini Haul Road Embankment - Plan and Sections

A timber pile bridge will be constructed to span the main creek crossing at the base of the haul road and has been designed as a full width 2 way haul road. The bridge will utilise timber pile driven abutments and central span piles, with rock backfill, timber deck, pavement layer and guardrails.

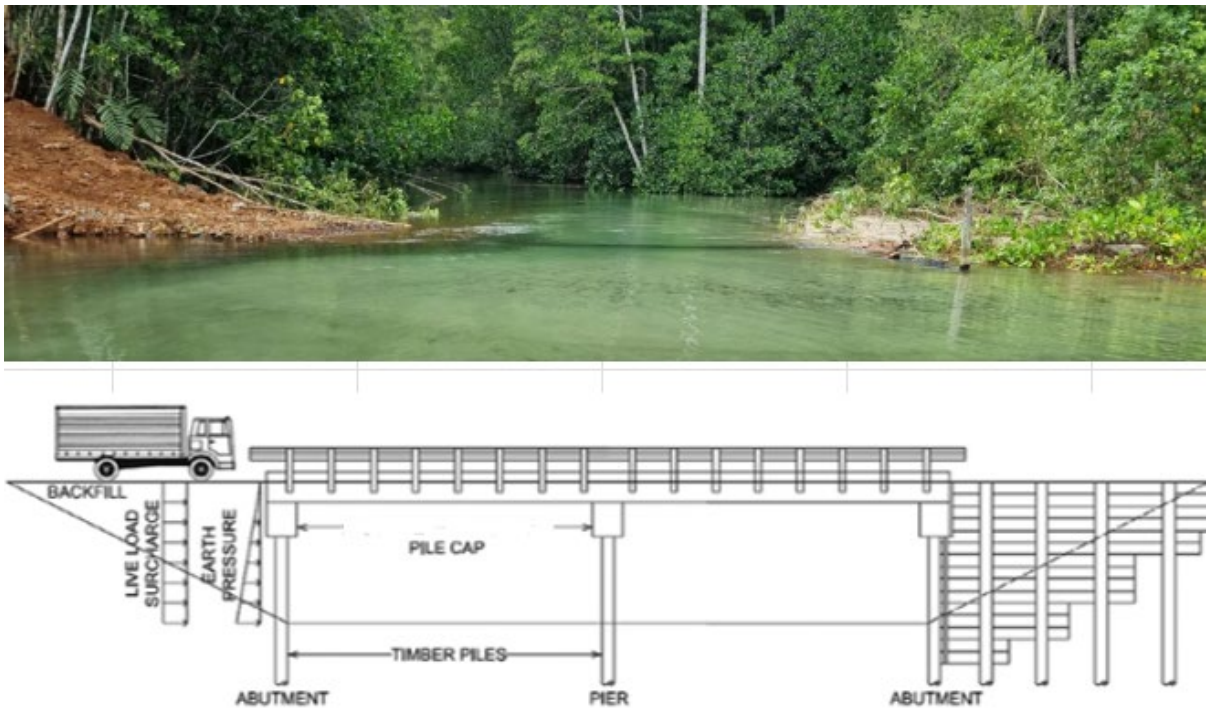


Figure 14 Crossing Location and Typical Timber Bridge Layout

6.8 Laterite Open Pit

The initial phase of the Project mining will involve strip mining of the laterite which contains the ore comprising a Saprolite and a Transition Zone. The Limonite zone from the deposit is treated as waste. The deposit is very shallow with soil overlying limonite ranging between 2 to 5 m in

thickness, which in turn overlies the Saprolite zone which is about 5 m thick. The average depth of the pit is about 6 m. The hill slope gradients are up to 3:1.

Mining will be systematic and sequential. Topsoil will be stripped ahead of the mining face. Behind the mining face, the void will be backfilled with overburden waste materials. Topsoil and overburden will be dozed or excavated and may require short haulage to be placed on the upslope bench in preparation for rehabilitation. Rehabilitation will be progressive and continuous behind the mining faces. In this way the bulk of the strip mine rehabilitation is planned to be completed at the time of closure (Figure 5-2). Site roads and borrow pits will be systematically rehabilitated when no longer required. All rehabilitation work will consider erosion and sedimentation management and control.

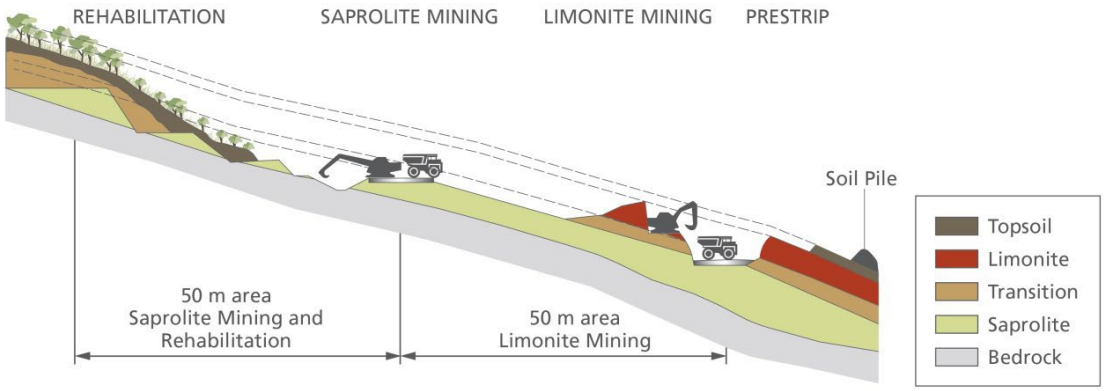


Figure 15 Typical Mining Sequence

The ore mining will use 30 ton and 50-ton excavators loading to all terrain articulated haul trucks. Specific excavators of the same type will service a separate fleet of 20 ton long haul, road dump trucks, to transport the ore to the ore stockpile. Mining fleet capacity will be subject to feasibility Study.

No explosives are planned as the laterite can be free dug and material required for construction of facilities such as roads will be excavated from nearby borrow pits.

6.9 Mine Roads

There are three types of roads for the Project; haul roads, pit access roads and pit bench access roads. Haul roads are designed to accommodate the largest haul trucks (35 ton) and will have a running surface 10.5 m wide with safety berms on each side, for a total nominal width of 12-15m. The roads will be sheeted with material from borrow pits.

Access roads will branch off the main haul roads and will allow access to the pits and other facilities. In the mining pit there will be external access roads from the haul road to the pit entrance and internal pit access roads that will be constructed progressively as the mine proceeds downslope. These roads will be sheeted and have side ditches and berms and culverts to cross drainage lines.

Bench access roads will radiate from the pit access roads to provide access to individual mining benches. All these roads will have 0.35 m of sheeting and will be approximately 6 m wide. They will be developed along contour or on a slight gradient to promote drainage.

Roads will be progressively rehabilitated as mining progresses, with rehab typically involving ripping, scarifying, regrading and topsoil added where the material requires additional growth medium. Hydro-seeding or planting will occur.

6.10 Stockpile Area

Approximately 50% of the nickel ore is expected to be above the transportable moisture limit (TML). This material will be drained prior to shipment by holding it in stockpile for approximately six weeks during which time it will be rehandled at least twice. The drying stockpile area will be levelled and compacted. Drainage channels will be formed to collect ore drainage water into sediment ponds. Storm water within the stockpile will also directed to the sediment ponds for settlement. Stormwater from the surrounding natural area will be diverted around the stockpile area and dispersed to the environment as it would occur naturally. During rainfall events, the nickel ore will typically be covered with tarpaulins to assist the drying process.

Figure 16 Typical Covered Stockpiles

Ore mined below the TML will either be loaded directly onto barges or held in a ready stockpile within the main stockpile area.

High moisture ore which has been dried over a six week period will be added back to the low moisture ore on the ready stockpile prior to loading onto barges for trans-shipment.

The primary stockpile has been located close to the Port area to take advantage of close access to flat terrain close to the DSO wharf. Barge and vessel loading are time constrained to avoid demurrage costs, with the proximity to the loading jetty ensuring fewer haul trucks for loading barges are required whilst mitigating potential interruption risks from longer haul routes. As the mining progresses to further inland pits, additional stockpiles will be established near the pits to optimise the use of the different truck types; pit haulage (ADT's) and road haulage (rigid body dump trucks).

The stockpile area will be fitted with perimeter lighting, the power supplied by the mining facility gensets to support 24 hour or extended shift operations.

6.11 Production Schedule

Production schedules were prepared for the Base Case and Expanded Case to define material movement requirements for the mine, stockpiles and trans-shipment and to form the basis of the financial models. Both schedules use January 2023 as Project Month 1 and assume commencement of site earthworks in February 2023. They are run a weekly basis to the end of 2024 to provide a detailed model of ore movements and then monthly for the remaining life of the project.

6.11.1 Expanded Case

The Expanded Case includes Measured, Indicated and Inferred resources. Key outcomes include:

- 6.0 Mt (wet) shipped at 1.51% Ni (assay on dry tonnes basis).
- First ore mined July 2023 (Project Month 7).
- First ore shipped August 2023 (Project Month 8).
- Mine life from date of first ore mined 56 months.
- 68% wet tonnes mined Measured and Indicated, 32% Inferred.

The following charts show key production measures over the project life.

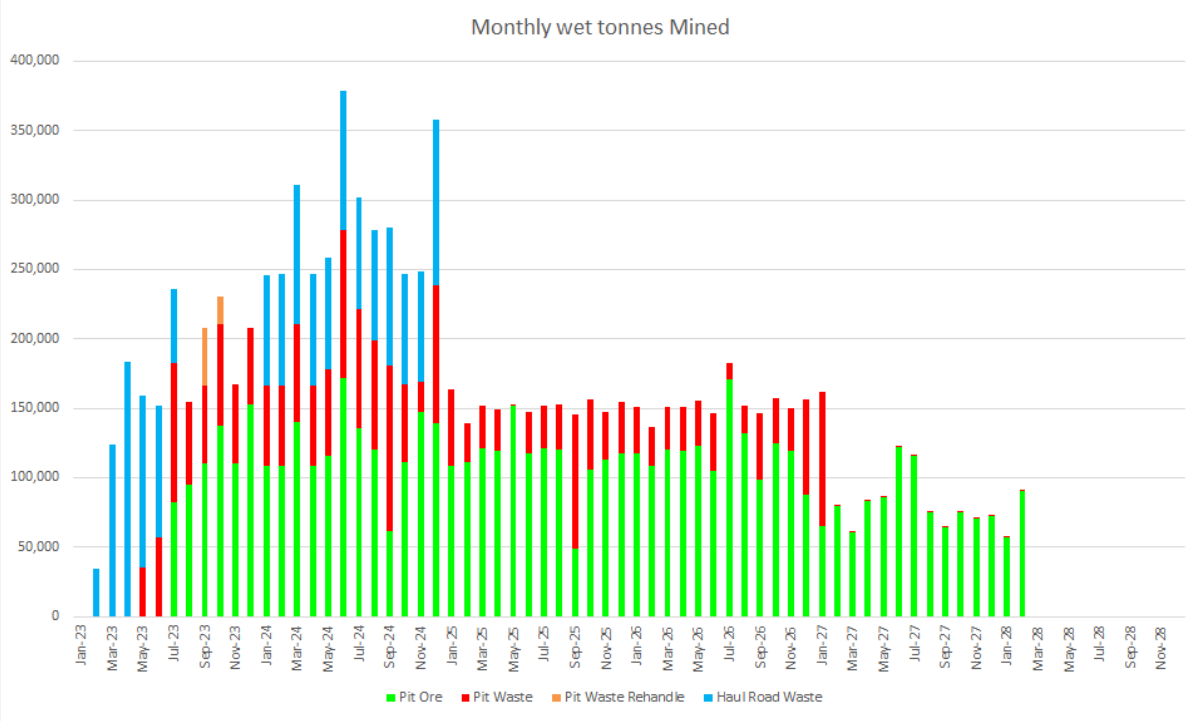


Figure 17 Monthly Wet tonnes Mined – Expanded Case

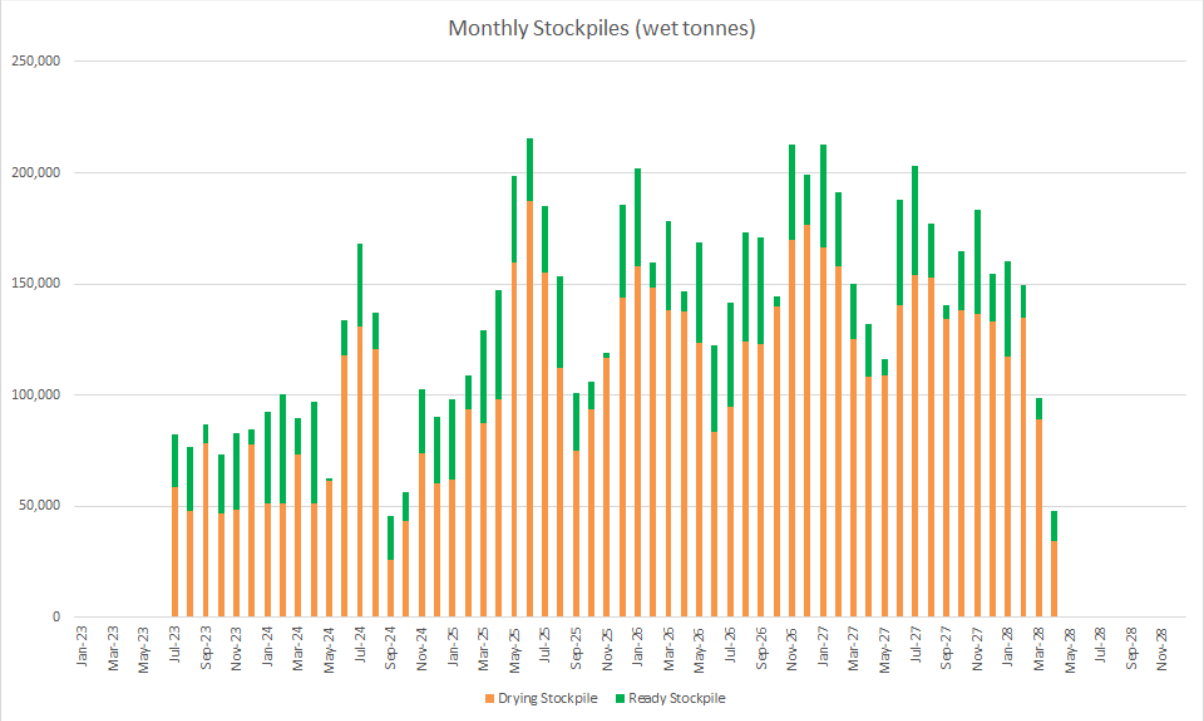


Figure 18 Monthly Stockpiles – Expanded Case

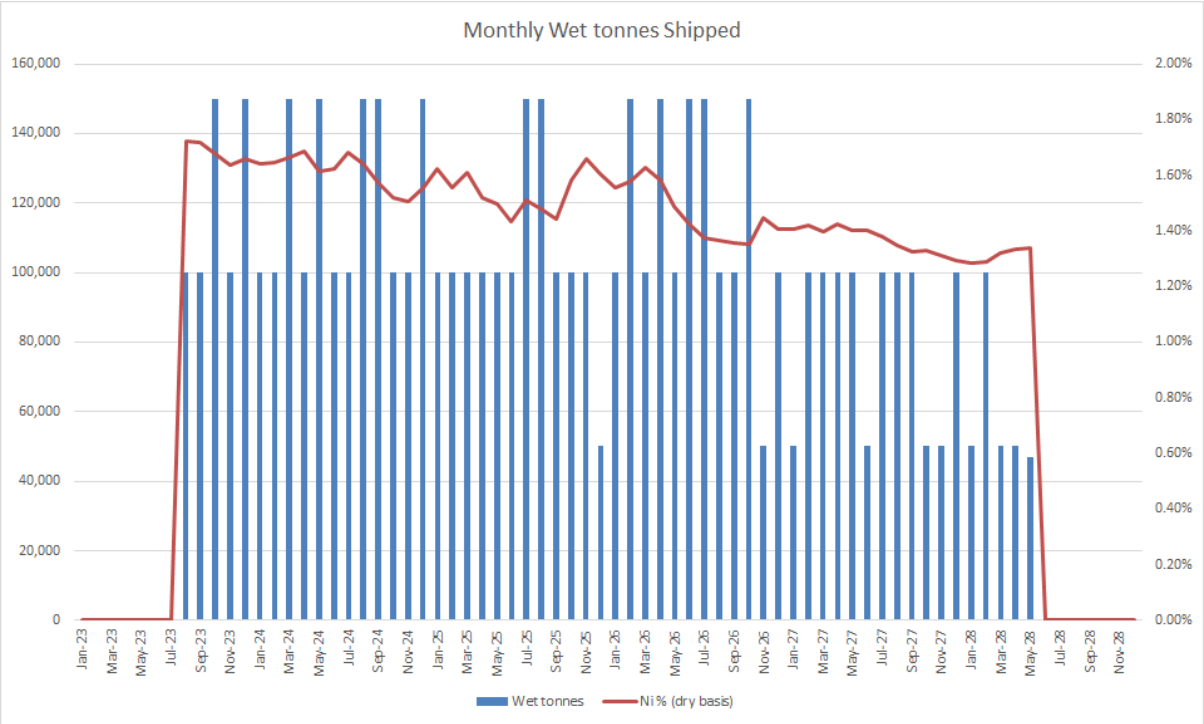


Figure 19 Monthly Wet tonnes Shipped – Expanded Case

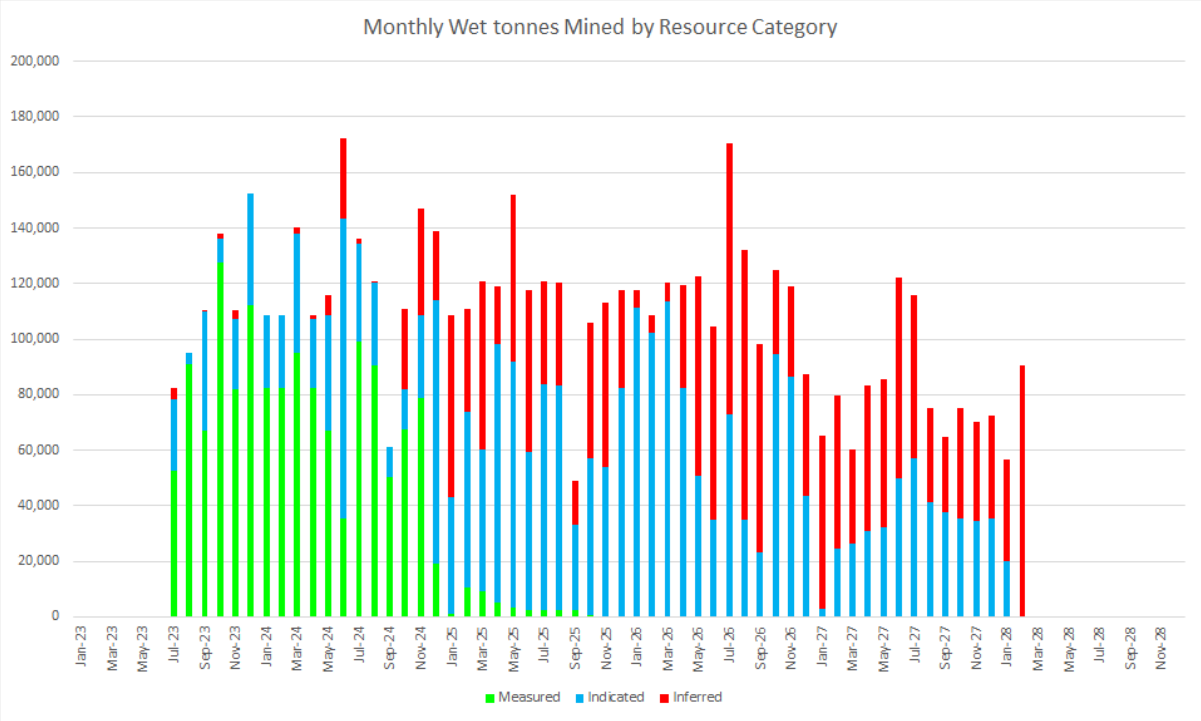


Figure 20 Wet tonnes Mined by Resource Category – Expanded Case

6.11.2 Base Case

The Base Case includes Measured, Indicated resources only. Key outcomes include:

- 3.8 Mt (wet) shipped at 1.57% Ni (assay on dry tonnes basis).
- First ore mined July 2023 (Project Month 7).
- First ore shipped August 2023 (Project Month 8).
- Mine life from date of first ore mined 32 months.
- 97% wet tonnes mined Measured and Indicated, 3% Inferred. Inferred is not included in the Ore Reserve.

