

## Release of Scoping Study for Kolosori Nickel Project and Clarification/Retraction of Previous Disclosures

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**Pacific Nickel Mines Limited** (ASX Code: PNM) (**Pacific Nickel or Company**) is pleased to advise that it has completed a Scoping Study (**Scoping Study or Study**) for its Kolosori Laterite Nickel Direct Ship Ore (**DSO**) Project (**Kolosori Nickel Project or Project**), an executive summary of which is annexed below. The completion of the Study allows Pacific Nickel to progress to a Definitive Feasibility Study (**DFS**) for the Project.

### Cautionary Statements

The Scoping Study referred to in this announcement has been undertaken for the purpose of the further evaluation of a potential development of the Kolosori Nickel Project. It is a preliminary technical and economic study of the potential viability of producing a nickel direct ship ore product from the Kolosori Nickel Laterite Project.

The Scoping Study outcomes, production target and forecast financial information referred to in this announcement are based on low accuracy level technical and economic assessments that are insufficient to support estimation of Ore Reserves, or to provide certainty that the conclusions of the Study will be realised. While each of the modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production target itself will be realised. Further exploration and evaluation work and appropriate studies are required before Pacific Nickel is in a position to estimate any Ore Reserves or to provide any assurance of an economic development case.

The JORC compliant Mineral Resource Estimate (**MRE**) for the Project was released on 19 November 2020. The MRE also forms the basis for this Scoping Study, the subject of this announcement.

Over the life of mine considered in the Scoping Study, 43% of the Production Target originates from Measured and Indicated Mineral Resources and 57% from Inferred Mineral Resources. Pacific Nickel confirms that 75% of the Measured and Indicated Mineral Reserve is mined in the first 2.5 years. The shallowness of mining allows flexibility to mine the Measured and Indicated Mineral Resources as early as possible where required.

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. Pacific Nickel confirms that the financial viability of producing a nickel DSO product from the Kolosori Nickel Project is not dependent on the inclusion of Inferred Resources in the production schedule.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). The Competent Person's Statement is found below in this announcement.

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 technical parameters underpinning the estimate continue to apply and have not materially changed.

No Ore Reserve has been declared. This announcement has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions, including sufficient progression of all JORC modifying factors, on which the production target and forecast financial information are based have been included in this ASX release.

Assumptions also include assumptions about the availability of funding and approvals. While Pacific Nickel considers that all the material assumptions are based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by this Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, pre-production funding in the order of US\$20 million will likely be required. There is no certainty that Pacific Nickel will be able to source that amount of funding when required. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Pacific Nickel's shares. It is anticipated that finance will be sourced through a combination of equity from existing shareholders, new equity investment and a debt facility from offtake providers.

This announcement contains a series of forward-looking statements. Generally, the words "expect," "potential", "intend," "estimate," "will" and similar expressions identify forward-looking statements. By their very nature forward-looking statements are subject to known and unknown risks and uncertainties that may cause actual results, performance or achievements, to differ materially from those expressed or implied in any forward-looking statements, which are not guarantees of future performance. Statements in this release regarding Pacific Nickel's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as Mineral Resource estimates, market prices of metals, capital and operating costs, changes in project parameters as plans continue to be evaluated, continued availability of capital and financing and general economic, market or business conditions, and statements that describe Pacific Nickel's future plans, objectives or goals, including words to the effect that Pacific Nickel or management expects a stated condition or result to occur.

Forward-looking statements are necessarily based on estimates and assumptions that, while considered reasonable by Pacific Nickel, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made.

Pacific Nickel has concluded it has a reasonable basis for providing these forward-looking statements and believes it has reasonable basis to expect it will be able to fund development of the project. However, a number of factors could cause actual results or expectations to differ materially from the results expressed or implied in the forward-looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this study.

The Project development schedule assumes the completion of a DFS by the end of 2021/early Q1 2022, subject to the receipt of assay results from drilling programs completed at the Kolosori Nickel Project from May to November this year.

The key document for the environmental approval process in respect of the Project is the Environmental and Social Impact Assessment (ESIA), which was lodged in October 2021. Delays in the environmental approval process or any other development approval (including the issue of a mining licence and landowner agreements) could result in a delay to the commencement of construction (planned for Q2 2022). This could lead to a delay to first production. The Company's stakeholder management and community engagement programs will reduce the risk of project delays. These dates are indicative only.

The Board considers the Company has sufficient cash on hand to undertake the next stage of planned work programs, including the DFS activities, continued exploration and an early works program in the Project area.

## COMPLETION OF KOLOSORI SCOPING STUDY

Resindo Resources & Energy Group (**Resindo**) was engaged to undertake the Study to support the development of the Project, which is 80% owned by Pacific Nickel Mines. The Project is located on Isabel Island in the Solomon Islands.

The Project is relatively uncomplicated in process with low strip ratio mining operations, haul roads, stockpiles, and barge port for transfer of ore to geared vessels (trans-shipment) together with the supporting infrastructure. Resindo is highly experienced and has undertaken engineering studies and mining developments for thirteen tropical nickel operations in Indonesia. Mining One Consultants (**Mining One**) was also engaged to undertake the mine scheduling component of the Study.

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

- Production Target of 6.23m tonnes at 1.5% Ni for 93,450t of contained nickel
- Production Target contains 43% Measured and Indicated Resources with more than 75% of the Production Target over the first 2.5 years from Measured and Indicated Resources
- The shallowness of mining allows flexibility to mine the Measured and Indicated Mineral Resources as early as possible where required
- Ability to mine higher grades in excess of 1.6%Ni early in mine schedule
- First production targeted in late 2022
- Capital cost estimate between US\$18m and US\$20m
- Site operating cost estimate in the range US\$15 to US\$17/wmt
- Barging costs in the range US\$4.50 to US\$5.50/wmt
- Shipping cost of around US\$38/wmt
- Saprolite shipped to China for the RKEF plants for the end use in the stainless steel industry
- 1.5% Ni saprolite CIF China US\$85/wmt
- Capital payback approximately one year

## CLARIFICATION AND RETRACTION OF PREVIOUS DISCLOSURES

In releasing the Scoping Study, the Company also wishes to make the following clarifications/retractions in relation to prior disclosures to the market concerning the status and progress of both its Kolosori and Jejevo Nickel Projects (together, the **Projects**).