The following charts show key production measures over the project life.

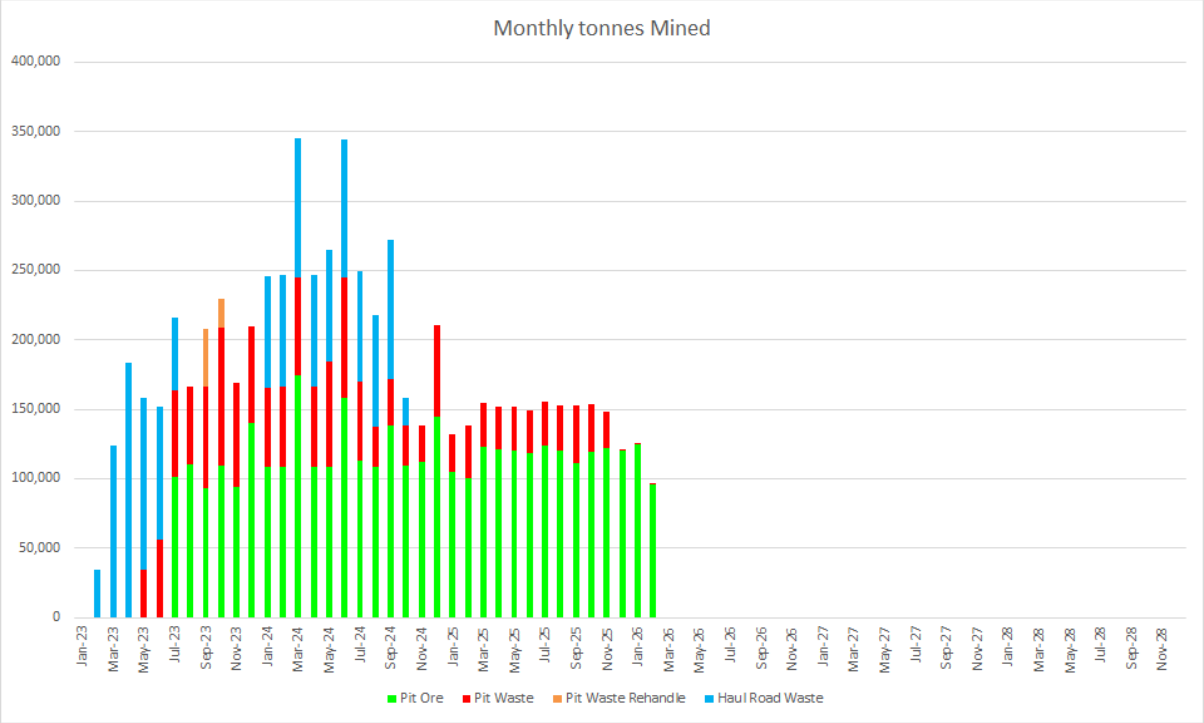


Figure 21 Monthly Wet tonnes Mined – Base Case

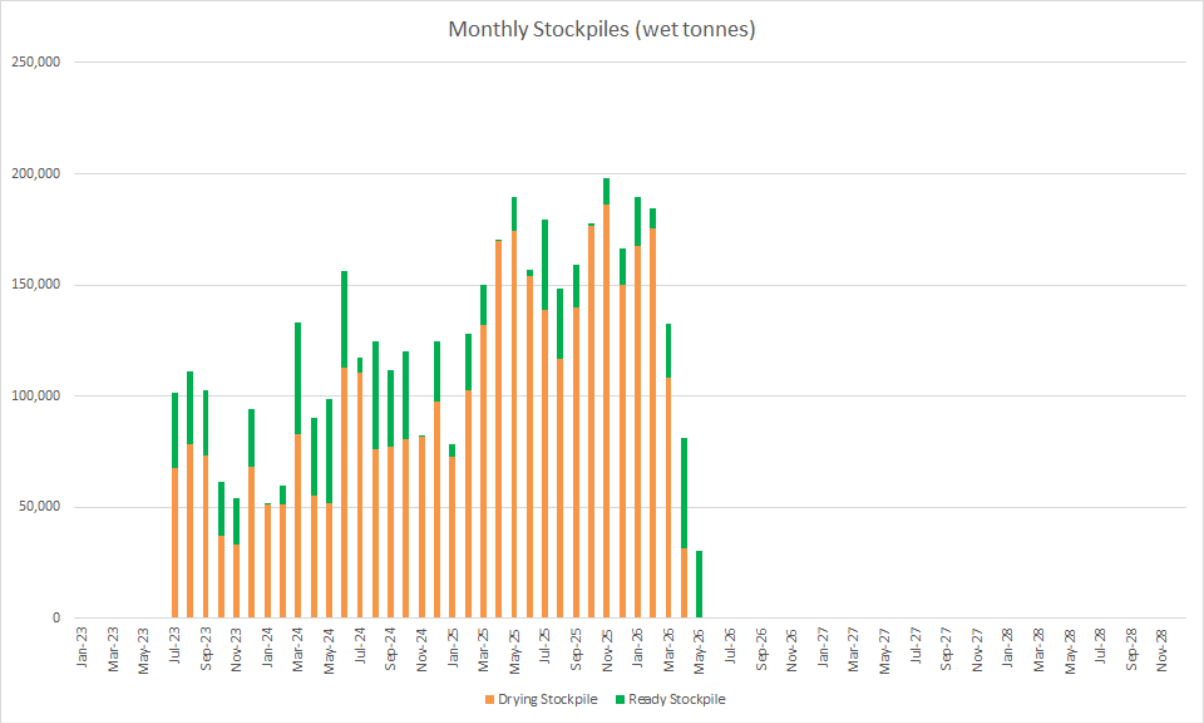


Figure 22 Monthly Stockpiles – Base Case

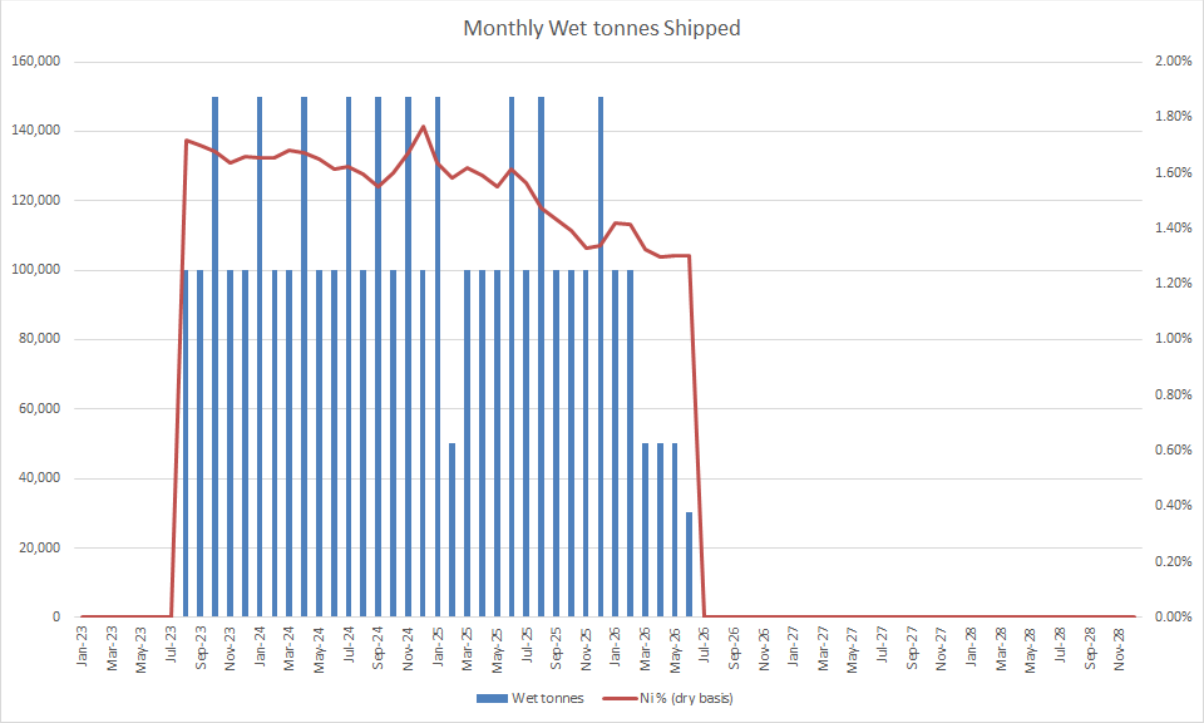


Figure 23 Monthly Wet tonnes Shipped – Base Case

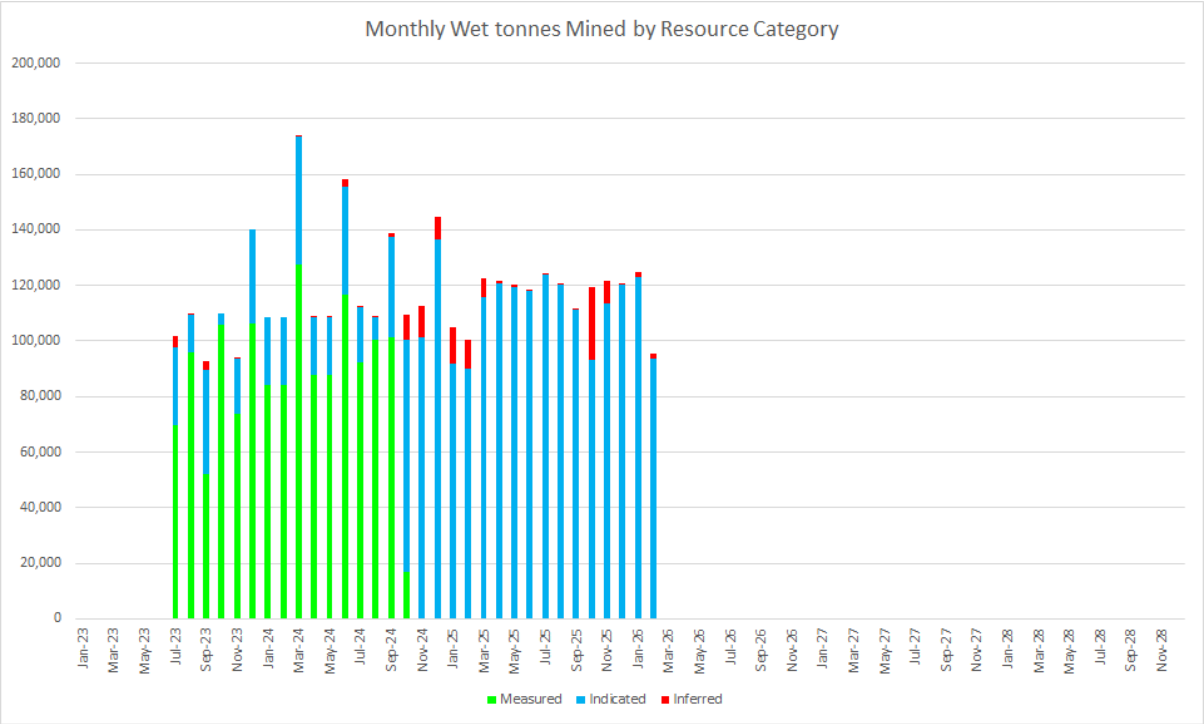


Figure 24 Monthly Wet tonnes Mined by Resource Category – Base Case

6.12 Ore Reserves

Ore reserves under the JORC Code 2012 can only be derived from Measured or Indicated resources. The January 2023 Ore Reserve for Kolosori is based on the Base Case mine plan.

The following figure, from the JORC Code, sets out the framework for classifying tonnage and grade estimates to reflect different levels of geological confidence and different degrees of technical and economic evaluation.

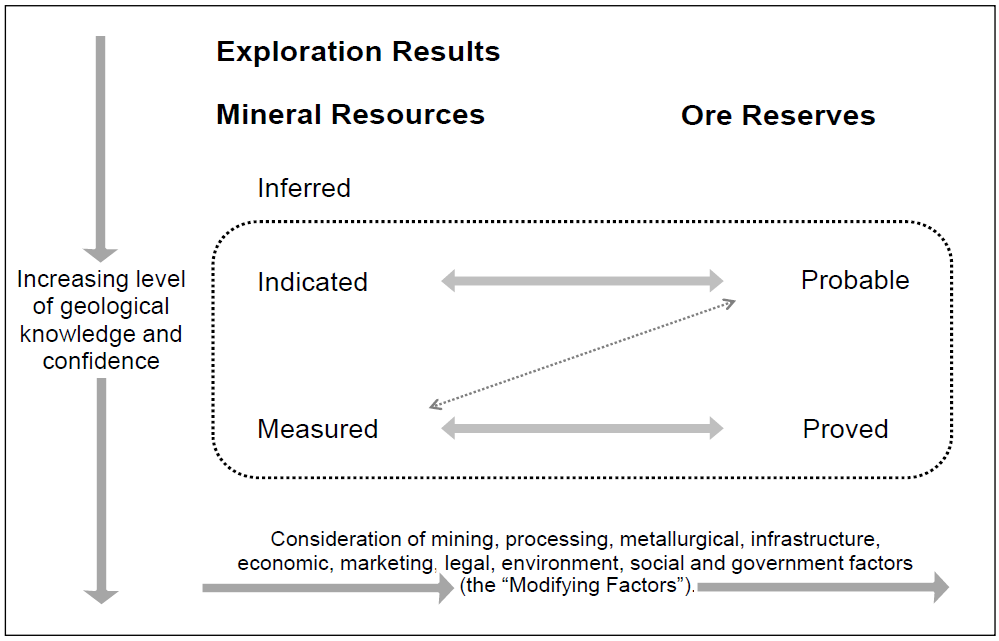


Figure 25 General relationship between Exploration Results, Mineral Resources and Ore Reserves

Mineral Resources can be estimated on the basis of geoscientific information with some input from other disciplines. Ore Reserves, which are a modified sub-set of the Indicated and Measured Mineral Resources (shown within the dashed outline in the Figure above), require consideration of the Modifying Factors affecting extraction, and should in most instances be estimated with input from a range of disciplines.

Measured Mineral Resources may be converted to either Proved Ore Reserves or Probable Ore Reserves. The Competent Person may convert Measured Mineral Resources to Probable Ore Reserves because of uncertainties associated with some or all of the Modifying Factors which are taken into account in the conversion from Mineral Resources to Ore Reserves.

While the Kolosori Mineral Resource includes some Measured, uncertainties remain with:

- Detail of the mining operation which impacts the mining recovery,
- Haulage costs to the pits furthest from the port, and
- The moisture distribution through the deposit which impacts the stockpiling strategy and costs.

Uncertainty with these modifying factors leads to the entire Ore Reserve being classed as Probable.

The full January 2023 Ore Reserve, including Table 1 of the JORC Code 2012 setting out discussion of the Modifying Factors, is presented in the document "*Ore Reserves Statement Kolosori Nickel project as of 31st January 2023*" and is contained within Appendix A.

Table 5 Ore Reserves

Category	Volume Mbcm	Wet Mt	Dry Mt	Ni %	Fe %	Moisture %
Proved						
Transition	0.0	0.0	0.0	0.0	0	0
Saprolite	0.0	0.0	0.0	0.0	0	0
Total	0.0	0.0	0.0	0.0	0	0
Probable						
Transition	0.4	0.7	0.5	1.6	42	39
Saprolite	1.8	2.9	2.1	1.6	17	28
Total	2.2	3.7	2.6	1.6	21	30
Proved + Probable						
Transition	0.4	0.7	0.5	1.6	42	39
Saprolite	1.8	2.9	2.1	1.6	17	28
Total	**2.2**	**3.7**	**2.6**	**1.6**	**21**	**30**
Waste	2.2	3.9	2.7			
Waste: Ore		1.1				

Note: The tonnes and grades shown in the totals rows are stated to a number of significant figures reflecting the confidence of the estimate. The table may nevertheless show apparent inconsistencies between the sum of components and the corresponding rounded totals.

7 Barging and Transshipment

The selected barging contractor will be based at the PNM Port and be responsible for the maintenance of their tugs and barges. PNM has provided limited port facilities for the barging contractor to assist their works and will be built into their contract, namely:

- Accommodation and messing facilities
- Warehouse / workshop area (containerised with canopies)
- Wharf fueling facilities for tugs. Fuel to be purchased at an agreed tariff from PNM.
- Mooring facilities for tugs and barges.

Barges will be loaded with ore from the drying stockpiles utilising a haul truck with an excavator maximising the capacity per barge as usual nickel ore shipment practice. Loaded barges are surveyed to determine their actual ore tonnage by licenses surveyors. Generally, where timing permits multiple barges will be loaded and parked ready to enable rapid transfer and loading of the vessel and minimise delays.

Loading is generally subject to demurrage timing and PNM have targeted a schedule where the vessel would be loaded within seven (7) days. PNM will undertake a social survey to determine if there are Community considerations with respect to 24 hour operations at the Port.

The project intends to operate 3 barges each with a capacity of up to 8000 tonnes. A single barge loading will take one day enabling the seven day loading time. The following is a typical image of the barge anticipated to be utilised.

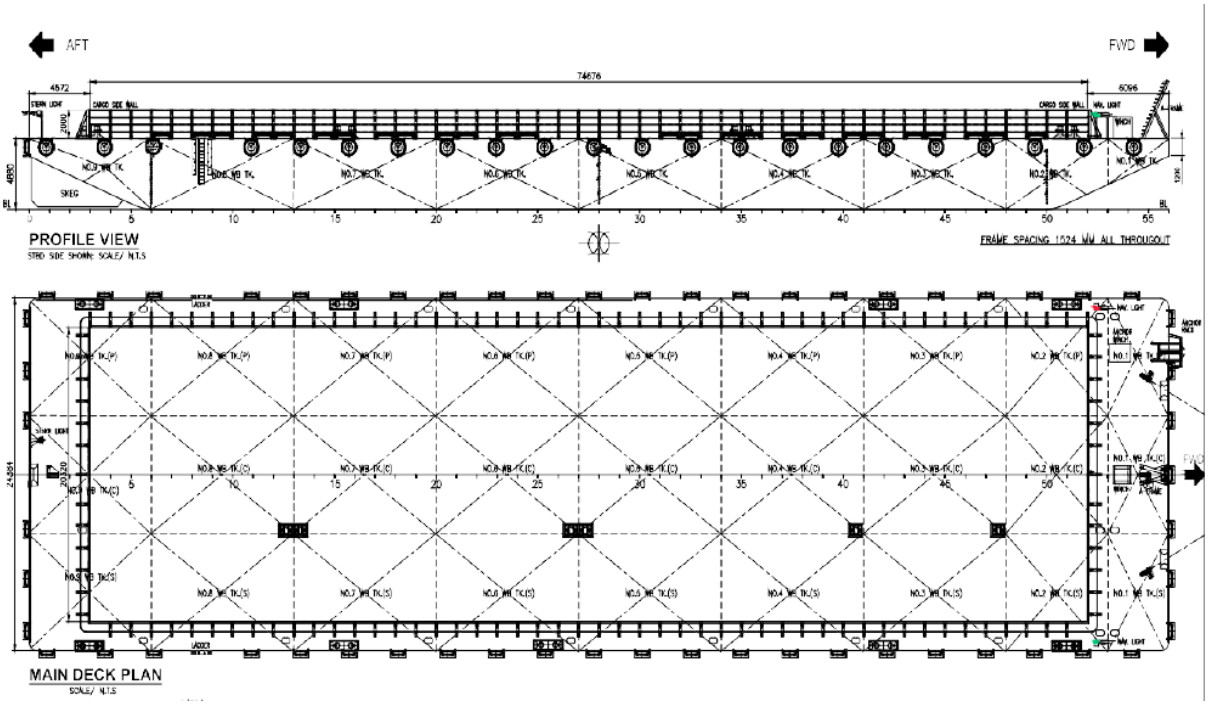


Figure 26 Typical 8000tonne barge

Barges will be towed utilising two (2) 35-40 tonne bollard pull main tugs and a smaller 15tonne bollard pull assist tug. A crew transfer vessel will be provided to transfer crew from the main bulk carrier and tugs to shore.

The jetty does not have fixed loading ramps so the project intends to utilise floating loading ramps that are moored between the jetty and the barge such that trucks and excavators can drive from the jetty and onto the bow of the barge via the floating ramp.

The barges will be towed by ocean class tug boats to a deep water trans-shipment point approximately 600m from the jetty where they will be moored to the moored bulk carrier vessel. Bulk carriers used for nickel ore are typically in the Handymax Class and approximately 55kt – 60kt capacity spread over several hatches. The vessels are all geared vessels (fitted with self-loading cranes) as per standard practice for these operations.

Figure 27 Typical Geared Bulk Carriers for Nickel Ore export

Once moored to the bulk carrier loading to the vessel commences utilising the onboard clamshell cranes dropping into the vessel holds. Once barge cargoes are transferred, they return to the wharf for loading and repeat the process until the vessel has reached capacity.

The bathymetry indicates a sea depth of approximately 35m at the transhipment point enabling the bulk carriers to utilise their anchors in lieu of a fixed mooring. Cyclone moorings will be provided for the barges and the tugs in the event of cyclone event.

The point of custody transfer is once the ore is loaded. The vessel's ore volume transferred / loaded will be compared with the PNM surveyed quantity on barge and mutually signed off in agreement. PNM laboratory analysis for the shipment is issued prior to vessel loading and later verified by the off-taker after being received at the destination port. This includes the moisture content of the ore which is carefully reviewed.

The barging contractor will also provide quayside support by way of a Loadmaster superintendent, a stevedoring gang for operation of the cranes on the bulk carrier and management personnel.

8 Project Infrastructure

8.1 Infrastructure Summary

The Project infrastructure was designed to support mine operations for the export of nickel ore, through the provision of operations and maintenance facilities, power, water, logistics, administration and other necessary support services. The initial mining area will be established in Pit 1 to the north of the main infrastructure locations as shown in the layout below.

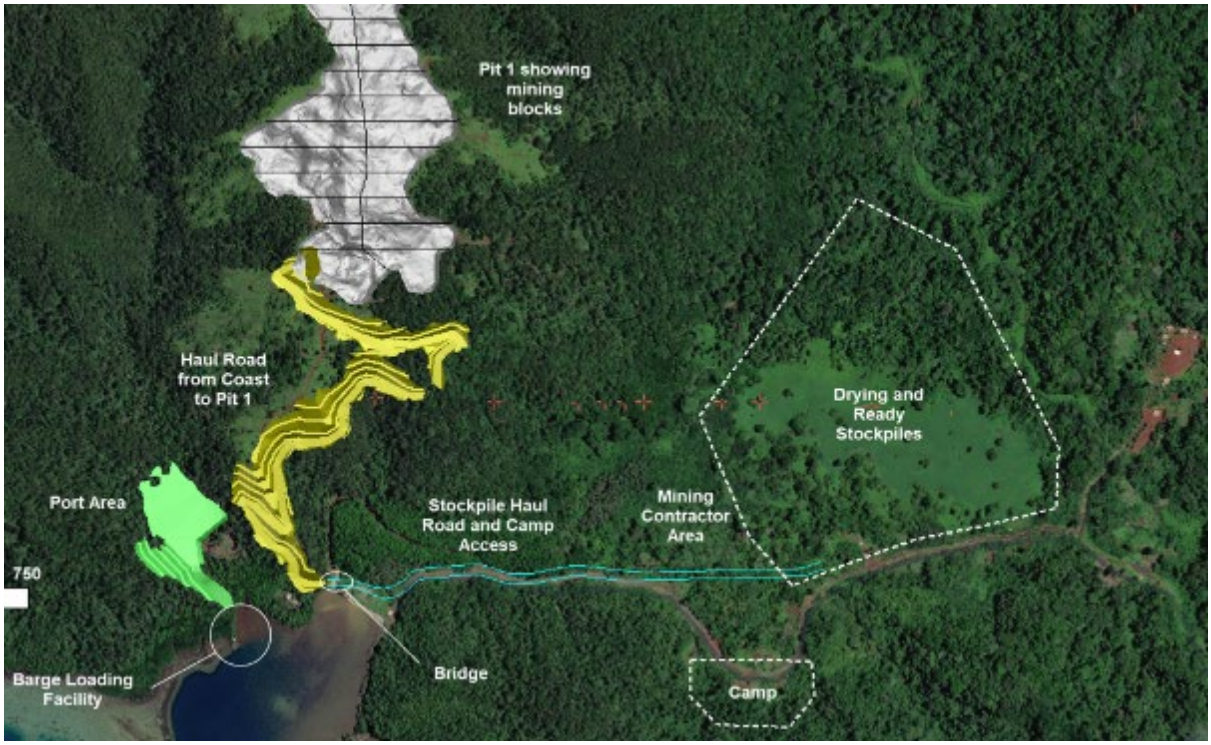


Figure 28 Mine and Operations Site Layout

The infrastructure is designed for a minimal effect to the local environment. The project areas including mine pits and with support facilities would be developed in strict accordance to mining regulations for good mine practices, allowing for water management and environmental protection.

8.2 Infrastructure Design Basis

8.2.1 Buildings and Maintenance Facilities

Buildings have been designed for a fit for purpose approach for operations, however, also to provide a suitable living environment for the Life of Mine (LOM) of a minimum of six (6) years. Pre-Fabricated Buildings, or Flat packs, are commonly used in the mining sector throughout the region and typically have a ten (10) year design life. The vendors in the region were assessed and the scope has settled on Chinese supply to similar mining projects with local labour erection under Vendor supervision.

Through the course of the Study, local Solomon Islands designed buildings using local materials such as timber for columns, frames, walls etc were investigated. The trade-off is generally construction time and cost, with this option being adopted for the initial 50 person early construction accommodation that is currently being constructed onsite. Local building design will also be adopted for the larger communal accommodation and recreation facilities onsite in the main operation village.

All workshops have concrete slabs with drainage to sumps and oil water separators so no hydrocarbons are released to project areas. Oil and waste oil storage areas for mining equipment are similarly constructed with containers for specialised storage, covered and drained open area under canopies, to contain all oil that may spill with bunds, concrete slab floors and sumps with oil-water separators.

8.2.2 Roads

Roads will be designed for a maximum grade of 9% across the Project site. All roads will be constructed as two (2) lane thoroughfares with shoulders and centre crown cross fall. Roads will be compacted and road base provided from the PNM quarry to be developed to provide an all-weather road for 24 hour or extended shift operations.

V-Drains will be constructed alongside the road on both sides with catchment disbursement ponds to avoid transfer of drainage across natural catchment boundaries and minimise the build-up of drainage flow velocity. Safety berms will be constructed in specific Haul Road sections for haul truck safety. Further details are included in the Haul Road section.

8.2.3 Utilities

Due to the remote nature of the Site, no general services or utilities are available, therefore the Project will provide the following;

8.2.3.1 Power

Diesel Gensets will be provided at each facility on a distributed approach. Power will be distributed at each facility via overhead lines which will also enable fibre optic cables to be run to key facility areas and link to the overall communications system.

8.2.3.2 Diesel Fuel

Diesel will be provided by fuel pontoons, barges or LCT spare tanks and pumped to onshore fuel tanks form the Jetty. From the onshore fuel tanks, fuel will be dispensed to vehicles and fuel trucks to the various facilities and mine pit operations.

8.2.3.3 Water & Wastewater

Water will be sourced from bores and / or small water ponds to provide all the project needs subject to the outcome of site hydrogeology investigations. Bore water (raw water) will be pumped to storage pond(s), then distributed to Users. Domestic water for ablutions and general cleaning will be passed through filters and stored as Domestic Water. Potable water will be processed via a reverse Osmosis plant to provided bottled water as Gallon bottles. These bottles will be distributed to dispensers throughout the facilities.

Main facilities will be serviced by a sewerage system comprising underground, gravity driven piping to a Sewerage Treatment Plant (STP). This sewerage system will process all kitchen and other grey water as well as lavatory black water. Remote facilities with low manning numbers will utilise bio septic tanks.

8.3 Mining Operations and Port Area

A mining operations area will be established adjacent to the main haul and access roads near the Port and Camp areas. This will be the main facility where the selected mining contractor will establish all personnel and maintenance facilities co-located alongside PNM operational facilities.

A summary of the scope is as follows:

- PNM Operations Office and Laboratory Facility
- Mining Contractor Office
- Port Operations Office

- Heavy & Light Vehicle Equipment Workshops
- Warehouses and Hardstand Storage Areas
- Bulk Fuel Storage and dispensing system delivered by pipeline from the wharf facility
- Water and wastewater systems
- Power and communication infrastructure

8.3.1 PNM Operations Office and Laboratory Facility

The Mining Facilities provide all operations and mining support facilities for the Project. The Main Office houses the Operations Team, Mining Management, Administration personnel and emergency First Aid Facility required for effective operations. The full medical Clinic manned by the paramedic is in the adjacent Camp. Further corporate support is provided offsite by PNM Management.

The facility will be supplied and installed by the mining contractor as part of their site establishment works. The following summarises the facilities.

- Main Office: Operations & Mining Team, Mining Technical Services, HR, Environmental and Administration departments.
- Trades Offices: Plant and trades offices are located adjacent to work areas.
- Maintenance areas including heavy vehicle workshop, light vehicle workshop, store & warehouse.
- Heavy and Light Vehicle parking and Go-Lines.
- Site Induction and Training Facility.
- Heavy Vehicle (HV) / Light Vehicle (LV) wash-pad
- Lubricant's storage area
- Tyre shop (tyre repair) & tyre storage area (covered)
- Electrical: gensets, distribution, lighting
- Laydown and storage areas
- Roads & Drainage
- Mess / Lunch Room
- Water & waste water systems. Potable water from the Camp filtered water supply.
- Personnel Transport Pickup / Drop off & Parking Area.
- Security Post & Gates
- Communications system utilising V-Sat, Radio and Fibre Optic Network.
- Medical / First Aid Facilities (are included here and in the adjacent Camp).

8.3.2 Vehicle Workshop (HV/LV Workshop)

Workshops are dedicated to the servicing, maintenance and overhaul of vehicles and miscellaneous equipment that is associated with the mine. The activities include:

- Servicing and maintenance of the heavy vehicle mining fleet and light vehicles
- Vehicle washing

- Tyre Changing
- Space for minor fabrication and repair
- Space for specialist sub-contractors stores and work areas

Figure 29 HV & LV Workshop Layout (a)

The Heavy Vehicle Workshop will be sited so that it is easily accessed by the heavy vehicles. This building is built on level ground due to the large size and heavy tonnage of vehicles. The building and associated circulation and parking areas will be laid out to suit traffic movements separation of light and heavy vehicles, minimisation of conflicts and anti-clockwise rotation of vehicles for safe movement.

- The workshop will be double drive through bays for efficiency in terms of walking distances and for economy of span.
- Apron slabs will be provided for drainage and cleanliness of the forecourt.

Sufficient building lighting will be provided to enable 24 hour operation of the Workshop. Light type and positions are chosen to minimize shadow effect against large vehicles. Area lighting will be provided for safe movement of trucks as they approach the Workshop. Natural lighting is also available from the open entrances and translucent roof sheeting sections.

The HV hardstand / parking is free draining for stormwater with low maintenance drainage systems and have an all-weather surface with low dusting. The ground is designed to carry the heavy vehicle loads without rutting or tracking of mud.

Oily water and contaminated water is generated in all plant areas from wash-down activities such as at workshops, heavy equipment and fixed plant and will be treated before discharge. The anticipated treatment is separation in a laminar flow separator. Oil collected will be stored in an approved manner and removed from site. Sludge will be collected and managed in accordance with plant and regional guidelines.

Figure 30 HV Workshop Lube container

Heavy Vehicles (HV) are typically washed prior to being taken to the workshop for service or maintenance. A wash down bay for HV's is provided at the entrance of the mine support facilities area. The wash bay is designed in length, width and height to suit the largest vehicles in the fleet including an allowance for growth or change. The wash facility accommodates one vehicle at a time.

It is intended to use treated water sourced from the various sedimentation ponds. The water will be pumped to tankers or pipelined, then transported or directed to a small pond close to the wash bay. The water from this holding pond is then pumped to the hose reels, wands and fix-mounted water guns. Both low pressure and high pressure water supply is provided

Dirty water is collected via a sloped pad before entering a sedimentation pond and oil separator and then fed back to the supply pond.

8.3.3 Laboratory

Containerised laboratory with canopy will be provided for nickel ore test work required for grade control, stockpile coordination / blending as necessary and certification documents for ore shipments.

The facility is provided by PNM however laboratory equipment and personnel are provided by a certified laboratory.

8.3.4 Sedimentation Ponds

A drainage system around the mine facilities and Port stockpile area is provided to collect run-off water and to drain the water to sedimentation ponds. A simple treatment system if required, applied to these ponds i.e. spreading lime into the ponds on a regular basis and monitoring the PH levels as part of normal operations.

An approved water quality test would be conducted preceding water discharge by operations personnel. The flow of water from one pond to the next pond will be gravity flow; no pump required only connection pipe and valve.

Note. Currently no Acid Mining Drainage (AMD / ARD) ore has been identified with current drilling and test work. If such material is encountered, then sediment ponds subject to this drainage would be lined and a suitable neutralisation process introduced prior to discharge.

8.4 Port Facility

The port facility is designed to enable direct load out of nickel ore onto barges. A summary of the scope is as follows:

- Timber wharf with mooring for three barges, tug refueling, and personnel transport boats
- Channel markers and cyclone moorings
- Hardstand area with lighting to enable direct loading from haul trucks onto barges

Barge berthing is staged with Phase 1 comprising a single barge berth for contractor and equipment mobilisation, it will then be extended to handle three barges sized for a nominal 300 foot / 5000 DWT capacity barge. The layout incorporates the option for a future extension of the wharf to enable additional berthing.

The port facilities include:

- Port Operations and Security Post
- Laydown areas for loading and unloading of goods.
- Lighting with power supplied by the Port Facility diesel gensets
- Fuel offloading pump station; offloading and transfer of fuel to the onshore tanks.
- Tug fuel storage & dispenser for tug refueling, fed by the fuel offloading pump station.
- Truck ramps for barge access, based on simple lift/lower system.
- Miscellaneous:
  - Tugs standby Personnel transport vessel berths will see personnel disembark directly onto the wharf
  - Loaded and empty Barges when not being loaded will be moored to the west of the Jetty.
  - Fuel pontoon deliveries will moor in the barge position to allow fuel to be pumped to the fuel storage facility.

Channel markers will be installed as per SIMA requirements and a cyclone rated mooring for barges will be provided. Tugs will relocate to suitable protected areas in the event of heavy seas and bad weather impacting the harbour.

8.4.1 Wharf

The wharf is an infill design with road connection to shore. It will be constructed using timber piles, with horizontal whaler members, fenders and rock armour side protection. Counterweights will hold back the driven timber piles with steel ropes as an anchored wall design whilst the eastern tug and transport craft will be a cantilever design with protection fenders. The wharf infill will be rock fill hauled from the main haul road embankment construction, with a capping layer of select road base material.

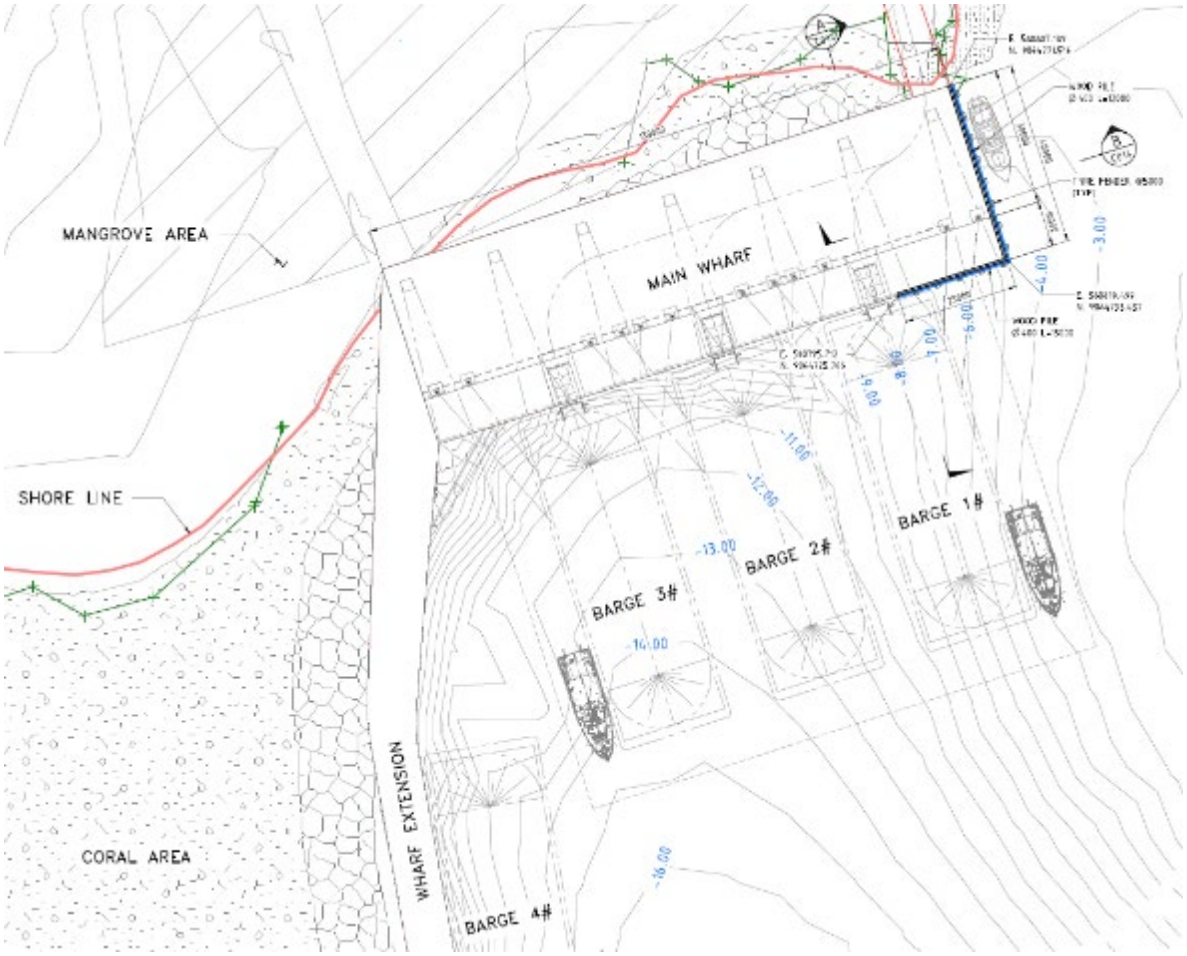


Figure 31 DSO Loadout Wharf Facility

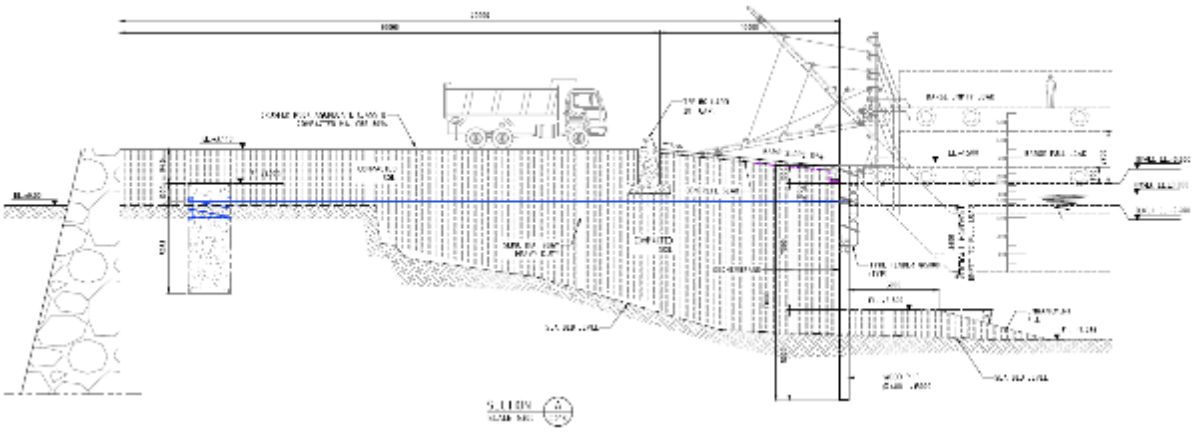


Figure 32 Timber Wharf Section

8.4.2 Fuel Storage

The Bulk Fuel Storage area will be located adjacent to the Port Facility. Diesel fuel consumption for all areas was calculated based on anticipated operating levels. Most fuel consumption is by mining HV's and ore haulage trucks. A fuel unloading facility (pump station) will be provided on the wharf with a pipeline to fuel storage tanks that will be located east of the Port Facility.