These disclosures include, without limitation, Pacific Nickel's ASX announcements of 19 November 2020, 27 November 2020, 9 April 2021, 11 May 2021, 11 June 2021, 26 July 2021, 31 August 2021, 7 October 2021, 13 October 2021 and 19 October 2021 and all disclosures made by way of other mediums, such as in interviews with the Company's CEO or investor presentations (the **Prior Disclosures**).

The Company expressly advises investors that:

- it has not completed a feasibility study of the kind defined by the JORC Code 2012 at its Kolosori Nickel Project and as such any prior references made by the Company in the Prior Disclosures to a 'feasibility study' are retracted and should instead be interpreted as being studies at a scoping study level (being the Scoping Study the subject of this announcement);
- it retracts any references in the Prior Disclosures about the potential scale and economics of the Projects noting that, at the times of the relevant disclosures, the Company had not yet released the results of any studies undertaken that may have provided it with reasonable grounds to disclose any production targets and/or forecast financial information based on production targets;
- any references in the Prior Disclosures about the potential scale and economics of the Projects were only solely to inform investors of potential design input parameters of the Projects; and

- Pacific Nickel otherwise confirms the references made to work being undertaken in preparation for a DFS for the Kolosori Nickel Project in the Prior Disclosures and otherwise notes that:
  - the DFS will be a Feasibility Study for the purposes of the JORC Code 2012;
  - the mineral resource estimate released by the Company on 19 November 2020 will form the basis of the DFS, along with the results of the drilling at the Kolosori Nickel Project that commenced in May 2021 and the comprehensive engineering work undertaken by engineering consultants Resindo;
  - the works undertaken for the Scoping Study will also be utilised in the DFS (such as the engineering work), which is why the Company has commenced and progressed both scoping and DFS level studies concurrently, as opposed to sequentially; and
  - the works that presently remain for completion of the DFS include:
    - receipt and analysis of assays from drilling commencing in May 2021 leading to an update of the mineral resource estimate;
    - assessment of quotes from contractors to carry out the major works for the Project which include mining contract, port construction, pad construction and barging contract;
    - geotechnical assessment for the port construction;
    - review of barging to ensure design throughput based on barges available in country; and
    - availability of equipment to carry out the mining.

## SUMMARY OF SCOPING STUDY

Pacific Nickel is pleased to announce the results of an independent Scoping Study for the development of its 80% owned Kolsori 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 Scoping Study was conducted by a group of leading independent consultants from Australia and Indonesia including Resindo and Mining One, overseen by in-house Pacific Nickel personnel who are experienced in mining projects in the region.

## 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 less than 1 km
- Stockpile management a key to moisture control and loading DSO onto barges
- Barge ore less than 1km to 50,000 to 60,000 tonne geared ships for export
- Production of 1.3 wet mtpa based on port throughput

## Key Study Assumptions and Results

The key assumptions and result inputs of the Study were:

- Production Target of 6.23m tonnes at 1.5% Ni for 93,450t of contained nickel
- Production Target contains 43% Measured and Indicated Resources with more than 75% of the Production Target over the first 2.5 years from Measured and Indicated Resources
- The shallowness of mining allows flexibility to mine the Measured and Indicated Mineral Resource as early as possible where required
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- Sapolite shipped to China for the RKEF plants for end use in the stainless steel industry

- Pricing of 1.5% Ni saprolite US\$85/wmt (CIF China)
- Pricing of 1.6% Ni saprolite US\$91/wmt (CIF China)
- Capital payback approximately one year

## KOLOSORI NICKEL PROJECT UPDATE

### Key Licences and Approvals

- Mining Lease application lodged in August 2021
- Environmental and Social Impact Assessment lodged in October 2021
- Mining Agreement to confirm project fiscal terms – currently in progress
- Surface Access Right Agreement with landowners – currently in progress
- Development consent approval process in progress – workshop meeting with key stakeholders held in Honiara on 28-29 October 2021
- Community Development Agreement – currently in progress

### 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
- 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 has been proceeding with a DFS on the Project in parallel with the Scoping Study
- Design of many of the key infrastructure components is already well advanced
- The DFS expected to be completed in Q4 2021/Q1 2022 subject driven largely by the completion of assay results from approximately 220 holes, noting that there is significant congestion at Australian assay laboratories
- Around 200 holes have been completed to date with the drilling program expected to be completed in late November 2021
- An early works program is expected to commence in late November 2021 to carry out initial pad construction, temporary site set up, a grade control pattern and a number of test pits
- Continuing discussions are being held with trading groups and off-takers to assist with financing the Project, and initial discussions with a number of these groups have been positive
- Pacific Nickel is expecting to commence construction of the Project in May 2022 subject to approvals and financing
- The Company has recently raised equity capital to enable it to meet its next steps

Further information on Pacific Nickel is available at [www.pacificnickel.com](http://www.pacificnickel.com).

Authorised by the Board.

For further information please contact:

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Please visit the company's website at [www.pacificnickel.com](http://www.pacificnickel.com)

## Statement from Geological Competent Person

The information in this report that relates to Exploration Targets, Exploration Results or Mineral Resources is based on, and fairly represents, information and supporting documentation prepared by Mr Stuart Hutchin a Member of the Australian Institute of Geoscientists. Mr Hutchin is a full-time employee of Mining One Consultants and has sufficient experience which is relevant to the style of mineralisation and type of deposit and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Hutchin consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

In addition, Pacific Nickel Mines confirms that all material assumptions and technical parameters underpinning the estimate of the Mineral Resource at Kolosori in the announcement "Initial JORC Resource Estimate at Kolosori" dated 19 November 2020 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.

## Executive Summary of the Scoping Study

The following is an Executive Summary of the Scoping Study.

The Study includes:

- 1) Mining Pits and Overburden Stockpile.
- 2) Mining & operations facilities to support the Project and the mining development.
- 3) Access & Haul Roads linking all facilities.
- 4) Barge Jetty for the loading and export of nickel ore as well as logistics support.
- 5) Port facilities to support the Barging Contractor and PNM Port operations personnel. This includes the initial temporary facilities established to commence the works.
- 6) Port Stockpile for ore drying and preparation for shipment.
- 7) Camp to accommodate the workforce.
- 8) Environmental, drainage and sediment control systems to maintain the integrity of the local flora, fauna and the sea.
- 9) Capital (Capex) and Operating (Opex) estimates;
- 10) Financial Model;
- 11) Integrated Study Report with supporting documents.