Fuel tank areas are bunded with earth bund walls and have geomembrane liners joined to the tank foundations which then extend over the berms for fuel containment in the case of a spill or tank

failure to render the bund leak proof. The liner is covered in a thin layer of sand then soft aggregate material to ensure no damage occurs due to pedestrian traffic during maintenance works.

The bunded area is graded to ensure Run-off water flows to a corner where a pipe is fitted with a hand operated valve. Discharge is fed to an oil-water separator with water passing to a sediment pond for testing prior to discharge.

Fuel storage and dispensing facility includes the following;

- Four parallel piped 50kl diesel double skinned fuel tanks in bunded area.
- Two fuel dispenser 'packages' comprising fuel pumps, fuel guns, filters including biodiesel filters, flow meters etc.
- Fuel Rack. Manually valve operated fuel pipe to feed the top intake of a fuel truck at high low. Inline flowmeter and operator platform to monitor the fuel truck fill.
- All fuel dispensing areas are on concrete slabs with drainage to a sump and oil-water separator. As the slabs are drive on drive off for vehicles, no bunding is practical and spills are directed to the sump by the constructed slab grades.
- The tank area is fully fenced.
- Operator Cabin is provided for servicing the fuel dispensing and maintaining records.
- Security is provided by the adjacent security station at the Port Office.

Figure 33. Exmaple of 50kl fuel Storage Tanks – Nickel Mining Facility

8.5 Camp Facility

8.5.1 Initial 50 person Camp

An initial 50 person temporary facilities camp is currently under construction on site which will enable the establish of further construction and early mine development activities. It is being constructed by local contractors onsite utilising local village housing to commence construction activities. A primary focus will be on accessing the various facility areas including the camp.

As of December 2022, construction of the initial camp is approximately 50% complete. Layouts and progress photos of the camp are below.

Figure 34 Initial 50 Person Camp Facility

8.5.2 Operations Camp

The full permanent operations camp has been designed for a 200 person workforce, providing for a fit for purpose approach to accommodate personnel in a suitable living environment for the Life of Mine (LOM) of a minimum of six (6) years. A combination of Prefabricated Buildings (Flat Packs) and traditional local buildings utilising local materials will be provided in the camp.

Figure 35 Local and Prefabricated Camp Buildings

The main Operations Camp includes the following facilities:

- Camp Office (Administration, HR, Transport, etc.)
- Housing, Senior Staff, Junior Staff, Non-Staff barracks

- Guest House(s)/VIP Rooms
- Mess hall / kitchen and associated facilities (cool room containers, etc.)
- Laundry and ablutions
- Medical Clinic
- Maintenance & Services Building(s)
- Recreation Building
- Security office & support area posts
- Packaged Potable Water Plant & Storage
- Wastewater septic system
- Gensets with fuel storage and distributed power
- Open area; car park, green areas, gardens
- Outdoor lighting
- Raw Water (bore) Supply, pump station with fire and water tanks for distribution.
- Open drain system for water run-off inside camp area
- Communications network and linked to the Main Office Vsat for controlled access to Staff for calls and email; Intent that a suitable 4G network tower would be constructed in future by a Network provider
- Security perimeter fencing and access control

8.5.3 Catering & Housekeeping

A professional caterer and housekeeping contractor would be engaged and has been included in the operational costs. The main Mess Hall / kitchen at the camp would prepare all meals and issue lunch packs to the various work area lunch rooms and work areas across the Project Site.

Similarly, the same contractor would undertake the room cleaning and laundry for the camp. The caterer will be required to maximise local employees for these works and identify suitable local food supplies as the first priority before importing form other areas.

The caterer is responsible for the various menus provided and the cool room containers for perishable items. The Caterer reports to the PNM Camp Manager.

8.6 Water Sources & Treatment

The project has significant water requirements for mining, processing, camp and other general uses. The main water requirements are:

- Raw water
- Domestic Water (filtered raw water)
- Potable water for consumption

8.6.1 Raw Water

Raw water is sourced from wells and rivers where it is pumped and piped to several water reservoirs / storage tanks at different areas. Raw water is distributed to the industrial areas and fire mains. The storage area locations are located as follows;

- Raw water tank at the Mining Facility.
- Raw water tank at the camp.

Raw water make up for the facility will be treated with lime to ensure optimum pH is achieved. Raw water will be used for all industrial and fire applications and for dust suppression.

8.6.2 Domestic Water

Raw water sourced is fed from storage tanks to a filter system to remove bacteria in order to render the water suitable for ablutions. Domestic water is supplied to all industrial and operation's facilities ablutions areas. The treatment (filtration) plant is located adjacent to the water tanks in the camp.

8.6.3 Potable Water

The total "operation" per capita potable water consumption is 200 litres per person per day for personnel housed at the site. This figure is based upon data from the previous projects and includes all personal and general personal water consumption. It does not include industrial, commercial or process water needs.

Potable water will be produced from filtered raw water by the Reverse Osmosis (RO) process. Water from the RO plant will also be treated by Ultra Violet light or a similar process then bottled for drinking water.

The plant and storage tanks are located at the camp and potable water would be bottled and provided to all buildings including security posts, rest areas, etc. The plant and storage tanks are sized to suit the maximum camp and operations population at any one time with contingency with the additional facility of rain water collection tanks.

8.6.4 Dust Suppression

Water for dust suppression will be raw water and should generally be delivered and sprayed by trucks. The preference will be to utilise water from sediment ponds prior to drawing on the camp raw water tank or river as sources.

8.6.5 Storm Water

All storm water runoff from areas that may contain pollutants would be captured and treated. This will include the ROM areas where run off may contain dust or oil. It will also include workshop areas where run off may contain oils and fuels. Sedimentation ponds are provided to remove solid contaminants and specialized treatment may be needed to remove chemical contaminants. Treated water will be to the quality required under Solomon Islands and International standards.

Dirty water catchments, which are the hardstand areas around workshops, warehouses, etc. will produce run-off principally contaminated with dust. This dirty water would be discharged to sediment control ponds and secondary treatment as necessary.

Water contaminated with oil and detergents from vehicle wash facilities and workshops would be passed through oil separators positioned as close as possible to the source. Oils would be recovered and collected under the waste oil disposal system. Water from the separators would be directed to the sedimentation ponds described above for secondary treatment or re-use.

8.6.6 Fire Fighting System

Firefighting systems are provided at all facilities, some in the form of fire hydrants with ring mains, sprinkler systems and fire extinguishers for discrete areas. All designs and equipment are according to Solomon Islands and International Standards.

The project systems include the following;

- Mining and Camp Facilities.
  - Fire Hydrant System with pressurised ring mains.
  - Portable dry foam and CO2 extinguishers where appropriate.
  - Portable foam systems for fuel storage areas.
- Emergency response fire truck (one unit shared).

In general, fire water will be sourced from Raw water tanks that will hold a fire reserve. In addition, water may be drawn direct from rivers and other water bodies as necessary as necessary for fire trucks.

8.7 Supporting Infrastructure

The following supporting infrastructure and services are provided across the Project areas:

- Quarry; Road base and aggregates
- Site wide drainage & containment systems
- Roads for haulage, access and logistics
- Distributed diesel Generating Sets & power distribution system
- Waste facility
- Firefighting systems
- Communications system
- Security Sitewide

9 Hydrology

A flood inundation and stormwater management study by ERM was commissioned.

The focus was Stage 1 of the project that comprised Pit 1, Port facility, Contractor's facility including: including office and workshops, haul roads and access roads to Pit 1

The work was divided into three components:

- Climate review and determination of design rainfall events.
- Development of a hydrological model to determine representative peak flow and critical duration, and
- Hydraulic model to simulate the flow of the representative peak flow within the areas of interest, as a flood inundation assessment.

The results of the hydrologic and hydraulic models have been designed to be used to assist in the review of the infrastructure design and placement across the site. Stormwater management across the site was reviewed as part of the flood study.

Rainfall data from Buala weather station, 35km northeast of Kolosori were used.

The design flows for Stage 1 of the project were determined using RORBWin modelling software, version 6.45 (HARC, 2019).

Study outputs included:

- Annual Maximum Series of selected durations for each year recorded
- Rainfall design depths for selected durations
- Design Peak Flow for critical duration

Flood modelling for Kolosori was carried out using 2D modelling HEC-RAS (6.2). software. The flood modelling was performed for the 1% and 2% AEP. Typically, the 1% AEP flood extent provides a level of understanding from which to base the design and placement of infrastructure. The inundation boundaries for both the 1% and 2% AEPs were calculated.

The fundamental approach to be adopted for Pacific Nickel Mines Ltd (PNML) water management is to keep any clean water runoff separate from mine affected water (MAW) and sediment affected water. It is also important to ensure no mine affected water is able to enter the surrounding waterways unless via a controlled release from designated points at appropriate times.

The stormwater controls conceptually involve minimising externally generated surface runoff (clean water) from entering mine work or infrastructure areas.

Clean water diversion drains will be placed to reduce the potential volume of surface runoff impacting the mine infrastructure. The steep gradient experienced across the site is likely to result in the need for velocity control structures in the drains in addition to sediment control structures.

The stormwater channels were conceptually sized to route the 10% AEP design flow event.

Stormwater management conceptual design was undertaken using the provided level of detail. Stormwater was split to be either clean water, sediment affected water or mine affected water. Management structures were conceptually placed to deal with each stream of stormwater independently of each other.

10 Environment and Community

An EIS report has been submitted and the Mining Lease has been issued with Environmental Conditions. As part of meeting these conditions previous studies are being updated to ensure these conditions of the Mining Lease are addressed.

Environmental documents issued include:

- ESIA
- Environmental Values and Impact Management Report
- Environmental Management Plan
- Closure and Rehabilitation Plan
- Early Works and Construction Management Plan
- Establish onsite moisture and metals testing

In preparation are

- Emergency Response Management Plan including safety at work procedures
- Design and establishment of nursery for propagating wildings for rehabilitation of disturbed lands
- Social Impact Assessment and Action Plan
- Baseline studies at proposed offloading and loading offshore area measuring ocean current, water chemistry, shoreline bathymetry and description of the offshore area.

11 Approvals

The Kolosori Nickel Project is subject to a wide range of statutory and regulatory approvals. These approvals are being sought by Pacific Nickel progressively as the mine develops. The Mine Lease ML 02/22 obtained by Pacific Nickel outlines the full list of permits and compliance approvals required for the project to proceed. These approvals include items such as:

- Business licenses
- Land acquisition approvals
- Royalty agreements
- Human resources approvals
- Planning and infrastructure approvals
- Approval of environmental bonds

12 Human Resources

The following table is a compilation of the expected personnel for the project and is split between three main parties:

- Pacific Nickel management
- Mining contractor personnel
- Barging contractor personnel

The project personnel will be hired from a range of locations as noted below. The project expects to have a large local participation in the project's operations; therefore the camp capacity has not been sized to suit the entire workforce.

Table 6 Operations Personnel

	Number of Personnel
Pacific Nickel	**97**
Management	4
Control (HSE/Environ)	3
Port Operations	14
Geological and local exploration services	10
Laboratory	12
G&A Site and cleaning	6
G&A Honiara	10
Messing and other Site	27
Security Post	7
Visitor accommodation	4
Mining Contractor	**175**
Mining Mgt and Technical	22
Workshop, Maintenance, Warehouse	54
Operators (Pits, Stockpiles, Port)	99
Barging Contractor	**31**
Management	1
Loadmaster	1
Stevedore supervisor	1
Stevedore crane operator	4
Tug and CTV Crew	18
Barge Crew	6
Total	**303**
Total (excluding Barging Crew accommodated on tugs)	**279**

13 Risk

The project has completed a preliminary risk assessment and the following is a selection of the key risks identified for the project:

Table 7 Key Project Risks

Category	Risk
Resource and Reserve risk	• Simple well understood geology and mineralisation supported by a test pit located in the initial planned mine area • A 750wmt bulk sample was established to test minability, moisture contents and stockpile methodologies • An 1,886 drill holes drilled totaling 20,961m inform resource data base
Product quality	• High grade product (>1.5%Ni) scheduled for initial years of operation • Moisture contents vary throughout the ore bodies and prior to shipment the ore must be below its TML rating. To accommodate this the wetter portions (approximately 50% of the total ore) will be placed on the drying stockpile. • No deleterious elements have been identified in the ore • A non-binding offtake agreement has been secured with international commodity trader, Glencore International AG for all the project's production for the first 4 years with a mutual option to extend a further 2 years.
Mining risk	• Shallow open pit free dig method • Low strip ratio (Base Case) • Test pitting demonstrates visual control on the ore body • Experienced PNG based mining contractor, HBS was engaged on an Early Contract Involvement (ECI) contract including a site visit has informed the final the mine methodologies, equipment requirements and cost models. • Mining will utilize a standard excavator and truck combination
Processing risk	• Nil, the ore is direct ship.
Logistical risk	• Mine is located adjacent to the port facility reducing trucking distance • Standard barge loading port arrangement with standard frontloading barges already being used in the Solomon Islands • Stockpile pad and in-pit areas for 100,000 wmt to permit drying and ship scheduling • Barge transship point less than 1km offshore from the port • Transshipment of ore will be subject to weather conditions, in particular rain fall events and cyclones.

Category	Risk
Construction and capital cost risk	• Approximately 60% of total direct capital is based on earth movements associated with site establishment, haul road and stockpile areas etc • Installed infrastructure includes standard wharf/port, creek bridge and camp facility
Operating Cost risk	• Approximately 83% of total operating costs are result of mining and barging activities • Mining and earth moving costs based on HBS's ECI work and the mine plan productivities • Barging and transshipment costs based on industry quotes
Shipping rates	• The project requires the use of ocean going ships to transport the ore to market. Shipping freight rates will be based on the prevailing international prices at the time of transport
Labour risk	• Skilled labour readily available in country or from regional countries such as PNG and Indonesia
Community risk	• Landowners at 20% Project owners & receive regular land access payments • No resettlement of landowners is required • Project access agreement in place • To date majority of exploration and development work has employed local contracts and workers as a priority
Environmental risk	• Full EIS approved and Development Consent granted • EMP will be issued prior to operations • Progressive rehabilitation with mine waste used as backfill • No tailings dam nor chemical used on site
Security risk	• Project is located in a remote location only accessible by sea • No history of community disturbance
Political risk	• Mining License and Mining Agreements granted • Project located on Santa Isabel Island and local Business License granted. • Export License to be granted upon final submission • Strong levels of government support for the Kolosori project • Local landowners have direct investment holding in the project • Exports are DSO ore with direct ship to markets
Commodity price risk	• The price received for the project's ore will be based on 1.5% Nickel DSO Ore CIF China third party derived benchmarks which is then adjusted (penalty or bonus) for its nickel content and

Category	Risk
	moisture content and marketing fees. The DSO nickel benchmarks are set based on international trades and subject to volatility.

14 Project Execution Summary

14.1 Development Schedule

The main remaining approvals for the Project include Financial Close and granting of the Export License. Early works have commenced onsite in preparation for mobilisation of the selected mining contractor forecast in Month 2. Initial mine development and infrastructure construction will be completed by the end of Month 6 where onsite mining operations will commence, with first shipment of ore expected in month 8.

The implementation schedule to first shipment is shown below.

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
Construction Phase	**Early Works**								
	50 Person Camp								
	Creek Crossing Bridge								
	Early Excavation/Clearing								
	Initial Mine Development								
		Mining Contract Award							
		Mobilisation							
		Haul Road Embankment							
			Access Roads						
				Drying Stockpile					
	Infrastructure								
			200 Person Camp						
			Maintenance Facilities						
				Operations Facilities					
					Wharf Construction				
Mining/Barging Operations	**Mining Operations**								
						Ramp Up			
							Full Mining Operations		
								Commence Shipping	

Figure 36 Development Schedule

14.2 Site Development Phases

14.2.1 Site Preparation & Mobilisation

Site preparation activities for all onsite facilities areas and include mobilisation, land clearing, earthworks, drainage and erosion control measures. Mobilisation of equipment and materials are divided into two origins, regional and imported.

Where not available immediately in the region, heavy material and equipment required would be imported and consolidated at the nearest port, loaded onto barge and tug sets or LCT's for transport to the Project's Kolosori Port.

Initially works would commence in the Port area, then progressively extend to the supporting facilities areas. As mining works commence with pre-strip, mining equipment would be walked or transported to the pit areas with adequate equipment as required.

Figure 37. Example – Ni Ore Access & Haul Road Development

14.2.2 Early Works

The Company has developed an Early Works Program to advance the development of the project as soon as practical. The intent of the Early Works, commencing with Pioneering as listed below, is to enable access landing of barges at an initial wharf area, clear initial access to Pit areas, commence initial pre-strip, access the facilities areas and provide the basis for facilities construction that follows with the main Works program. Works have progressed onsite with local contractors as part of the current DFS study to ensure an efficient ramp up period once full project approvals are received.

The following identified pioneering works have been completed, with the following scope delivered:

- Site meetings to confirm equipment landing area and permissions. Scout areas for any required variations to initial civil works.
- Establish initial wharf for Barging – equipment, fuel, supplies and materials for accommodation for Contractors.
- Formal Contractor Engagement and mobilisation.
- Sufficient heavy equipment to develop roads and site preparation civil works. Further equipment delivery depending on civil production rates and weather.
- Clear initial access to Pit areas, commence initial pre-strip, access and clearing of the infrastructure facilities areas.
- Source construction materials including timber for wharf and creek crossing construction and the identification of quarry sites.
- Initial vehicle maintenance facility and laydown area
- Diesel Gensets and temporary water services

The initial 50 person village is currently under construction and approximately 50% complete, with full occupation expected by end of February 2023. Post initial construction needs, this facility will be occupied by the barging contractor to be engaged for ore shipments to the offshore transhipment point.

Figure 38 Pit Clearing and Access

Figure 39 Local Timber Milling On Site

Figure 40 Equipment Landing Wharf

14.2.3 Initial Development Works

The initial development works include the following:

- Mobilisation and establishment of the mining contractor personnel, maintenance and warehousing facilities
- Construction of the main haul road embankment to provide two lane HV access to Pit 1 – material will be cut from benched embankments and carted to fill locations in the port, wharf, access road and drying stockpiles areas.
- Upgrade Havihua village access road to port area – this will become the main haul road linking the pit haul road access with the drying stockpiles and will include construction of a bridge crossing over the creek.
- Clearing of development areas including the mining and port operations area, drying stockpile, access road and camp.
- Clearing and earthworks for sediment ponds, diversion channels, fuel bay (tank delivery) and log stockpiles.
- Continuation of wharf construction including tug mooring and barge berthing bays.
- Continuation of port / camp development works as designed.

14.2.4 Mining Operations

The selected mining contractor will work to a detailed weekly mine schedule for the LOM operations. In consultation with the Mine Planner and the Contractor, an initial 6 week ramp up has been included once all initial development works have been completed.

Completion of the ramp up stage will see full mining production commencing in Pit 1, with the ore hauled to the drying stockpiles. A 6 week rehandle period has been allowed to sufficiently dry the stockpile material, after which it is transported to the wharf for loading onto barges.

14.2.5 Barge and Transhipment Operations

The selected barging contractor will work with the mining contractor through the initial 6 week ramp up window to ensure that barges are available for the mining operations to load.

Following this ramp up window the contractor will operate on a weekly transhipment cycle for 12 months of the year. It is expected that the bulk carrier will take a week to load and a barge will take a day. Therefore 7 barge loads per week is the design barging target.

The barging personnel will operate on the following rosters:

- Officers – 6months on, 6 months off
- Crew – 9 months on, 3 months off
- Quayside support – 9 months on 3 months off

The offshore crew will be accommodated on the tugs and work vessels. All supplies will be provided by Pacific Nickel via the on shore accommodation camp. The onshore quayside support will be housed in the accommodation camp.

Fuel will be provided by Pacific Nickel at the wharf and will utilise the same fuel type as used in the mining fleet.

15 Project Financial Summary

15.1 Financial Summary

This section presents the financial outcomes of the Kolosori Project Feasibility Study. This evaluation considers the Project on a 100% basis. Unless otherwise stated all amounts are in United States Dollars.

Two operating scenarios were considered:

- Base Case, with the mine schedule representing 97% from Reserves and 3% from Inferred Resources; and
- Expanded Case, with the mine schedule representing 68% from Reserves and 32% from Inferred Resources.

The financial model uses a discounted cashflow methodology to assess the financial viability of the Project. Using an 8% real discount rate, the financial model indicates that the Project delivers a strong financial return across the two options as shown in the table below:

Table 8 Financial Summary

ITEM	BASE CASE	EXPANDED CASE
NPV Post-Tax	$64m	$83m
IRR Post-Tax	156%	170%
Payback period (Mths)	6	6
Ore Mined	3.8 Mwmt @ 1.57% Ni	6.1 Mwmt @ 1.51% Ni
Peak Annual Ore Shipping (M wmt pa)	1.40	1.45
Mine Life (years)	3.0	5.8
LOM[1] Net Revenue (incl. quality bonus & penalty payments, shipping & marketing fees)	$212m	$313m
LOM OpEx (excl tax and royalties)	$116m	$186m
Initial CapEx	$21.3m	$21.3m
LOM Sales Price 1.5% Ni CIF China (USD/wmt)	$75.00	$75.00
LOM C1 Costs ($/wmt sold FOB)	$31.08	$30.70
LOM Taxes and Royalties ($/wmt sold FOB)	$2.96	$2.84

[1] Life of Mine

15.2 Capital Estimate

The capital cost estimate has been prepared in the following components:

- Site Development and Maintenance Facilities
- Site Infrastructure

- Owners team accommodation, transport and equipment

The estimate has been completed to an accuracy of ± 15% and a summary of the site development, infrastructure and owners capital estimate is below.

Earthworks & Mobilisation	USD'm	10.88
Infastructure	USD'm	5.61
Owners Costs	USD'm	2.12
Working Capital	USD'm	2.69
Total	USD'm	21.30

Figure 41 Site Development and Maintenance Facilities CAPEX

A summary of the site infrastructure capital estimate is below.

Site Infrastructure		
Wharf Facility		
Timber (incl. 20% contingency)	USD	765,317
Sub-total	**USD**	**765,317**
Creek Crossing Bridge		
Creek Bridge (incl 30% contingency)	USD	154,721
Sub-total	**USD**	**154,721**
Initial Operations Camp (50 beds)		
50 man camp	USD	241,199
Sub-total	**USD**	**241,199**
Operations Camp (200 beds)		
Earthworks	USD	287,154
Building facilities	USD	927,083
Water facilities	USD	235,331
Power facilities	USD	492,818
Freight	USD	421,475
Contractor indirects	USD	71,654
Contingency (15%)	USD	365,327
Sub-total	**USD**	**2,800,842**
Mine and Port Operations Facilities		
Earthworks	USD	30,000
Port and facilities	USD	149,533
Fuel facilities Stage 1	USD	163,955
Fuel facilities Stage 2	USD	305,075
Water facilities	USD	36,868
Power facilities	USD	282,173
Freight	USD	89,700
SIMA	USD	180,000
Contractor indirects	USD	16,440
Contingency (15%)	USD	188,062
Sub-total	**USD**	**1,441,806**
Laboratory		
Laboratory facility and equiment fitout	USD	210,245
Sub-total	**USD**	**210,245**
Site Infrastructure Subtotal		**5,614,129**

Figure 42 Site Infrastructure CAPEX

15.3 Operating Estimate

The LOM schedule was assessed by HBS to determine the duration, fleet, personnel and support requirements to execute mining operations for the Kolosori project. Their response was adopted as the basis for the operating cost estimate, with adjustment applied where scope reduction and value engineering opportunities have been recognised. The cost estimate includes mobilisation and establishment of all plant, equipment, personnel and facilities for the mining operation, and ongoing mining breakdown of direct and time based costs.

Barging operations were estimated with support from local contractors who engaged with barge operators based in the Solomon Islands. The estimate is inclusive of tugs, barges, fuel, crew, stevedores and support costs to manage barge operations for the project.

PNM manning and operation costs have been included that covered management, geological services, HSE controls, port operations, laboratory, general and administration.

All other operating costs have been determined by PNM which includes general and administration, sales contracts, product shipping, taxes, royalties and landowner payments.

15.4 Basis of Quantities

The nature of the work is primarily PNM site directed building scope where local contractors are engaged for the camp construction, whilst HBS as the mining contractor will mobilise and install fit for purpose maintenance facilities. Engineering designs have been completed for the wharf and civil works, including the main haul road embankment, access roads, and primary stockpiles. Based on this the quantity definition is deemed suitable for a DFS study level of definition.

15.5 Basis of Pricing

The capital estimate prepared for this DFS study is primarily driven by the LOM mine schedule, which determines mine development and bulk earthworks designs and quantities, and the pricing received from mining contractor HBS who were engaged through an early contractor involvement (ECI) phase. The scope priced by HBS included all bulk earthworks and mining operations infrastructure, whilst local contractors engaged onsite for early works assisted with estimating the building facilities (camp and port/mine operational buildings), wharf and creek crossing components. Vendors were engaged to provide quotations for equipment components where required.

As a result, the pricing basis for the DFS estimate is considered suitable for a typical DFS level estimate.

15.6 Economic Assumptions

The Project's economic are presented in 2022 real price and cost basis.

Table 9 Economic Assumptions

ITEM	ASSUMPTION
SBD:USD	8.23
AUD:USD	0.70
1.5% Ni DSO CIF China	USD75.00/wmt
Diesel	USD1.20/ltr

15.7 Taxation and Royalties

The fiscal regime applied to the Project is set out from the Mining Agreement (2022) between the Government of Solomon Islands and the Company for Mining Lease 02/2022.

Table 10 Taxation and Royalty Assumptions

FISCAL	ASSUMPTION

Solomon Island Corporate Tax	• 35% with exemption for first four years of production
Sales and Goods Tax	• Exempt
Additional Profits Tax	• 20%
State Royalty	• 3.0% of value calculated on a Free on Board (FOB) basis
Customs Duty	• 1.5% of value calculated on a Free on Board (FOB) basis
Depreciation	• Life of mine • Straight line depreciation

15.8 Operational Assumptions

The financial evaluation of the project has made several assumptions:

- All physical assumptions are on a wet basis other than nickel content which is on a dry basis
- Inflation is not considered and future forecast cash flows have been discounted using a real discount rate to generate Net Present Value calculations.
- No allocations for head office costs have been included.
- Working capital is considered in the following:
  - Initial stockpile build up sufficient for the first shipment;
  - Ore with moisture < 31% being available for direct shipment with the balance requiring a 8 week resident time on drying stockpiles;
  - Shipments year round with provisions for weather delays;
  - Sales receipts with a Provisional Payment of 85% follow by a Final Payment one month later.
- Environmental bond of SBD 200,000

15.9 Reasonable Basis for Funding Assumption

To achieve the outcomes indicated in the Feasibility Study, pre-production funding of US$21.5 million will be required. Based on the robust financial outcomes and strong technical fundamentals, the Company believes the Feasibility Study provides good support for financing the Project via traditional debt and equity markets. There is, however, no certainty that funding will be available when it is required.

The Company has employed Blackbird Commodity Partners Pty Ltd as its corporate advisor, who specialises in structuring and sourcing of project financing in the mining industry.

Blackbird has managed a competitive process which resulted in mandating Glencore International AG on a non-binding indicative basis to provide a US$22m senior secured debt facility to the Project with a three year repayment term. This debt facility is subject to Glencore completing its final due diligence, receipt of all internal approval and full documentation. The selection of Glencore was the result of a competitive process with several proposals from perspective debt providers being received by the Company. This level of interest by a range of potential financiers is taken as support for the attractive nature of the Project.

15.10 Nickel DSO Ore market and sales

The Project DSO saprolite product will be a high Nickel grade ore that is destined for the Rotary Kiln Electric Arc Furnace (RKEF) plants located in China.

The RKEF plants produce a nickel pig iron which is then used to make stainless steel. The demand in China for saprolite ore is high due to the domestic ban on DSO Nickel ore exports from Indonesia.

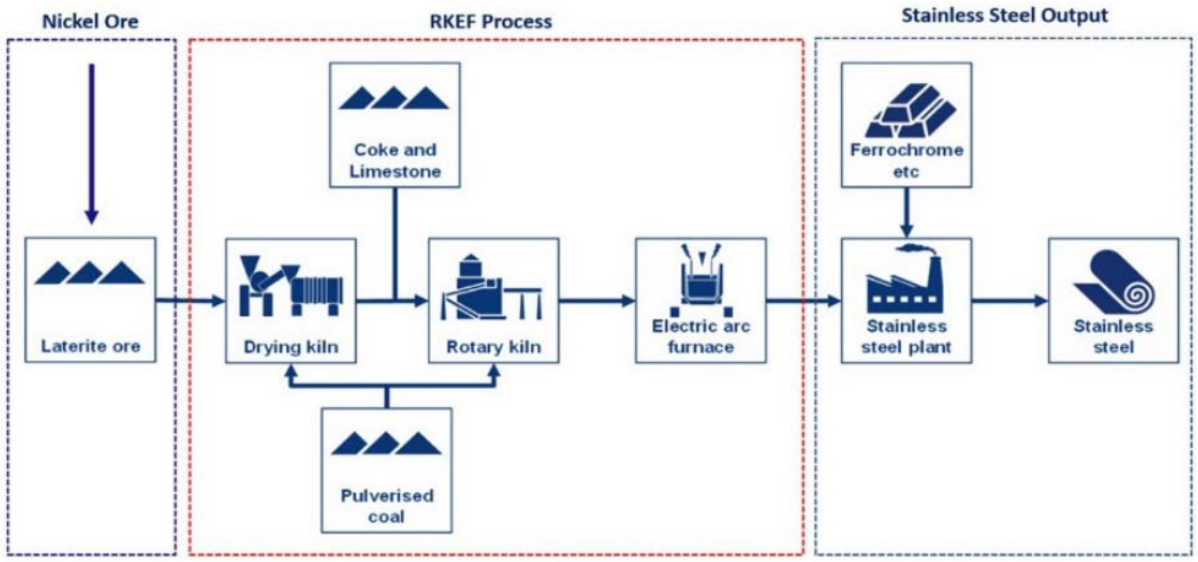


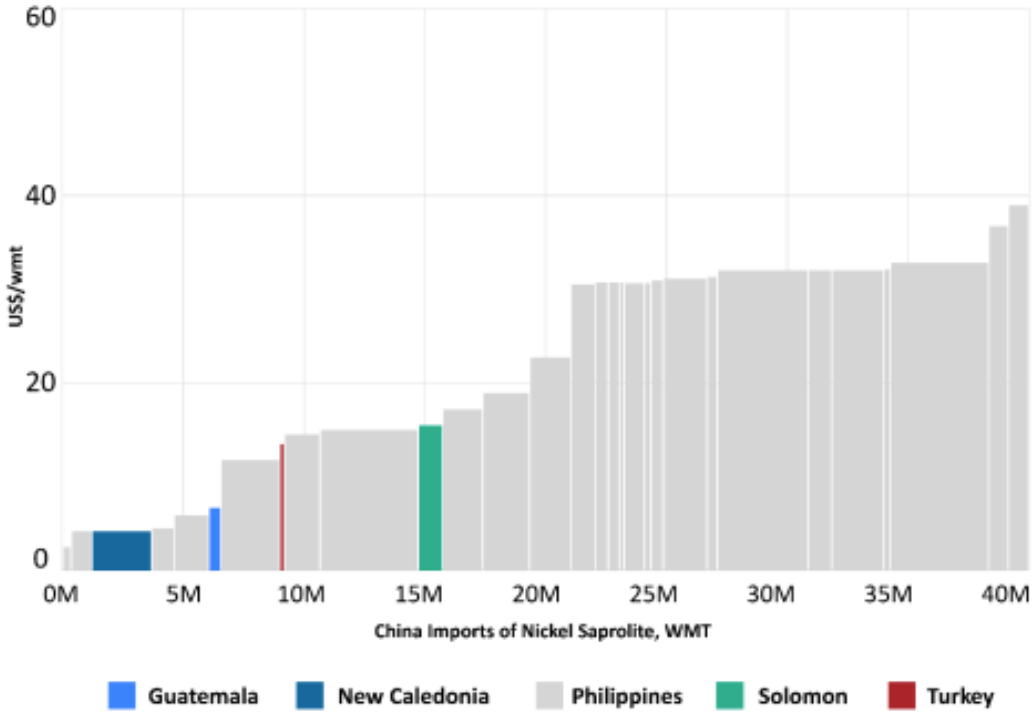
Figure 43 Laterite DSO Nickel Ore Downstream Processing

Laterite nickel sources are becoming an increasingly important source of nickel units to the global stainless steel and EV battery markets. Approximately 70% of global nickel demand (around 2.5mtpa) is employed in the manufacture of stainless steel. Stainless steel is a widely used industrial alloy, highly impervious to corrosion, used in cookware and major domestic appliances and widely throughout the world's chemical, paper water industries.

Global nickel supply is driven by two main types of nickel ore being, i) nickel sulphides derived from primary nickel orebodies (now a mature industry); and, ii) nickel laterites formed from the weathering and subsequent enrichment of nickel bearing rock types. The laterite deposits and further subdivided into limonite and saprolite.

China imported approximately 44Mt of laterite ore in 2021 with 75% comprising saprolite ore. Following recent domestic export bans by Indonesia, the Philippines has dominated China's laterite imports totalling for 40Mt or 91%. The grade of the Philippine ore has reduced form 1.68% in 2018 to 1.35% in 2021 and this grade depletion is expected to continued.

Given the decline in the Philippine ore grade, the Project is well placed competitively as demonstrated in the figure below which places it in the bottom half of the 2021 Value in Use cost curve.



Source: CM Group

Figure 44 Ni laterite ore cash cost curve 2021 (CFR China USD/wmt, ViU Adjusted to 1.3% Ni base)

Saprolite ore is a non-exchange traded product with offtake contracts negotiated directly by the producers either with the RKEF consumers or traders. Pricing is based on an agreed index, typically 1.5% or 1.3% Ni CIF China which is then adjusted with bonus or penalty payments linked to the ore's nickel and moisture content for each shipment.

To assist with marketing the Project's product, the Company has mandated on a non-binding basis Glencore International AG to provide an Offtake Facility. The Offtake Facility proposed is for 100% of the Project's production for a 4 year term which can be extended a further 2 years by mutual agreement. The pricing will be linked to market prices and subject to standard commercial adjustments for product quality. The Offtake Facilities remain subject to Glencore completing its final due diligence, internal approvals and full documentation.

Restrictions do apply to the transportation of laterite ores due to the moisture content raising the risk of liquification whilst on board the ocean going vessels. For a laterite cargo to be accepted it must be below its Transportable Moisture Limit (TML) which is measured for each ore body. The Project's TML is 37% and it is expected that this will not present a material risk for the Project given the drying strategy to be implemented.

15.11 Base Case cashflow charts and tables

		CY	2022	2023	2024	2025	2026
		TOTAL / AVE		1	2	3	4
Economics							
1.5% Ni DSO CIF China	USD/lb	75.00					
SBD:USD	FX	8.23					
AUD:USD	FX	0.70					
Mining							
Waste Mined	M w mt	1.53	-	0.46	0.65	0.42	0.00
Ore Mined	**M w mt**	**3.77**	**-**	**0.51**	**1.49**	**1.43**	**0.34**
Ore Mined	M dmt	2.64	-	0.36	1.05	0.99	0.24
Nickel grade	**% Ni**	**1.57%**	**-**	**1.68%**	**1.64%**	**1.52%**	**1.31%**
Fe2O3 grade	% Fe2O3	21.16%	-	19.88%	20.41%	22.20%	22.06%
Moisture	%	31.63%	-	29.90%	30.50%	32.85%	34.07%
Shipped							
Ore	M w mt	3.75	-	0.45	1.40	1.40	0.50
Ore	M dmt	2.63	-	0.32	0.99	0.97	0.35
Nickel grade	% Ni	1.57%	-	1.68%	1.63%	1.55%	1.37%
Fe2O3 grade	% Fe2O3	21.16%	-	19.31%	20.32%	21.94%	23.06%
Moisture	%	31.59%	-	28.80%	29.99%	32.52%	35.97%
Revenue							
Net Revenue	**USD'm**	**212.1**	**-**	**28.78**	**86.91**	**76.19**	**20.22**
OpEx							
Mining	USD'm	68.24	-	17.03	24.68	20.62	5.91
Barging	USD'm	29.28	-	4.05	10.55	10.53	4.15
Owner Labour	USD'm	15.09	-	2.03	5.40	5.40	2.26
Other	USD'm	0.94	-	0.22	0.31	0.31	0.11
G&A	USD'm	2.75	-	0.82	0.92	0.92	0.10
Total OpEx	**USD'm**	**116.30**	**-**	**24.16**	**41.85**	**37.77**	**12.52**
CapEx							
Initial	USD'm	9.981	-	9.98	-	-	-
Sustaining Capital	USD'm	0.24	-	-	0.09	0.11	0.04
Total CapEx	**USD'm**	**10.22**	**-**	**9.98**	**0.09**	**0.11**	**0.04**
Tax & Royalties							
Total Tax & Royalties	**USD'm**	**11.1**	**-**	**1.67**	**4.46**	**3.96**	**1.02**
Cash Flow (Operational)	**USD'm**	**74.4**	**-**	**(7.01)**	**40.51**	**34.34**	**6.55**
Unit Cost							

Unit Costs (per wmt shipped)		
Revenue (FOB)	**USD/w mt**	**56.56**
Mining	USD/w mt	18.20
Barging	USD/w mt	7.81
Owner Labour	USD/w mt	4.02
Other	USD/w mt	0.25
G&A	USD/w mt	0.73
Sustaining CapEx	USD/w mt	0.06
Total Cost of Operations	**USD/w mt**	**31.08**
Taxs & Royalties	USD/w mt	2.96
Operating Margin	**USD/w mt**	**22.52**