The works reviewed and developed the preferred options and design for Mine-Site Infrastructure, Port Facilities and Haul Roads including Materials Handling Systems for Direct Shipment of Ore (DSO). The Facilities are simpler and are a lower capital cost approach than that are generally used for DSO operations in the region. Importantly there is no need for a processing facility nor tailings dam.

The project development level is Scoping Study classified as 20-25% contingency levels for the Capital Costs (Capex). The following summarises the scope of the Study.

### Production Capacity Evaluation

Modelling was undertaken based on Haul Road lengths, stockpile sizes, truck sizes and travel speeds, barge sizes, loading and unloading trucks including congestion, barge cycles times including barge positioning at the jetty and transfer to vessels one kilometre offshore. From this basis, commencing with loading ore into trucks at the Port ore stockpile, to loading to barges then transfer to vessels, the nominal production capacity was determined via the model to be 1.3mtpa of nickel ore shipped per annum.

This is consistent with most DSO nickel operations in the region. The production target of 1.3mtpa is essentially driven by the port capacity taking into account the appropriate number of barges to load a 50,000 tonne to 60,000 tonne vessel.

Basic infrastructure was required to accommodate the initial development of the mining operations and then later expanded at an appropriate time to meet increased production and export volumes as required. Wherever practical, cost-effective local contractors would be the recommended approach for both construction and operations which is included in the basis of the costs and financial model. The financial model includes a modular camp for the construction and later operations workforce.

Fuel storage facilities have been placed in the Port support area as well as at key areas of use; Mining Facility and camp generator sets. Fuel is delivered by LCT spare tanks (common during initial construction mobilisation and works) or fuel pontoon and pumped to the shore tanks.

### Mine Area

The mine area comprising the pits and overburden stockpile is spread over some larger area, as determined by the Resource Consultant, and requires interlinking pit roads to the stockpile. The stockpile has been placed

at the Port as it is adjacent to the initial pit developments for the first few years, minimising costs of haulage and rehandling.

Mining will be carried out by a Contractor and managed by the Company. The Study has included the design and construction of the fixed facilities required for mining operations. In this way the contractor may be replaced with no delays as the infrastructure would be utilised by the next incumbent contractor. Mining facilities are on a cost-effective basis, common practice for DSO and the majority of new mines in this period, comprising modified containers and canopies approach for vehicle workshops and storage.

### **Haul Road to Coastal Port**

A review of the route, grades and width was undertaken and then engineered the modifications necessary to suit the initial haulage requirements, currently planned as twenty tonne (20t) rear dump trucks. This work included a preliminary review of the suitability during the wet season, fill and culvert requirements to overcome likely floods determined from data provided and topographic review.

### **Stockpiles**

The stockpile may be situated at a central location in the mine area (preferred) or at the port and would be determined during the project evaluation phase. Where the stockpile is situated the support facilities would also typically be provided, essentially; offices, workshops, fuel facilities, drainage ponds, communication hub, water and waste water facilities, etc. It is assumed a crusher will not be required for this ore to meet the sales requirements and will be further confirmed with ongoing geological test work of boulders in the ore.

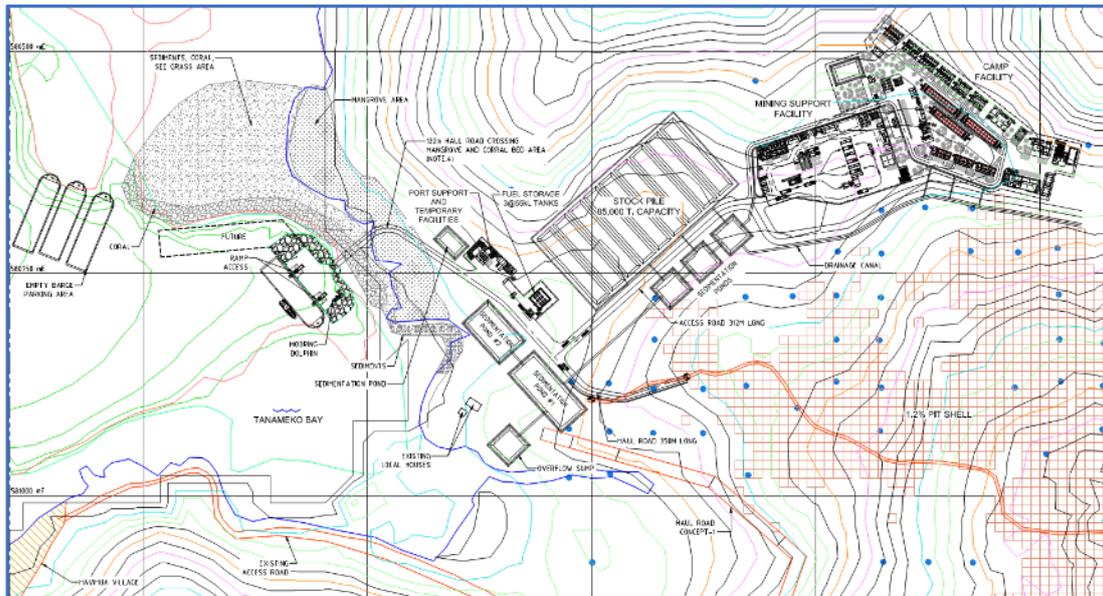
Stockpile management is via front end (track or wheel) loaders with optional excavators to load trucks and manage ore onto barges.

Nickel ore in this region is generally has a high moisture content and would be stockpiled in low windrows to aid initial drainage. Drainage channels have been developed between the windrows and feed a two stage sedimentation pond. Excavators would be used for turning over stockpile material to assist drying if determined beneficial from testwork and economic analysis. Tarpaulins would usually be used over stockpiles during rain events and are manually managed.

### **Port & Ore Export**

The Port incorporates the primary stockpile area as described with sufficient capacity to maintain sufficient ore in the necessary grades to service the out-loading / export requirements of a vessel. Ore would be discharged into 5,000 to 8,000 tonne barges via dump trucks, with excavator "pull up" to maximise the load in the barge.

The barges would then travel to the offshore trans-shipment area where the geared bulk carriers can be loaded. A berthing area incorporating loadout jetty with adjacent parking for tugs, personnel, general logistics and mooring for barges provided. The shallow water shoreward on the eastern side of the Jetty also enables LCTs to berth for offloading of heavy equipment (construction and mining).



**Figure 1. Overview of the Facilities Areas.**

## Economic Review

Capital and Operating estimates utilising a range of Vendor and Contractor pricing was developed specifically for Kolosori. These formed inputs into a preliminary financial model to determine the overall economic viability of the project.

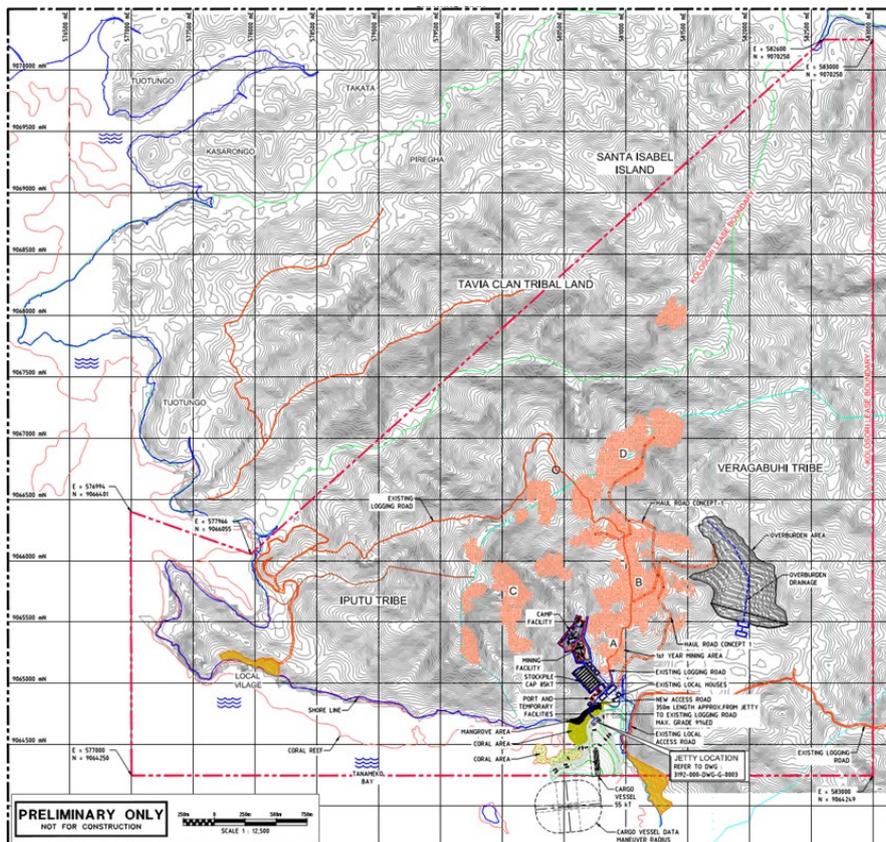
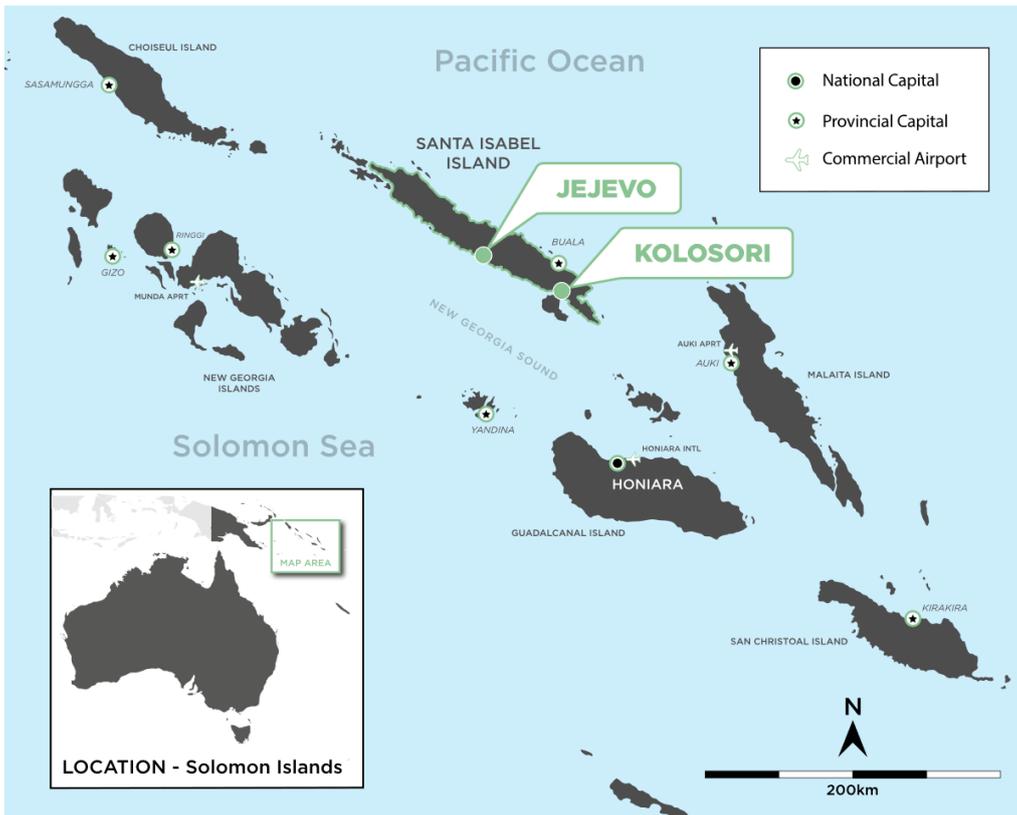
## Project Description

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.

## Background

In October 2020, Pacific Nickel executed a Share Purchase Agreement to formalise the acquisition of an 80% interest in Kolosori Nickel (SI) Limited (KNL), a company incorporated in the Solomon Islands, with the remaining 20% of KNL held by traditional landowners. KNL held PL 05/19. KNL transferred PL 05/19 to Pacific Nickel Mines Kolosori Limited. Pacific Nickel holds 80% of Pacific Nickel Mines Kolosori Limited. PL 05/19 holds the Kolosori Nickel Project. There are no mining activities planned on land held by the Iputu tribe (south west corner of the PL).