Figure 45 Base case Life of Mine Cashflow and Unit Costs

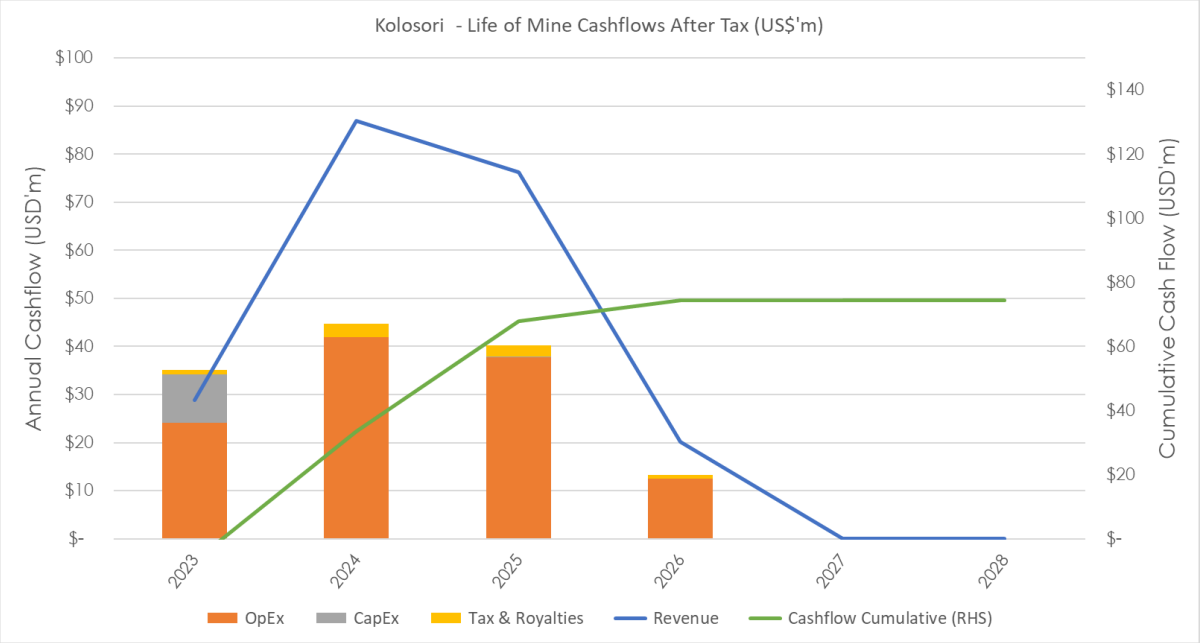


Figure 46 Base Case Post Tax Cashflow

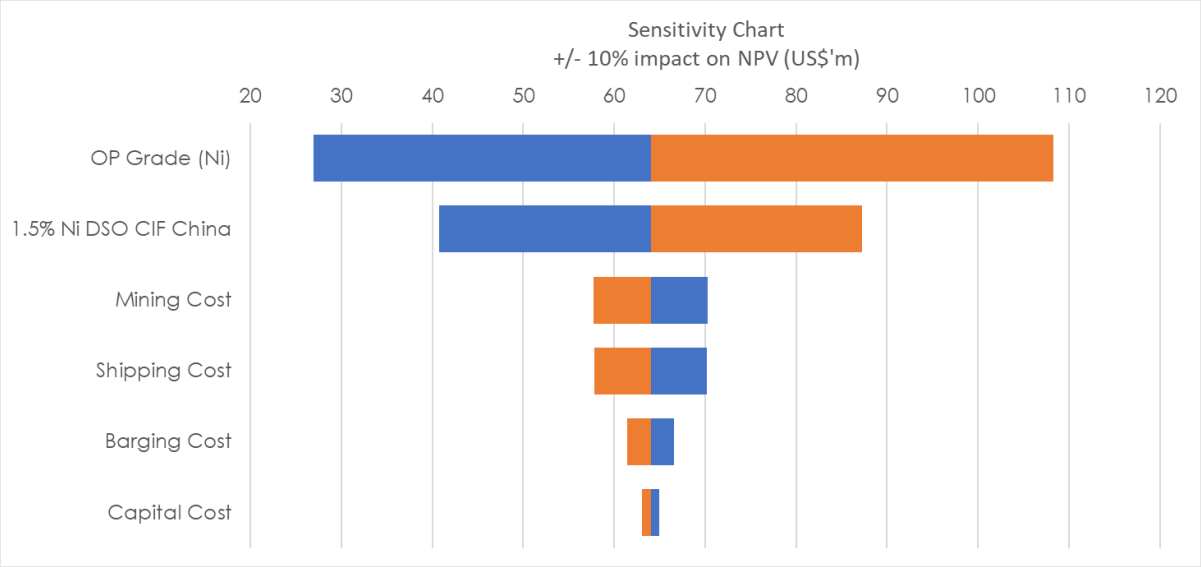


Figure 47 Base Case Sensitivity Analysis

15.12 Expanded Case charts and tables.

		CY	2022	2023	2024	2025	2026	2027	2028
		TOTAL / AVE		1	2	3	4	5	6
Economics									
1.5% Ni DSO CIF China	USD/lb	75.00							
SBD:USD	FX	8.23							
AUD:USD	FX	0.70							
Mining									
Waste Mined	M w mt	2.33	-	0.44	0.83	0.52	0.38	0.17	0.00
Ore Mined	**M w mt**	**6.06**	**-**	**0.54**	**1.48**	**1.38**	**1.46**	**0.99**	**0.22**
Ore Mined	M dmt	4.23	-	0.38	1.04	0.96	1.02	0.68	0.16
Nickel grade	**% Ni**	**1.51%**	**-**	**1.69%**	**1.62%**	**1.54%**	**1.45%**	**1.36%**	**1.32%**
Fe2O3 grade	% Fe2O3	21.35%	-	20.15%	20.80%	21.36%	21.45%	23.64%	17.30%
Moisture	%	31.36%	-	29.44%	30.28%	30.05%	30.95%	35.82%	34.33%
Shipped									
Ore	M w mt	6.05	-	0.45	1.45	1.35	1.45	1.00	0.35
Ore	M dmt	4.23	-	0.32	1.02	0.94	1.02	0.69	0.25
Nickel grade	% Ni	1.51%	-	1.69%	1.62%	1.53%	1.48%	1.37%	1.30%
Fe2O3 grade	% Fe2O3	21.36%	-	19.31%	20.65%	20.92%	21.36%	24.10%	20.97%
Moisture	%	31.35%	-	28.04%	30.14%	29.44%	30.77%	35.99%	37.23%
Revenue									
Net Revenue	**USD'm**	**312.6**	**-**	**29.10**	**89.05**	**72.13**	**70.85**	**39.86**	**11.59**
OpEx									
Mining	USD'm	104.60	-	17.02	25.35	19.33	19.99	17.82	5.09
Barging	USD'm	49.05	-	4.05	10.68	10.40	10.66	9.48	3.77
Owner Labour	USD'm	25.83	-	2.03	5.40	5.40	5.44	5.44	2.12
Other	USD'm	1.55	-	0.22	0.31	0.31	0.31	0.31	0.11
G&A	USD'm	4.59	-	0.82	0.92	0.92	0.92	0.92	0.10
Total OpEx	**USD'm**	**185.62**	**-**	**24.14**	**42.66**	**36.35**	**37.32**	**33.96**	**11.19**
CapEx									
Initial	USD'm	9.981	-	9.98	-	-	-	-	
Sustaining Capital	USD'm	0.46	-	-	0.09	0.11	0.11	0.11	0.04
Total CapEx	**USD'm**	**10.44**	**-**	**9.98**	**0.09**	**0.11**	**0.11**	**0.11**	**0.04**
Tax & Royalties									
Total Tax & Royalties	**USD'm**	**17.2**	**-**	**1.68**	**4.56**	**3.78**	**3.71**	**2.87**	**0.62**
Cash Flow (Operational)	**USD'm**	**99.2**	**-**	**(6.68)**	**41.75**	**31.90**	**29.68**	**2.90**	**(0.33)**
Unit Cost									

Unit Costs (per wmt shipped)		
Revenue (FOB)	**USD/w mt**	**51.67**
Mining	USD/w mt	17.29
Barging	USD/w mt	8.11
Owner Labour	USD/w mt	4.27
Other	USD/w mt	0.26
G&A	USD/w mt	0.76
Sustaining CapEx	USD/w mt	0.08
Total Cost of Operations	**USD/w mt**	**30.76**
Taxs & Royalties	USD/w mt	2.84
Operating Margin	**USD/w mt**	**18.07**

Figure 48 Expanded case Life of Mine Cashflow and Unit Costs

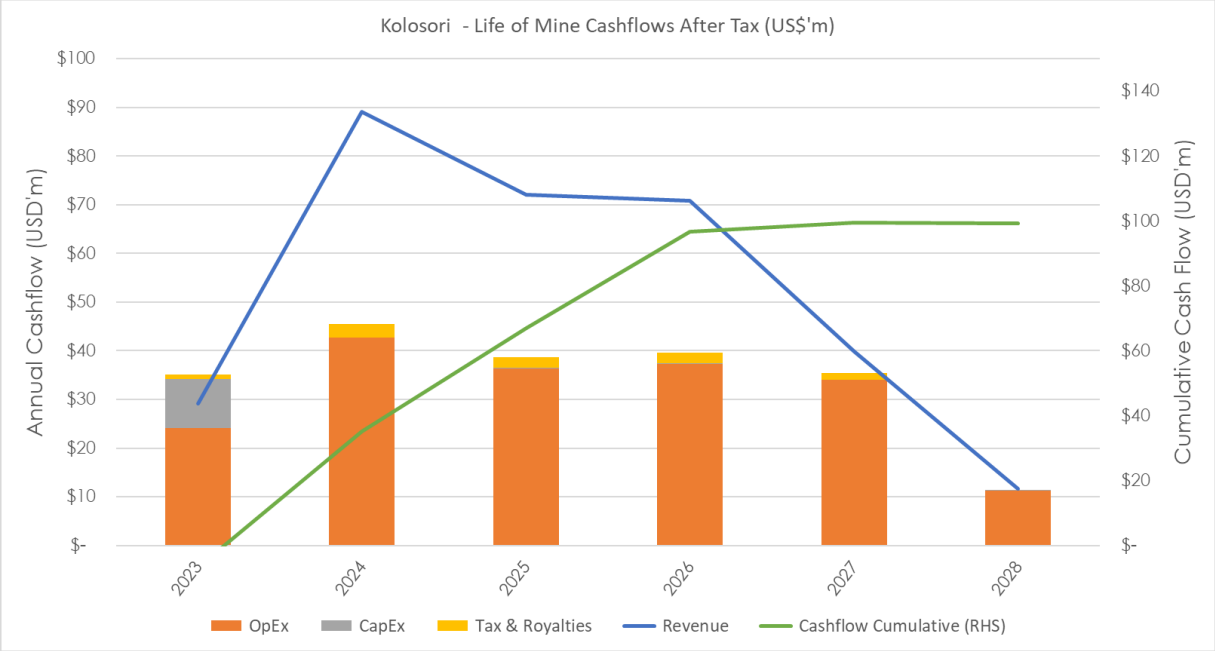


Figure 49 Expanded Case Post Tax Cashflow

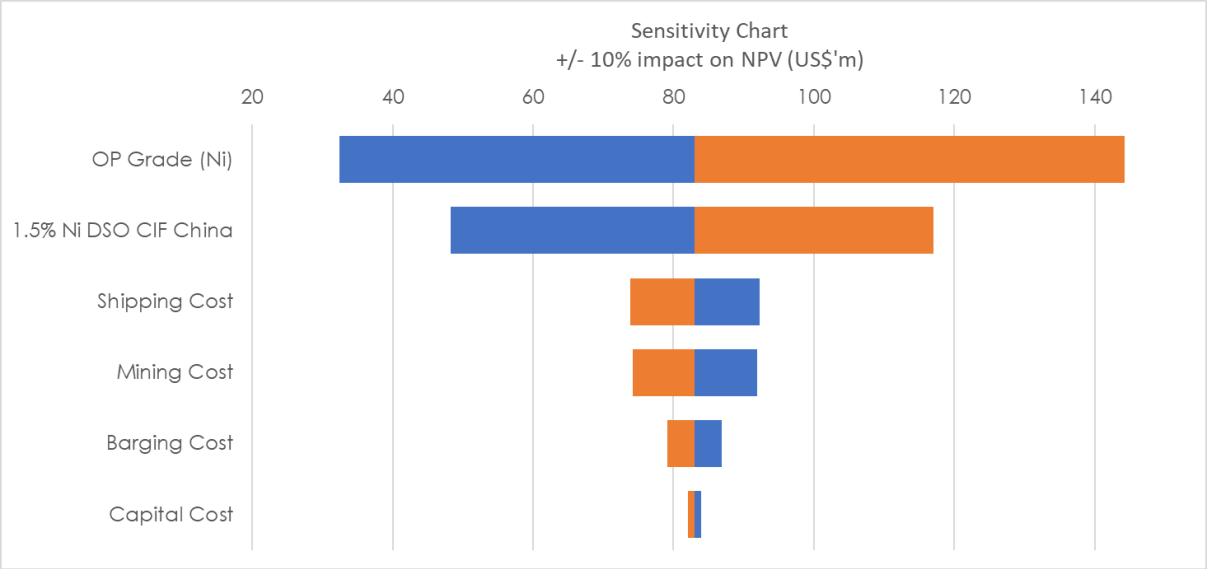


Figure 50 Expanded Case Sensitivity Analysis

APPENDIX A – ORE RESERVE STATEMENT

Ore Reserves Statement

Kolosori Nickel Project

As at 31 January 2023

Prepared by Australian Mine Design and Development Pty Ltd

for

Pacific Nickel Mines Limited

Authors: John Wyche - AMDAD

Effective Date: 31 January 2023
Submitted Date: 31 January 2023

Office: *Brisbane*
Address: *PO Box 15366* *Level 4*
City East QLD 4002 *46 Edward Street*
Brisbane QLD 4000
Telephone: *61 7 3012 9256* *61 419 299323*
Facsimile: *61 7 3012 9284*
Email: *Chris.desoe@amdad.com.au* *John.wyche@amdad.com.au*

1 ORE RESERVES STATEMENT

SCOPE

This statement forms the maiden Ore Reserve for the Kolosori Nickel Project. It deals with open cut mining of lateritic nickel. The project is being developed by Pacific Nickel Mines Limited (PNM) which holds 80% ownership with the remaining 20% held by local land owners.

Kolosori is at the southern end of Isabel Island in the Solomon Islands. Mining is planned from eight shallow pits which all mine the same lateritic nickel horizon within Pacific Nickel Mines Limited's (PNM) mining tenement. The operation is planned to comprise:

- Mining by 50 tonne hydraulic excavators loading 40 tonne articulated dump trucks and 30 tonne rigid body trucks.
- Stockpiling of mined ore. Ore with a moisture content less than 31% will be available for direct shipping. Ore with a moisture content over 31% will be held in stockpile to air dry to reduce the moisture prior to blending back with the low moisture ore for shipping.
- Trans-shipment by barge to load ships in deeper water for transport to the smelter port.

Particular features of the deposit relevant to the Ore Reserve include:

- Direct shipping ore with relatively high grade against comparable lateritic nickel operations.
- Ore moistures ranging from 15% to 45%.
- Location immediately adjacent to the coast for trans-shipment to ships.
- Shallow pit with depths from surface of 5 to 15 metres.
- Steep topography with pits ranging from 60 to 370 metres above sea level.
- Steep, irregular pit floors.
- High clay content overburden and ore.

The impact of these features on the modifying factors for the Ore Reserve are discussed in Section 4 of Table 1 from the JORC Code 2012 which is included as part of this statement.

This Ore Reserves Statement has been prepared in conjunction with PNM's Feasibility Study. The Feasibility Study provides more detail and context beyond the modifying factors discussed in this statement.

CONTRIBUTING PERSONS

The January 2023 Ore Reserve Statement prepared by AMDAD is supported by contributions from the persons listed in Table 2.

ACCORD WITH JORC CODE

This Ore Reserves Statement has been prepared in accordance with the guidelines of the Australasian Code for the Reporting of Resources and Reserves 2012 Edition (the JORC Code 2012).

The Competent Person signing off on the overall Ore Reserves Estimate is Mr John Wyche, of Australian Mine Design and Development Pty Ltd, who is a Fellow of the Australasian Institute of Mining and Metallurgy and who has 31 years of relevant experience in operations and consulting for open pit metalliferous and industrial mineral mines.

ORE RESERVES SUMMARY

The Ore Reserve Estimate is summarised in Table 1.

Table 1 Kolosori Project Ore Reserves

Category	Volume	Wet	Dry	Ni	Fe	Moisture
	Mbcm	Mt	Mt	%	%	%
Proved						
Transition	0.0	0.0	0.0	0.0	0	0
Saprolite	0.0	0.0	0.0	0.0	0	0
Total	0.0	0.0	0.0	0.0	0	0
Probable						
Transition	0.4	0.7	0.5	1.6	42	39
Saprolite	1.8	2.9	2.1	1.6	17	28
Total	2.2	3.7	2.6	1.6	21	30
Proved + Probable						
Transition	0.4	0.7	0.5	1.6	42	39
Saprolite	1.8	2.9	2.1	1.6	17	28
Total	**2.2**	**3.7**	**2.6**	**1.6**	**21**	**30**
Waste	2.2	3.9	2.7			
Waste : Ore	1.0	1.1	1.0			

Note: The tonnes and grades shown in the totals rows are stated to a number of significant figures reflecting the confidence of the estimate. The table may nevertheless show apparent inconsistencies between the sum of components and the corresponding rounded totals.