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.



## Geology & Deposits

### Regional Geology

The Solomon Islands archipelago is a linear NW-SE trending chain of islands located at the boundary of the Australian and Pacific continental plates. The boundary is comprised of three geologic zones, known as the Pacific Province (Cretaceous unmetamorphosed Ontong Java Plateau basement, overlain by pelagic sediments), Central Province (Mesozoic metamorphosed basalts and intruded gabbros) and the Volcanic Province (Pliocene to Holocene volcanoes).

The collision between the Ontong Java Plateau (OJP) and the Old Solomon Arc of the Central Province resulted in the uplift and obduction of ultramafic rocks, marine volcanoclastic sediments and limestone facies. It is in this region where the St Isabel and San Jorge Islands formed.

The Kia-Korigole-Kaipito Fault System (KKKFS) is the main geologic feature that separates the Pacific Province from the Central Province. North of the KKKFS, the OJP is made up of lavas belonging to the Sigana Basalts. They occur mostly as pillowed lavas and comprising low-K tholeiites from nearby deep-sea sites of the OJP.

South of the KKKFS, the Central Province consists of pillowed and massive flows of basaltic to andesitic lavas. Associated micro- to medium grained gabbros and minor leucocratic rocks are also present, with clastic sediments overlain. All these lithologies are part of the Jajao Igneous Suite, ranging in age between 62 - 46 Ma (ref. c). The igneous suites of the Central Province are all petrographically, chemically and isotopically distinct from the Sigana basalts. It is understood that the igneous rocks of the Central Province are fragments of uplifted ocean floor formed in an arc back-arc system.

Thin fault-bound slices of peridotites are distributed on both sides of the KKKFS. The ultramafic rocks also outcrop predominately in the south near San Jorge and have been termed the San Jorge Ultramafics (see Figure below). In all locations, they consist of a series of elongate pods of more or less serpentinised harzburgites and dunites, cut by pyroxenite veins. In contrast, only fragments of ultramafic rocks occur further north on Santa Isabel.

The nickel laterite deposits of the Solomon Islands have developed under tropical conditions by weathering and decomposition of the ultramafic host rocks. These processes lead to residual and supergene enrichment of nickel within the laterite profile.

The laterite profile in Kolosori tenement overlies ultramafic rocks and can be divided into two distinct zones. The lower zone consists of saprolitic rock, rocky saprolite and saprolite. The upper oxide zone consists of ferruginous saprolite, limonite, ferruginous zone and soil types.

The lower saprolite zone consists of boulders of the bedrock in a soft, earthy matrix. The boulders generally have fresh cores and partially oxidised rims. Highly serpentinized rocks may have more pervasive oxidation and the boulders may be friable and lack a tough core. The matrix contains a high proportion of iron-oxides that are a product of weathering, but bedrock textures are usually still recognisable.

Iron grades increase rapidly upwards across the saprolite-limonite contact, reflecting the displacement of silicate minerals by iron oxides (goethite) as the dominant component. Bedrock textures are not readily recognisable and although relict bedrock boulders do occur, they tend to be more isolated and less abundant than in the underlying saprolite.

### Kolosori JORC 2012 Mineral Resource Estimate

Mining One has completed an initial JORC (2012) mineral resource estimate for Prospecting Licence PL 05/19 (Kolosori tenement) on Isabel Island, Solomon Islands. The results are provided in

**Table 1** and **Table 2** (below). The Mineral Resource estimate is classified in accordance with the 2012 JORC guidelines.

**Table 1. Kolosori JORC(2012) Resource Estimate Cut off grade 1.2% Ni**

<b>KOLOSORI JORC MINERAL RESOURCES &gt; 1.2 % Ni</b>				
<b>LITHOLOGY</b>	<b>RESOURCE CATEGORY</b>	<b>Kt ('000)</b>	<b>Ni %</b>	<b>Co %</b>
<b>TRANSITIONAL</b>	MEASURED	104	1.79	0.08
	INDICATED	559	1.63	0.05
	INFERRED	1,178	1.60	0.05
	<b>SUB TOTAL</b>	<b>1,842</b>	<b>1.62</b>	<b>0.05</b>
<b>SAPROLITE</b>	MEASURED	549	1.72	0.03
	INDICATED	1,136	1.54	0.02
	INFERRED	2,359	1.46	0.02
	<b>SUB TOTAL</b>	<b>4,045</b>	<b>1.52</b>	<b>0.02</b>
<b>TOTAL (M+I+I)</b>		<b>5,887</b>	<b>1.55</b>	<b>0.03</b>

**Table 2. Kolosori JORC(2012) Resource Estimate Cut off grade 1.0% Ni**

<b>KOLOSORI JORC MINERAL RESOURCES &gt; 1.0 % Ni</b>				
<b>LITHOLOGY</b>	<b>RESOURCE CATEGORY</b>	<b>Kt ('000)</b>	<b>Ni %</b>	<b>Co %</b>
<b>TRANSITIONAL</b>	MEASURED	107	1.77	0.08
	INDICATED	631	1.57	0.05
	INFERRED	1,504	1.49	0.06
	<b>SUB TOTAL</b>	<b>2,242</b>	<b>1.53</b>	<b>0.06</b>
<b>SAPROLITE</b>	MEASURED	575	1.69	0.03
	INDICATED	1,399	1.46	0.02
	INFERRED	3,061	1.37	0.02
	<b>SUB TOTAL</b>	<b>5,035</b>	<b>1.43</b>	<b>0.02</b>
<b>TOTAL (M+I+I)</b>		<b>7,277</b>	<b>1.46</b>	<b>0.03</b>

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. The ore profile and model results are shown below noting that these details were released formally on the ASX on 19 November 2020.

In addition, Pacific Nickel Mines confirms that all material assumptions and technical parameters underpinning the estimate of the Mineral Resource at Kolosori in the announcement “Initial JORC Resource Estimate at Kolosori” 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.

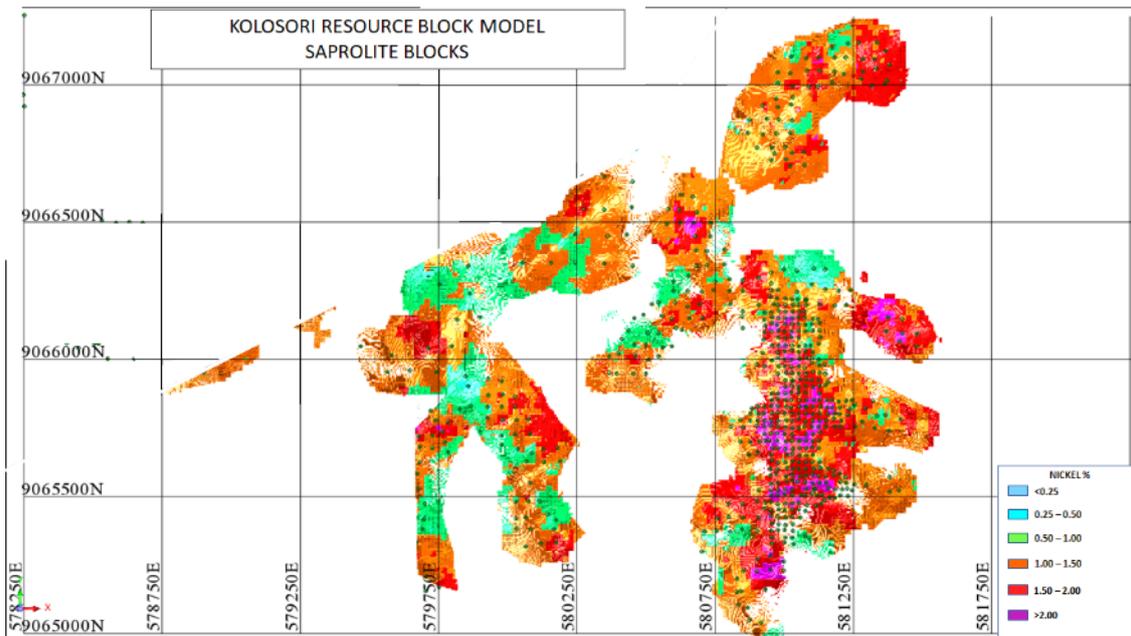


Figure 4. Kolosori Resource Block Model – Saprolite Blocks (Ni%)

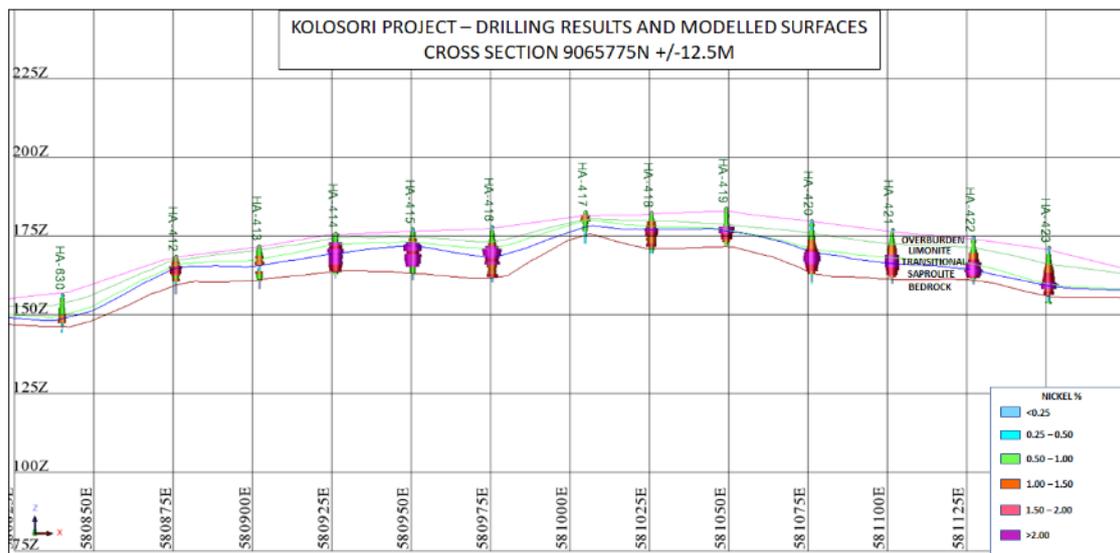


Figure 5. Kolosori Deposit Cross Section [9065775 North +/- 12.5m]

### Kolosori Further Exploration Targets

Numerous resource extensional targets have been defined that are located adjacent to the currently defined Mineral Resource area. The targets are defined where historical drilling has encountered significant nickel grades at the extent of drilling that coincide with topographic highs. Target tonnages have been calculated using an average density value of 1 and thicknesses ranging between 4m and 8m (potential Saprolite and Transitional material).

There are six initial target areas that have been defined that will require extensional drilling. A total of 2-3 million tonnes of material ranging between 1.2% and 1.6% Nickel is defined within these areas. The individual conceptual exploration targets for each of these areas are summarised in the following Table 3. A plan of the target areas is also shown in the Figure 6 below.

TARGET AREA	AREA (m <sup>2</sup> )	THICKNESS (m)	TONNAGE (Mt)		Ni%	
			LOW	HIGH	LOW	HIGH
1	140,000	4-8	0.56	1.12	1.2	1.6
2	135,000	4-6	0.54	0.81	1.2	1.6
3	85,000	4-6	0.34	0.51	1.2	1.6
4	55,000	4-6	0.22	0.33	1.2	1.6
5	40,000	4-6	0.16	0.24	1.2	1.6
6	30,000	4-6	0.12	0.18	1.2	1.6
<b>TOTAL CONCEPTUAL TARGETS (EXTENSIONAL)</b>			<b>1.94</b>	<b>3.19</b>	<b>1.2</b>	<b>1.6</b>