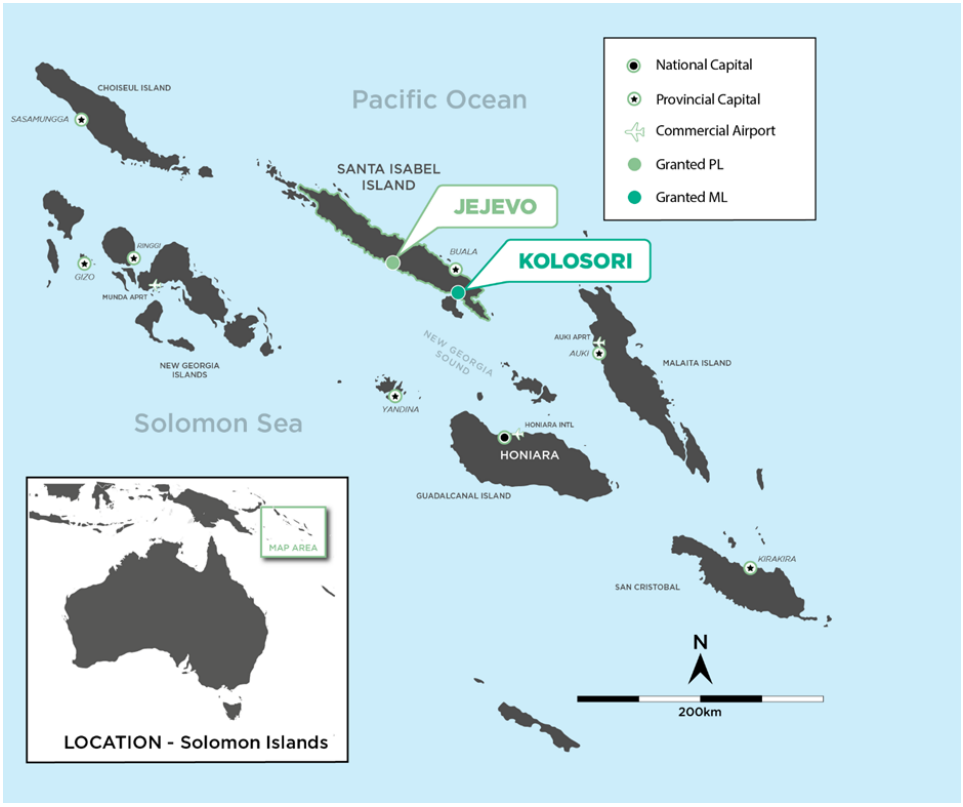


Figure 1 Project Location

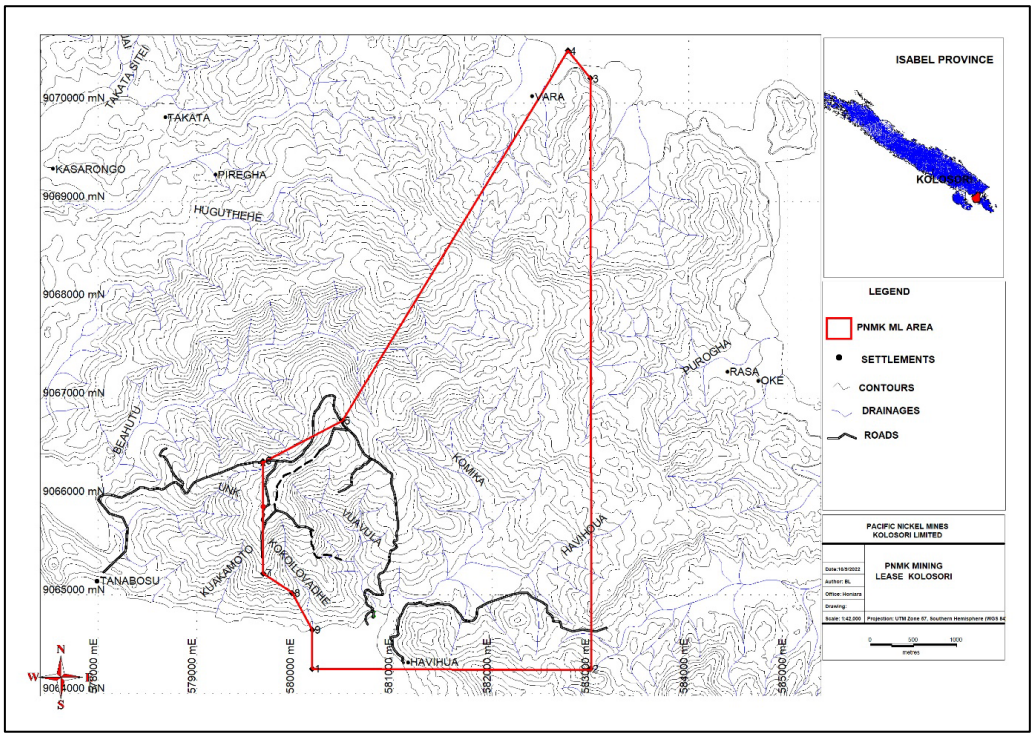


Figure 2 Project Location

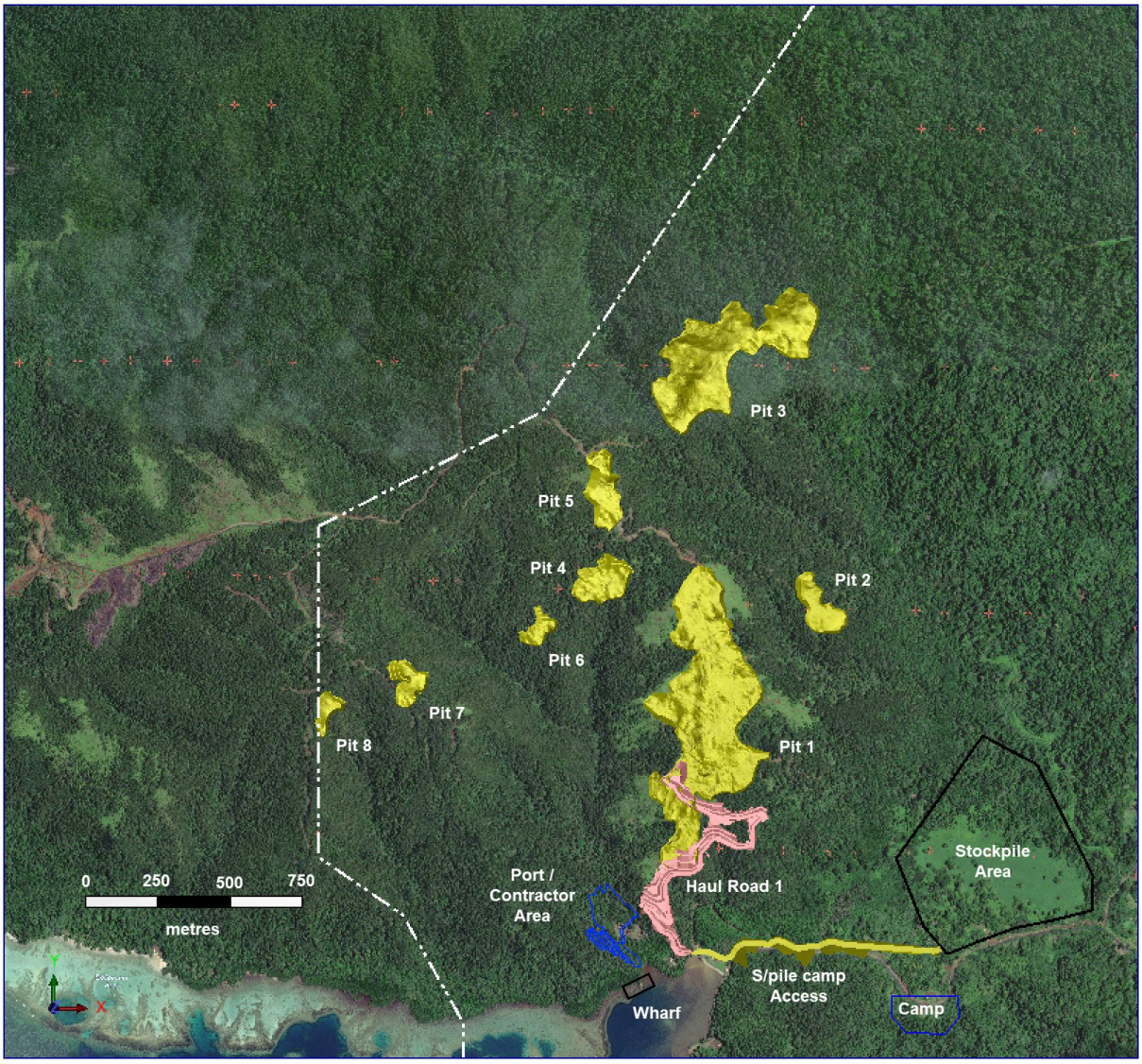


Figure 3 Mine Layout

Table 2 Contributing Experts

Expert Person/Company	Area of Expertise	References / Information Supplied
Stuart Hutchin, Mining One	Mineral resource estimation	November 2022 Mineral Resource Estimate and resource block model.
Peter Scott, Environmental Earth Sciences	Environmental and social studies and planning	Environmental and Social Impact Assessment and planning for the project.
Nick Martin, Blackbird Commodity Partners	Project finance	Financial model.
Geoff Hiller, CEO Pacific Nickel Mines	Project development.	Project approvals, marketing.
Mike James, General Manager Project Development, Pacific Nickel Mines	Site management and survey.	Site costs, survey, Solomon Islands based inputs.
Simon Birch, Resindo	Project construction	Jetty and related infrastructure
Duane Maxwell, Maxwell Energy and Resources	Study coordinator, project development	Bridge design and general study coordination.
John Wyche, Australian Mine Design and Development	Mining engineering.	Pit optimisation, design and scheduling. Liaison with mining contractors.

The contributing experts listed above are responsible for elements of the Mineral Resource or Modifying Factors.

ORE RESERVE ASSESSMENT

Table 3 JORC Table 1 Section 4, Estimation and Reporting Ore Reserves

JORC Code, 2012 Edition – Table 1

As this is a maiden Ore Reserve Estimate for the Kolosori Nickel Project, Sections 1, 2 and 3 of the JORC Code 2012 Table 1 are included here with Section 4 dealing with the Ore Reserve Estimate. Sections 1, 2 and 3 are taken from the November 2022 Mineral Resource Estimate prepared by Mr Stuart Hutchin of Mining One.

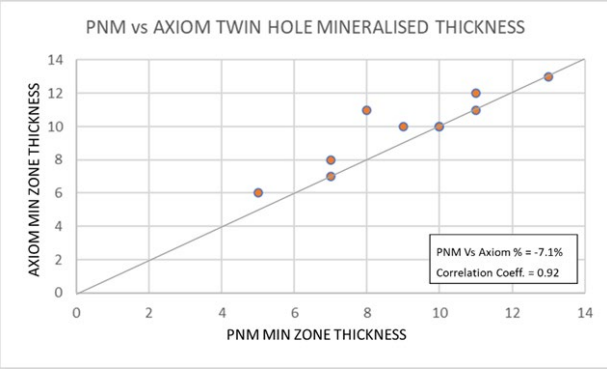
Section 1 Sampling Techniques and Data

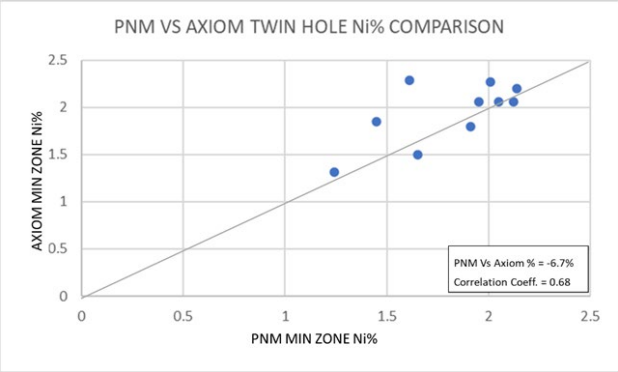
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (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.*	Sampling has been undertaken sporadically over the Kolosori license area since the 1960s. Work was completed by INCO primarily. Axiom Mining Limited who completed work from 2015 through to 2016 supervised diamond drilling programs within the Kolosori project area. Pacific Nickel Mines (PNM) has since completed drilling in 2021 and 2022 at Kolosori. The Diamond drilling was completed over multiple phases that are described as: • November 2014 to June 2015 – 2,241 M were completed with a diamond rig drilling HQ sizes core. Half core was generally sampled at 1m intervals • July 2015 to September 2015 – 5001m completed by man portable diamond drill rigs. NQ sized core was drilled by these rigs, samples were generally taken as whole core on 1m sampling intervals. • August 2015 to November 2015 – 5,476m were drilled using the man portable diamond rigs that produced NQ core that was sampled as whole core on 1m intervals.

Criteria	JORC Code explanation	Commentary
		• (PNM) June 2021 to January 2022 – 1566.05m were drilled using man portable diamond rigs that produced NQ sized core samples. Half core samples were taken typically at 1m intervals. Core samples from the pre 2021 diamond drilling programs were assayed at the Intertek laboratories in Brisbane Australia. Samples were assayed using glass fusion XRF for the standard 12 element nickel laterite suite. Core samples from the 2021 -2022 drilling programs were submitted to the ALS laboratory located in Brisbane. Samples were assayed using glass fusion XRF for the standard 12 element nickel laterite suite.
Drilling techniques	• *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).*	Diamond drilling was completed using a small portable drilling rig that was moved between drill sites using a track based crawler. A larger diamond drill rig was also used between November 2014 and June 2015 that was able to drill HQ size core The rigs drilled conventional NQ sized single tube core that was contained within a plastic sleeve within the core barrel to ensure any loosely consolidated material was contained within the sample interval. These types of drill rigs are commonly used for drilling of laterite hosted deposits within Indonesia and the South Pacific. Holes were drilled vertically through the limonite and saprolite zones into underlying basement.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	Sample recovery averaged greater than 97% given the containment of each sample run within a plastic sleeve within the core barrel.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	All holes were: • marked up for recovery calculations

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• geologically marked up and logged for geology, fractures and recovery • marked up for sampling interval • photographed Geology logging includes lithology, minerals, colour and texture.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	The NQ core was sampled as whole core over samples ranging in length from 0.25m to 1.0m. The majority of sample intervals were 1m in length. Geological contacts were used to determine the sampling intervals where practical to do so. The principal sampling method from the drill core resulted in samples averaging 3-5 kg in weight for each 1m sample. The Intertek laboratory in Australia, a commercial laboratory facility, used standard perpetration methods that included: • 24 hour drying at 90° C • jaw crushing to <5 mm • riffle split to 1.2 to 1.6 kg • pulverised with LM2 sampled to 50 g and 200 g pulps. The ALS laboratory in Brisbane, a commercial laboratory facility, used standard perpetration methods that included: • 24 hour drying at 105° C • jaw crushing to <5 mm • riffle split to 1.0 to 1.5 kg • pulverised with LM2 sampled to 50 g and 200 g pulps.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks,*	All diamond core samples were analysed at either the Intertek or ALS laboratory located in Australia. The glass fusion XRF method was used where the nickel laterite multi-element suite was completed. Assay were determined for: • Ni%, Co%, Mg%, Cr%, Fe%, Mn%, Al%, Si%, Ca% and K%.

Criteria	JORC Code explanation	Commentary
	duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Standards, Blanks and Duplicates were inserted into the sample batches. The combination of QAQC samples inserted by Axiom and by Intertek ranged from 0.3% through to 5.6%, The QAQC samples represented 18.6% of the total diamond core assay dataset. PNM also submitted blanks, standards and duplicates within each assay batch at a ratio of 1:20 samples. No material biases were noted in the QAQC sampling results.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	11 twin holes were drilled to be used for metallurgical testing of the mineralised material. The mineralised zone thickness and nickel grade were within 10% of the original Axiom assay data for these holes. No material bias or errors were noted based on the twin hole results. The plots of the results for both thickness and nickel grade are shown below. 

Criteria	JORC Code explanation	Commentary
		 There were no adjustments to any assays other than the replacement of below detection values with half the detection limit.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Collar locations were surveyed by hand-held GPS. No elevation was recorded, GPS reading accuracy was to approximately 5 m. Collar elevations have been assigned based on the topographic surface that covers the deposit area. All exploration and evaluation work is completed in UTM WGS 84 Zone 57S. A LIDAR survey was completed in August 2022 that covers a section of the main Kolosori deposit area. The LIDAR survey for the Northern area of Kolosori was completed in October 2022.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	Drilling has been completed on spacings ranging from greater than 100m x 100m down to 25m x 25m in the central deposit area. This drill spacing is adequate to establish continuity of the nickel laterite style of mineralization. Drill core samples are generally 1 m in length, the regolith horizons encountered within the deposit are generally greater than 1m in thickness. The drill spacing and sampling intervals are assessed as acceptable for this style of mineralization.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The nickel laterite deposit is formed as a weathered geomorphic surface sourced from ultramafic bedrock units. All diamond holes were vertical and provide a suitable intersection angle. The drill pattern spacing allows for interpretation of the nickel and cobalt mineralization throughout the project area. Regional and local structures are described as horizontal to sub- horizontal and related to thrusting. There is no evidence of cross cutting structures or units that would bias the assay results.
Sample security	• *The measures taken to ensure sample security.*	Axiom reported that samples were escorted from the drill sites to a secure facility at the site camp. Samples were placed in zip tied bags and then escorted to the transport depot located in Honiara. PNM provided supervision by the site Geologist of all samples between the drill site and the storage facility in Honiara where they were packaged for transport to Australia.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	Mining One have reviewed the drilling database that relates to the reported resource area. Previous reviews have been completed by ResEval Pty Ltd for both the Exploration and Diamond Drilling programs. The twin hole and resource definition drilling programs completed in 2021-2022 have also provided confirmation on the validity of the historical assay results reported by Axiom

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	In October 2020 Malachite (now PNM) executed a Share Purchase Agreement (Agreement) to formalise its acquisition of an 80% interest in Kolosori Nickel (SI) Limited ("KNL") which holds a 100% interest in PL 05/19. A Mining lease was then granted on the 14th September 2022 (ML02/2022). The lease area covers the same extents as the previous PL boundary.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	INCO, Kaiser Engineering and Axiom Mining Limited have completed the majority of historical exploration work completed within the Resource area.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Wet tropical laterite. In-situ chemical weathering of the ultramafic rocks with nickel and cobalt enrichment through both residual and supergene processes.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		Diamond drilling programs were primarily completed by Axiom Mining between 2014 and 2016 and then by PNM in 2021 and 2022.
		These holes were drilled on various spacings ranging from 100m x 100m down to 25m x 25m.
		Diamond drilling was completed using a small portable drilling rig that was moved between drill sites using a track based crawler.
		The rigs drilled conventional NQ sized single tube core that was contained within a plastic sleeve within the core barrel to ensure any loosely consolidated material was contained within the sample interval. These types of drill rigs are commonly used for drilling of laterite hosted deposits within Indonesia and the South Pacific.
		Holes were drilled vertically through the limonite and saprolite zones into underlying basement.

Data aggregation methods	• *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.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be*	Weighted averages are used for reporting all assay intervals from the diamond drillholes.

Criteria	JORC Code explanation	Commentary
	clearly stated.	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	The laterite is thin but laterally extensive. The intercepts are almost perpendicular to the mineralisation. Drilling so far has been confined to the major ridgelines due to access and deposit geometry.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Maps are provided in ASX releases that show the distribution of drilling across the Kolosori deposit.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	The significant results reported from the historical drilling use a lower cut-off of 1% Ni with no more than 1m of internal material less than 1% included.
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.*	Significant studies were completed by Axiom Mining in relation to the estimation of JORC compliant resources in 2016 of which included the Pacific Nickel resources now reported within ML 02/22.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Future work will include: • Completion of infill and extensional drilling within the Kolosori deposit area • Testing of regional exploration targets within Mining Lease ML 02/2022 .

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	The information contained within the database was supplied via the Solomon Islands Geology Bureau. The data is sourced from the historical INCO and Kaiser drilling programs and then more recently in the 2010's the Axiom diamond drilling datasets. These datasets were compiled into a master database that contained collar, survey, lithology and assay tables. Validation of the data was completed via plotting of drillholes and results in relation to the topography and matching lithological logging codes on section. Assay data was also compared between adjacent drillholes to determine correlation of between different phases of drilling. The Axiom series of holes were also accompanied by QAQC samples including Standards, Blanks and Duplicates
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	Site visit completed in October 2022.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	Nickel is concentrated in a lateritic profile that overlays ultramafic rocks. The lateritic profiles are developed primarily on ridge lines within the project area. The resource has been modelled based on the following regolith domains from the top of the deposit to the base: • Overburden/Fe Cap • Limonite • Transitional • Saprolite • Weathered Bedrock

Criteria	JORC Code explanation	Commentary
		These domains were built based on a combination of geological logging and multi-element analysis. Ni, Fe, Mg, Ca and Si values were used to guide the boundaries on these domains, boundaries are modelled as hard boundaries in that only data contained within each domain was used to estimate grades into each particular domain. Grades show strong lateral continuity within each of the modelled domains, this is due to the laterization process for accumulation of nickel and cobalt mineralisation.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Kolosori deposit exists over a large area of approximately 2km by 3km on Isabel island (Solomon Islands). Individual regolith domains average in thickness ranging between 3m and 10m. The deposits all occur within 50m depth of the topography surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of*	The Kolosori block model was constructed using a parent cell size of 20m (Y) by 20m (X) by 5m (Z) with sub blocking down to a minimum size of 5m (Y) by 5m(X) by 1.25m (Z). The grade estimation was completed using Ordinary Kriging. Estimation parameters were based of variogram analysis of the composite files created for each regolith domain. Leapfrog™ and Surpac™ software was used to build the domain models and create the block model respectively. Blocks were estimated for Ni (%), Co (%), Fe_2O_3 (%), MgO (%), Al_2O_3, (%) CaO(%), Cr_2O_3 (%), K_2O (%), MnO (%), Na_2O (%), P_2O_5 (%), SO_3 (%), SiO_2 (%), TiO_2 (%) and LOI (%). Insitu Moisture was also estimated into the model based on wet and dry sample weights. The estimation of these attributes was required to support the metallurgical assessment of the deposit. The drill spacing ranges from 25m x 25m at its closet, some areas are drilled at 50m x 50m spacing and then out to greater than 100m on the periphery of the deposit. The parent block size is therefore suitable in relation to the drill spacing.

Criteria	JORC Code explanation	Commentary
	model data to drill hole data, and use of reconciliation data if available.	The sub blocking cell size was down to a minimum of 5m (Y) x 5m (X) by 1.25m (Z). This accounts for the potential bench and flitch heights and the lateral block size to be mined within an open pit scenario. Dynamic isotropy was used to account for the variable dip and dip direction of the weathering profile for each regolith domain. The search ellipsoid for each block was modified to account for variable dip and dip direction. No correlation between variables was used apart from using the MgO%, Fe_2O_3%, SiO_2% and CaO% values to guide the coding of the regolith domains The estimate was constrained with the Fecap/Overburden, Limonite, Transitional, Saprolite and Bedrock domains. Only sample data located within each of these domains was used to inform the estimation of grades within each respective domain. Hard boundaries were therefore applied. No grade capping was assessed as required due to lack of grade outliers. The style of the Kolosori deposit leads to a relatively homogenous distribution of nickel grades with low nugget values. The estimation process and results were checked via comparison of block model grades and regolith coding with the raw drilling data and also by plotting the composite data against the raw drillhole data and the block grades.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated based on dry and wet insitu tonnages. Moisture contents are reported within the model also.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	Resources were reported above a 1.0% and 1.2% nickel cut-off. The cut-offs used deliver an average global resource grade between 1.46% and 1.56%, application of the current nickel prices ($33,900/t) therefore values the material at the cut-off grades of between $339 and $407 USD/t.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	The potential mining method will be open pit. The block model has been constructed with parent and sub cell sizes to account for this. The deposit occurs from surface down to a maximum depth of 50m. Given the shallow nature of the reported mineral resources and the value per tonne ascribed to the blocks the criteria of the reasonable prospects for eventual economic extraction are met.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	The block model contains grade estimation of nickel and cobalt and all elements (compounds) that effect the metallurgical processing of the nickel laterite ore. The resources are therefore reported to enable assessment of the processing amenability of the material.
Environmen-tal factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Environmental studies are ongoing however the project will likely comprise a series of shallow open pits where waste material will be stored in surface waste dumps and/or backfilled into the mined pits in a staged process. The product is likely to comprise direct shipping ore, onsite tailings dams and processing infrastructure is therefore not envisaged to be required.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	2,957 density measurements were used to assign density values to each material type. A combination of the callipers and volume via water displacement methods were used depending on the sample type. For example the callipers method was used for soil samples and the displacement method used where competent core sample material was available. The densities were assigned via each regolith domain

Criteria	JORC Code explanation	Commentary
		<table><tr><th>Domain</th><th>Wet Bulk Density</th><th>Dry Bulk Density</th></tr><tr><td>FeCap</td><td>1.68</td><td>1.21</td></tr><tr><td>Limonite</td><td>1.76</td><td>1.18</td></tr><tr><td>Transitional</td><td>1.80</td><td>1.10</td></tr><tr><td>Saprolite</td><td>1.66</td><td>1.20</td></tr><tr><td>Bedrock</td><td>2.32</td><td>1.97</td></tr></table>
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The resource is classified based on the average drill spacing and the results of the variogram analysis. The variograms provided ranges averaging 35m for the major structure. Wireframes were constructed to code the model for resource class. In general terms measured blocks are informed where drill spacing is 25m or less, Indicated where drill spacing is between 25m and 50m and inferred where spacing is between 50m and 150m. The classification criteria is assessed as appropriate in relation to the style of mineralisation and the average drill spacing through the deposit area.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	No audits or reviews have yet been completed on this estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include*	The block model is based on geological domain layers that represent the commonly encountered regolith profile in nickel laterite deposits. The deposit has been drilled down to a 25m x 25m spacing in places where results show a strong continuity of nickel and cobalt grades, especially in the Saprolite and Transitional domains. The drilling results therefore provide validation of the expected geological setting. The mineral assemblages and ratios noted in the assay dataset are line with those used to determine the boundaries between bedrock, saprolite, transitional, limonite and overburden material.