Table 3. Kolosori Resource Exploration (Extension) Targets

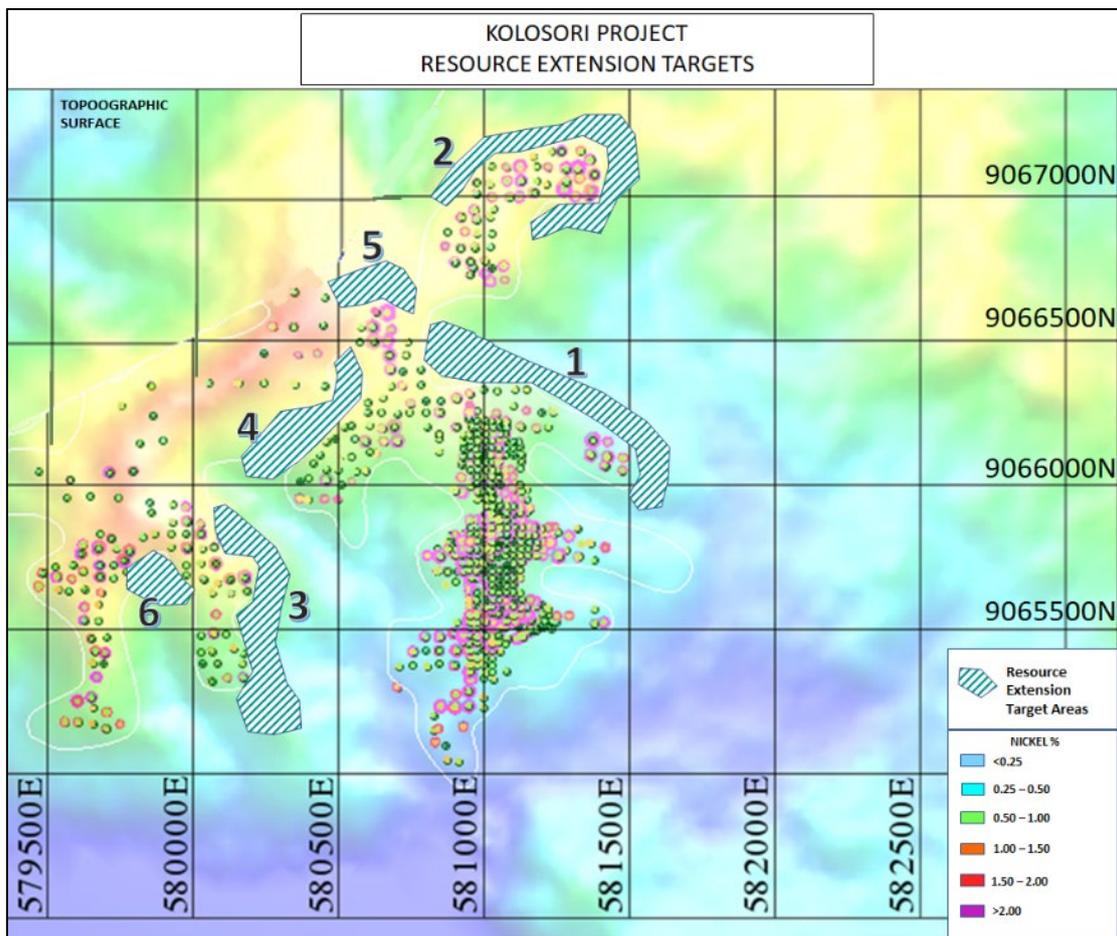


Figure 6. Kolosori Resource Exploration (Extension) Targets – Plan View

Additionally, there exists significant upside potential in relation to regional exploration targets within the project area. Further field work is required to better understand the potential of these targets. Broadly the initial regional exploration target areas are shown in the following Figure 7.

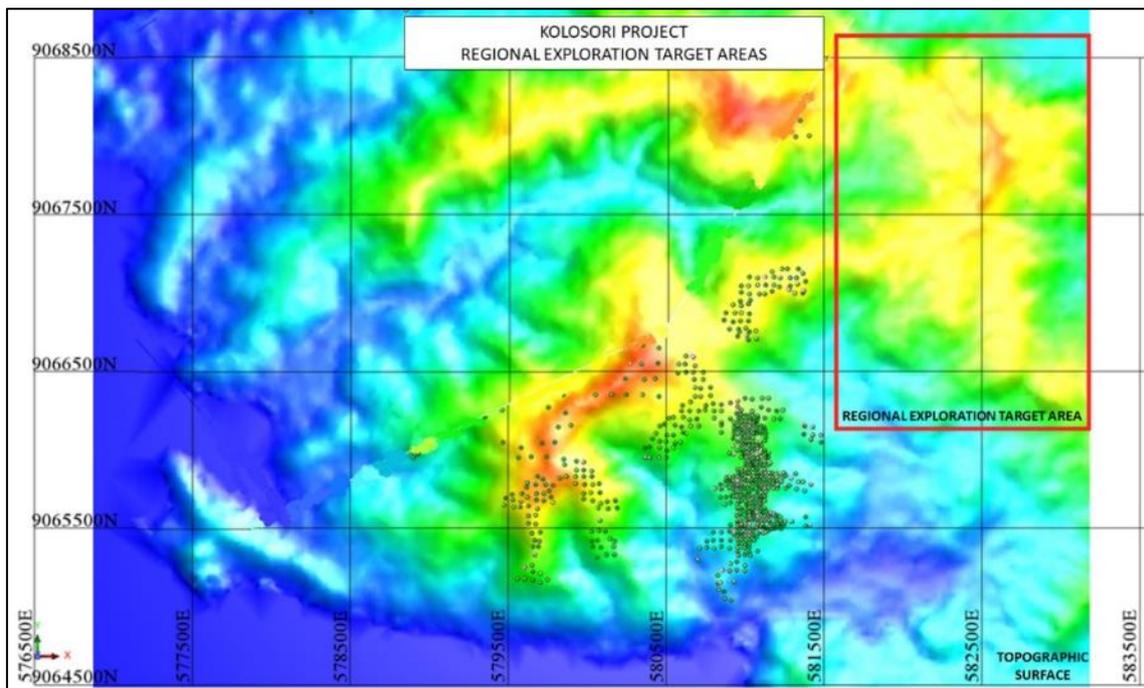


Figure 7. Kolosori Regional Exploration Target Area – Plan View

### Current Development Drilling

The Company has completed the first stage of drilling program comprised of 83 holes (including 11 metallurgical holes).

As indicated in Figure 8 below, Mining One has designed the next stage drill program of around 150 holes for the Kolosori Nickel Project. These holes are part of the planned 2021 pre-development activities and are based on the mine planning and scheduling work carried out by Mining One and the Company. Approximately 120 holes have drilled to date with 10 holes not being drilled leaving some 20 holes to be drilled in November 2021.

The 150-hole drilling program is designed to continue infilling the existing Mineral Resource of 5.89Mt at 1.55% Ni. The next phase of drilling after this program will test for extensions to the Mineral Resource.