Criteria	JORC Code explanation	Commentary
	assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Within the drilled areas there is a moderate to high level of confidence in the grade and thickness estimates of the deposit. A small 5000t trial mining exercise has been completed with material stockpiled awaiting processing.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Ore Reserve is based on the Mineral Resource Estimate for the Kolosori lateritic nickel deposit prepared for Pacific Nickel Mines Limited (PNM) by Mr Stuart Hutchin of Mining One in November 2022. The resource block model provided Mr Hutchin is *kolosori_nov22_bm.mdl*. Apart from global adjustments for mining loss and dilution this model was used without modification for the Ore Reserve Estimate. The Mineral Resource is inclusive of the Ore Reserves.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	The Competent Person for the Ore Reserve is Mr John Wyche of Australian Mine Design and Development Pty Ltd (AMDAD). Mr Wyche was unable to visit the site during 2022 due to the COVID19 pandemic and prior commitments. In lieu of a site visit Mr Wyche has taken reasonable steps to confirm topographic, geological, ore quality, cost, environmental, permitting and local community information provided by PNM and their consultants. Mr Wyche has visited another project in the Solomon Islands with a similar climate, topography and vegetation setting and is familiar with the physical issues in mining the deposit. Mr Wyche has over 30 years experience in planning and operation of opencut mines in similar conditions in the Solomon Islands, Papua New Guinea, Indonesia and the Philippines. Mr Wyche is satisfied that the information available is adequate to support a Probable Ore Reserve.

Criteria	JORC Code explanation	Commentary
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The Ore Reserve Estimate was prepared in conjunction with a Feasibility Study prepared by PNM and their consultants. Discussion of the Modifying Factors in this Ore Reserve document summarises more detailed information in the Feasibility Study.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	The cut off grade is defined as the nickel grade which just pays for the ore related operating costs of bringing one unit of product to market. At Kolosori the product is wet tonnes of direct shipping ore (DSO). The ore related costs are: • The additional cost of mining material as ore as opposed to waste (mainly extra haulage cost). • Grade control drilling and assaying. • Stockpile management costs. • Site owner's team costs. • Site general and administration costs. • Barge loading cost. • Shipping cost. • Royalties. Ore related costs do not include waste mining. Revenue is calculated per wet metric tonne (wmt) shipped. The price per wmt is calculated as: Value of contained nickel = Ni% x dry metric tonnes (dmt) x Ni price per tonne ± Ni grade adjustment with 1.5% Ni as the base ± Moisture adjustment with 33% moisure as the base x Payability = ((Ni% rounded to 1 decimal place)*10 + 16)% PNM's financial model assumes a base Case of US$75.00/wmt at 1.5% Ni and 31% moisture. Using the price adjustments and payability this equates to a nickel price of US$11.65/lb. At this price, the economic cut off grade where revenue =

Criteria	JORC Code explanation	Commentary
		ore costs is 1.37% Ni. Within the relatively thin mining horizon, ore will be mined from the bottom two layers which are the transition and saprolite zones of which the saprolite zone forms 80% of the tonnes. The combined Transition/Saprolite horizon is 1 to 8 metres thick. Nickel grades can vary vertically through the target horizon but mining conditions make it difficult to selectively mine out sub-grade material, so the entire Transition/Saprolite horizon is mined. Lateral extents of the pits are, in part, determined by the economic cut off grade composited over the full height of the Transition/Saprolite horizon.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	The proposed mine plan uses conventional mining with hydraulic excavators and trucks mining each pit area in a series of strips. Waste rock is placed back in the mined out strips as close as possible to the current mining face. Based on loader truck productivity estimates and discussions with mining contractors experienced in this environment, the mining fleet will be based around 50 tonne excavators and 30 tonne payload rigid body trucks. The excavators will provide flexibility to mine ore and waste on steep topography and to maximise ore recovery on steep and irregular floors. The trucks are suitable for mining, ore rehandling off stockpiles and barge loading. None of the deposit is expected to require blasting. All equipment is planned to handle periods of wet weather and high clay materials. Excavators and bulldozers will have wide tracks to reduce ground pressure. Road sheeting materials will be used to promote trafficability for the trucks. All productivity estimates allow for significant periods of wet weather delays. Estimation of the ore tonnes and grades and definition of the pit extents include the following adjustments and allowances: • Mining recovery – 95% global allowance. • Mining dilution – 5% at zero grade global allowance. • Initial pit extents were defined by a Whittle™ pit optimisation using the

Criteria	JORC Code explanation	Commentary
		cost and revenue assumptions in the cut off grade discussion above. The optimised shells were then trimmed using the following three criteria. • Minimum nickel grade of full height of Transition/Saprolite horizon 1.4%. Minimum thickness Transition/Saprolite horizon 1 metre. This constraint was relaxed in places to facilitate access to higher grade areas. • Minimum thickness Transition/Saprolite horizon 1 metre. This constraint was relaxed in places to facilitate access to thicker areas. • Exclusion of broad areas with saprolite floor too steep for truck access. This constraint was applied using floor dip maps and visual inspection of the floor contours. Areas with dips steeper than 1 in 5 were avoided unless the pit area is wide enough to allow switchback access to the upper and lower sides of the steep dip areas. Pit wall slopes were set at 35° for the pit optimisation and designs. This is flatter than 8 metre high walls of a sample pit which has been open for two years. Mining costs for the pit optimisation were estimated using rates supplied by a local contactor. These were subsequently updated for the Feasibility Study financial model using rates estimated by a PNG mining contractor based on the proposed mine plan. Non-mining costs were estimated by PNM and their consultants based on detailed infrastructure designs and vendor quotes. Pricing for the direct shipping ore is based on PNM's forecast nickel price and offtake agreement negotiations with Glencore. The pit optimisation and subsequent pit designs treat Inferred resources as waste. The Ore Reserve does not include any Inferred resources. Kolosori is new project which currently has very little infrastructure in place. The following infrastructure items are included in the Feasibility Study: • Wharf capable of berthing up to three 8,000 tonne barges for transhipment of ore to ships in deeper water. • Barges, tugs and tug support facilities.

Criteria	JORC Code explanation	Commentary
		• Port / contractor area for the mining contractor's workshop, fuel storage and other supplies. • Camp to house up to 200 people. • Stockpile area to facilitate drying of high moisture ore and to hold low moisture and dried ore prior to barge loading. • Haul road connecting the port area to the camp and stockpile area. • Initial haul road from the port area up to the initial pit area approximately 100 metres above sea level. • Haul roads formed over the mine life to access pits beyond the initial mining area. • Generators to power the camp, workshops and other fixed facilities. • Competent rock sources near the mine for construction fill and road sheeting. • Services including potable water, sewage treatment and communications.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	Ore will be direct shipped without processing other than air drying. Sales are based on a price per wet metric tonne. Three main grades or qualities are important to product price and acceptance: • Nickel grade. Pricing in the likely offtake agreement is based on nickel grade with bonuses above and penalties below a reference grade of 1.5% Ni. The nickel grade is determined on dry basis where "dry" means after the as received ore is dried at a set temperature for a set period. The offtake agreement allows for rejection of ore at less than 1.4% Ni. • Moisture content. Bonuses apply above and penalties below 33% moisture. Moisture is also critical to shipping of the ore to avoid cargo liquefaction. The loaded moisture must be no more than the transportable moisture limit (TML) which is 90% of the tested flow moisture limit (FML). FML tests for Kolosori ore from the initial mining area returned TML values of around 32% moisture. Moisture was measured for all samples in the exploration drilling. Transition ore (20% of the ore reserve tonnes) averages 41% moisture. Saprolite ore (80% of the ore reserve tonnes) averages 22% moisture.

Criteria	JORC Code explanation	Commentary
		Moisture distribution is too erratic to model at a local level from the exploration drilling. A close spaced drilling program is in progress (February 2023) over the initial mining areas to define nickel and moisture values to guide mining. Low moisture ore (<31%) will be available for direct shipping. High moisture ore (>=31%) will be placed in drying stockpiles and rehandled at least twice to promote drying before being added to the low moisture ore ready for shipping. Drying stockpiles and rehandling are widely used for ore drying in lateritic nickel mines through Indonesia and the Philippines. • Iron grade. While Fe% is not as critical as Ni% and Moisture, excessive iron grades can impact smelter performance. For this reason Kolosori treats the limonite horizon (>60% Fe) above the Transition ore as waste. Transition ore averages 42% Fe. Saprolite ore averages 17% Fe. The total ore reserve averages 21% Fe.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	An EIS report has been submitted and the Mining Lease has been issued with Environmental Conditions. As part of meeting these conditions previous studies are being updated to ensure these conditions of the Mining Lease are addressed. Environmental documents issued include: • ESIA • Environmental Values and Impact Management Report • Environmental Management Plan • Closure and Rehabilitation Plan • Early Works and Construction Management Plan • Establish onsite moisture and metals testing In preparation are • Emergency Response Management Plan including safety at work procedures • Design and establishment of nursery for propagating wildings for rehabilitation of disturbed lands • Social Impact Assessment and Action Plan • Baseline studies at proposed offloading and loading offshore area measuring ocean current, water chemistry, shoreline bathymetry and

Criteria	JORC Code explanation	Commentary
		description of the offshore area.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.*	Kolosori is new project which currently has very little infrastructure in place. The following infrastructure items are included in the Feasibility Study: • Wharf capable of berthing up to three 8,000 tonne barges for transhipment of ore to ships in deeper water. • Barges, tugs and tug support facilities. • Port / contractor area for the mining contractor's workshop, fuel storage and other supplies. • Camp to house up to 200 people. • Stockpile area to facilitate drying of high moisture ore and to hold low moisture and dried ore prior to barge loading. • Haul road connecting the port area to the camp and stockpile area. • Initial haul road from the port area up to the initial pit area approximately 100 metres above sea level. • Haul roads formed over the mine life to access pits beyond the initial mining area. • Generators to power the camp, workshops and other fixed facilities. • Competent rock sources near the mine for construction fill and road sheeting. • Services including potable water, sewage treatment and communications.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	Operating costs have been estimated as follows: • Mining, stockpile management and barge loading – Rates quoted by experienced PNG contractor. • Barge trans-shipment to ships – vendor quote. • Shipping – vendor quote. • Owner's team costs – PNM estimate using local and expat labour rates. • Camp costs – PNM estimate. • Diesel supply – vendor quote. • Barge freight costs – vendor quote. • Services (power, water, sewage, communications) – PNM estimates and

Criteria	JORC Code explanation	Commentary
		vendor quotes. • Land holder payments – Landholder Agreement. • Royalty, business licence, export duty – SI Government Capital costs have been estimated as follows: • Haul roads and general earthworks – Experienced PNG contractor quoted rates applied to cut and fill designs. • Barge loading wharf – Engineering estimate by PNM and Resindo. • Camp – PNM estimate and vendor quote. • Mine workshops and facilities – Experience PNG contractor estimate. • Services (power, water, sewage, communications) – PNM estimates and vendor quotes.

Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.*
	• *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*
		Revenue is based on takeoff agreement negotiations with Glencore. Under the current model ore price is calculated per wet metric tonne (wmt) shipped. The price per wmt is calculated as:
		
		Value of contained nickel = Ni% x dry metric tonnes (dmt) x Ni price per tonne
		
		± Ni grade adjustment with 1.5% Ni as the base
		
		IF(NI.G<1.41,(1.51-NI.G)*100*-1+5,IF(NI.G>1.51,(NI.G-1.51)*100*0.95,(1.51-NI.G)*100*-0.5))
		
		± Moisture adjustment with 33% moisture as the base
		
		IF(H2O<33,(33-H2O)*0.5,IF(H2O>35,(H2O-35)*-0.5,0))
		
		x Payability = ((Ni% rounded to 1 decimal place)*10 + 16)%
		
		PNM's financial model assumes a base Case of US$75.00/wmt at 1.5% Ni and 31% moisture. Using the price adjustments and payability this equates to a nickel price of US$11.65/lb. The average nickel price for January 2023 was approximately US$12.80/lb.

Criteria	JORC Code explanation	Commentary
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	To assist with marketing the Project's product, PNM has mandated on a non-binding basis Glencore International AG to provide an Offtake Facility. The Offtake Facility proposed is for 100% of the project's production for a 4 year term which can be extended a further 2 years by mutual agreement. The pricing will be linked to market prices and subject to standard commercial adjustments for product quality. The Offtake Facilities remain subject to Glencore completing its final due diligence, internal approvals and full documentation.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	PNM's financial model was tested against the Ore Reserve mine plan. The undiscounted net cash flow remains significantly cash positive against changes in the major inputs including: • Mining cost – tested up to 50% increase • Ore price – Tested up to 20% decrease • Project capital cost – tested up to 100% increase The Ore Reserve Case mine life is only three years so discount rate does not have a significant impact.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	Local landholders hold 20% ownership in the project. In addition to profit sharing arrangements PNM has a local landholder agreement in place covering the works and land disturbance set out in the mine plan plus allowances for land holder payments.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	The mine plan considers the project's location, topography, climate and material types. However, operational risks remain: • The moisture distribution may require more ore than expected to be dried on stockpiles which would increase rehandle costs and delay revenue. • Steep and irregular pit floors may result in lower mining productivity and increased ore loss. • Excessive rainfall may exceed allowances made for wet weather delays. • The above factors may increase mining costs, particularly for pits further from the coast. Wherever possible steps are being taken to mitigate these risks ahead of mining.

Criteria	JORC Code explanation	Commentary
		For example, a close spaced drilling program is being planned over the initial mining areas during February 2023 to increase confidence in the moisture distribution and pit floor conditions. PNM is in discussions with an experienced PNG mining contractor familiar with working in similar conditions. With regard to project approvals, the Kolosori Nickel Project is subject to a wide range of statutory and regulatory approvals. These approvals are being sought by PNM progressively as the mine develops. The Mine Lease ML 02/22 obtained by PNM outlines the full list of permits and compliance approvals required for the project to proceed. These approvals include items such as: • Business licenses • Land acquisition approvals • Royalty agreements • Human resources approvals • Planning and infrastructure approvals • Approval of environmental bonds
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	38% of the tonnes in the Ore Reserve are derived from Measured resources and 62% from Indicated resources. After consideration of the modifying factors, the Competent Person, Mr John Wyche, is of the opinion that sufficient uncertainty remains with: • Distribution of moisture in the deposit, • Mining recovery on irregular and steep floors, and • Mining costs in steep areas and in pits at longer distances from the coast to warrant classifying all the Ore reserves, including those derived from Measured Resources, as Probable Ore Reserves.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	No audits or reviews of the Ore Reserves have been undertaken.
Discussion of relative	• *Where appropriate a statement of the relative accuracy and confidence level*	Accuracy and confidence in the Ore Reserve estimate depend on how it predicts nickel grade, moisture and mining cost as the main inputs to value across the

Criteria	JORC Code explanation	Commentary
accuracy/ confidence	*in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	planned pits. Nickel grade is well defined in the Resource model so confidence is reflected in the resource categories. A large portion of the area to be mined in the first two years is Measured so confidence in the nickel grade is high in this portion of Pit 1. The remainder of the Ore Reserve is derived from Indicated resources so confidence in nickel grade is good. Moisture is erratically distributed and will require close spaced drilling at the grade control level to define at a high level of confidence. Moistures were measured for all exploration drilling samples. At a global level confidence in the average moistures for the Transition and Saprolite ore types is good. However, confidence in predicting moistures locally on a week to week basis for the mining and stockpiling operations is lower. Steep and irregular topography and pit floors combined with high rainfall and high clay waste and ore present significant challenges to the mining operation. PNM is in discussions to engage a PNG mining contractor well experienced in similar conditions. The mine fleet was selected to handle the conditions and planning has been done on a range of mining approaches to handle varying situations. However, it is expected that some learning will be required to adapt to the specific conditions encountered and this may impact on planned productivity, ore recovery and mining cost. Considering confidence across the three main inputs to the Ore Reserve global confidence (life of mine) is expected to be good but locally (week to week) significant variations form plan maybe encountered. The area of highest confidence is the Measured resource area in the middle of the first pit. Local confidence in the moisture should be significantly improved with close spaced grade control drilling planned for February 2023 and confidence in mining productivity and cost should improve as the operation “learns” the specific methods required.

RESOURCE AND RESERVE CATEGORIES – EXPLANATION

According to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) 2012 Edition:-

A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include

application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

The guidelines in the JORC Code state that the term 'economically mineable' implies that extraction of the Ore Reserves has been demonstrated to be viable under reasonable financial assumptions. This will vary with the type of deposit, the level of study that has been carried out and the financial criteria of the individual company. For this reason, there can be no fixed definition for the term 'economically mineable'.

A 'Probable Ore Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.

A 'Proved Ore Reserve' is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

The guidelines provided in the JORC Code note that "A Proved Ore Reserve represents the highest confidence category of reserve estimate and implies a high degree of confidence in geological and grade continuity, and the consideration of the Modifying Factors. The style of mineralisation or other factors could mean that Proved Ore Reserves are not achievable in some deposits."

The following figure, from the JORC Code, sets out the framework for classifying tonnage and grade estimates to reflect different levels of geological confidence and different degrees of technical and economic evaluation.

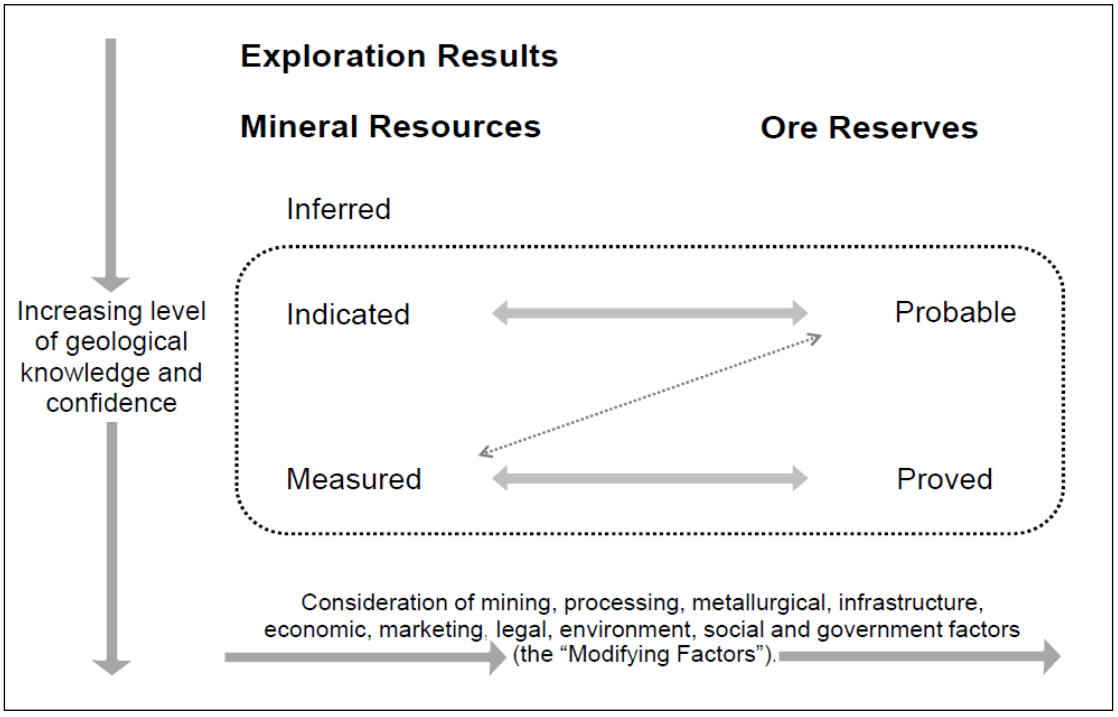


Figure 4 General relationship between Exploration Results, Mineral Resources and Ore Reserves, from 2012 JORC Code Figure 1

Mineral Resources can be estimated on the basis of geoscientific information with some input from other disciplines. Ore Reserves, which are a modified sub-set of the Indicated and Measured Mineral

Resources (shown within the dashed outline in the Figure above), require consideration of the Modifying Factors affecting extraction, and should in most instances be estimated with input from a range of disciplines.

Measured Mineral Resources may be converted to either Proved Ore Reserves or Probable Ore Reserves. The Competent Person may convert Measured Mineral Resources to Probable Ore Reserves because of uncertainties associated with some or all of the Modifying Factors which are taken into account in the conversion from Mineral Resources to Ore Reserves.

Inferred Resources cannot convert to Ore Reserves.