The core samples taken from the 11 metallurgical holes will provide metallurgical information needed in marketing of the DSO product. Technical information such as moisture content will be estimated from core samples and used for designing the materials handling systems from mining to stockpiling to exporting the DSO via barges and ships.

The samples from the 83-hole drill program are with ALS Brisbane for assaying with the first set of assays being received by the Company recently. Assay results are now expected to be received on a continual basis. The Company has an established QA/QC program for drilling, as demonstrated by the successful assay results from its drilling program at the Jejevo Nickel Project on Isabel Island earlier in 2021.

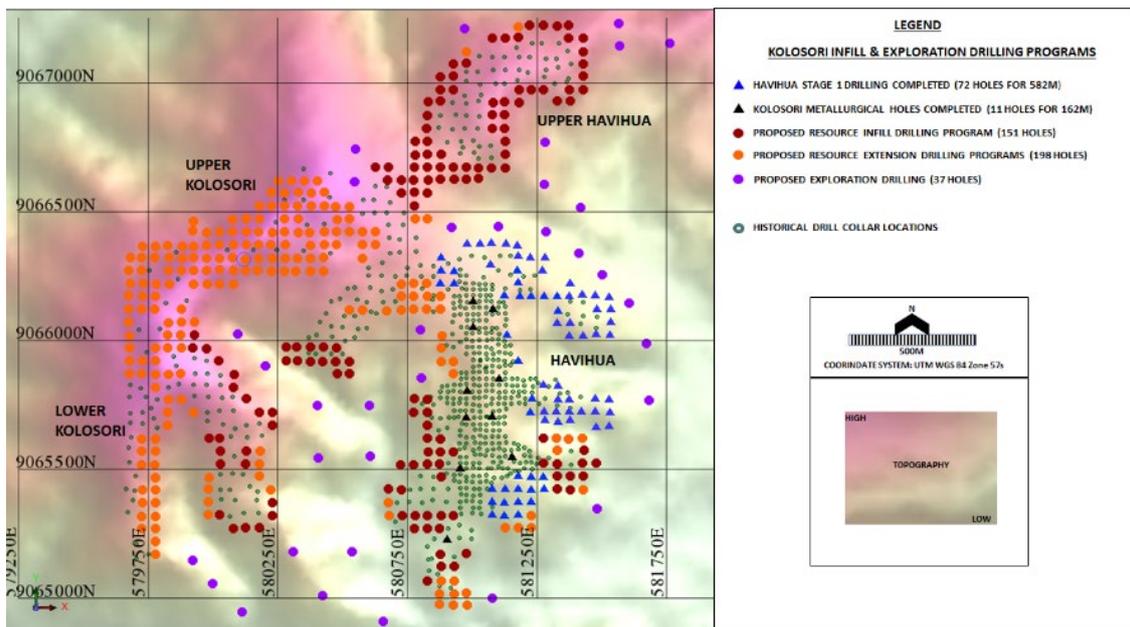


Figure 8. Drill program at Kolosori Nickel Project

## Mining

The Company is proposing to mine within the Kolosori tenement to extract the limonite, transitional and saprolite nickel ores through conventional strip-mining techniques. The ore will be available for direct shipping and upgrading if possible. The mining area will be developed progressively, with progressive rehabilitation of the mined area completed as soon as practical after mining has been completed. Based on the resource delineated at present the operation is anticipated to have a five-year mine life. The Company will carry out further exploration during mining to increase the mine life where possible.

The conventional method of strip-mining, using excavator and truck haul fleets has been based on a number of parameters including:

- 1) The shallow and variable thickness of the ore deposit. A thin overburden layer lies directly underneath the topsoil, followed by a thin layer of limonite nickel ore zone (minor volumes). The transition nickel ore zone separates the limonite ore zone (where present) from the underlying saprolite nickel ore zone. The saprolite nickel ore zone extends to a defined depth below the transitional material.
- 2) Mining operations will have challenges during the tropical wet season months. Mining methods are proposed to allow for multiple mining benches (faces) to ensure access and maintenance of the mining locations, including surrounding areas.
- 3) The indicated and assumed earth moisture content (30-60%) presents issues for heavy earthmoving equipment and mining movements.
- 4) The low dry bulk density of the transitional and saprolite (approximately 1.2t/m<sup>3</sup> including a swell factor of 1.3) is expected to impact the capacity of the mine haul trucks. Selective utilisation of the articulated and rigid dump trucks will be required.



**Figure 9. Typical equipment to be used in the mining operation**

## Mine Planning

A mine layout was prepared using Whittle pit optimisation software. The following Table 4 provides the physical tonnes and grades for the five mining areas A to E.

In total, approximately 6.23 million tonnes of ore will be mined at an average grade of around 1.5% nickel after mine dilution.

Area	ROM Wet Tonnes (M wmt)				Diluted Ni%				Diluted Fe%			
	Mea	Ind	Inf	Total	Mea	Ind	Inf	Total	Mea	Ind	Inf	Total
Area A	0.28	0.38	0.73	1.40	1.70	1.67	1.50	1.59	14.20	15.10	15.24	14.99
Area B	0.48	0.25	0.51	1.25	1.63	1.46	1.55	1.57	15.32	17.48	16.91	16.41
Area C	-	0.24	0.99	1.24	-	1.37	1.43	1.42	-	17.62	17.07	17.18
Area D	-	1.06	1.16	2.22	-	1.49	1.43	1.46	-	15.42	15.90	15.67
Area E	-	-	0.12	0.12	-	-	1.29	1.29	-	-	12.25	12.25
<b>Total</b>	<b>0.77</b>	<b>1.94</b>	<b>3.53</b>	<b>6.23</b>	<b>1.66</b>	<b>1.50</b>	<b>1.46</b>	<b>1.50</b>	<b>14.90</b>	<b>15.90</b>	<b>16.11</b>	<b>15.90</b>

**Table 4 ROM tonnes per Area**

The overburden stockpile is proposed to be located in the valley east of Area B (refer Figure below). The overburden stockpile was designed as an overflow location, as required, designed at a 25-degree overall slope angle up to the 70m RL

The overburden stockpile has a design capacity of 6.9 million m3 at a swell factor of 1.3, which is more than adequate for what is required for the project.

Initial mining at Area A is in close proximity to the port facility.

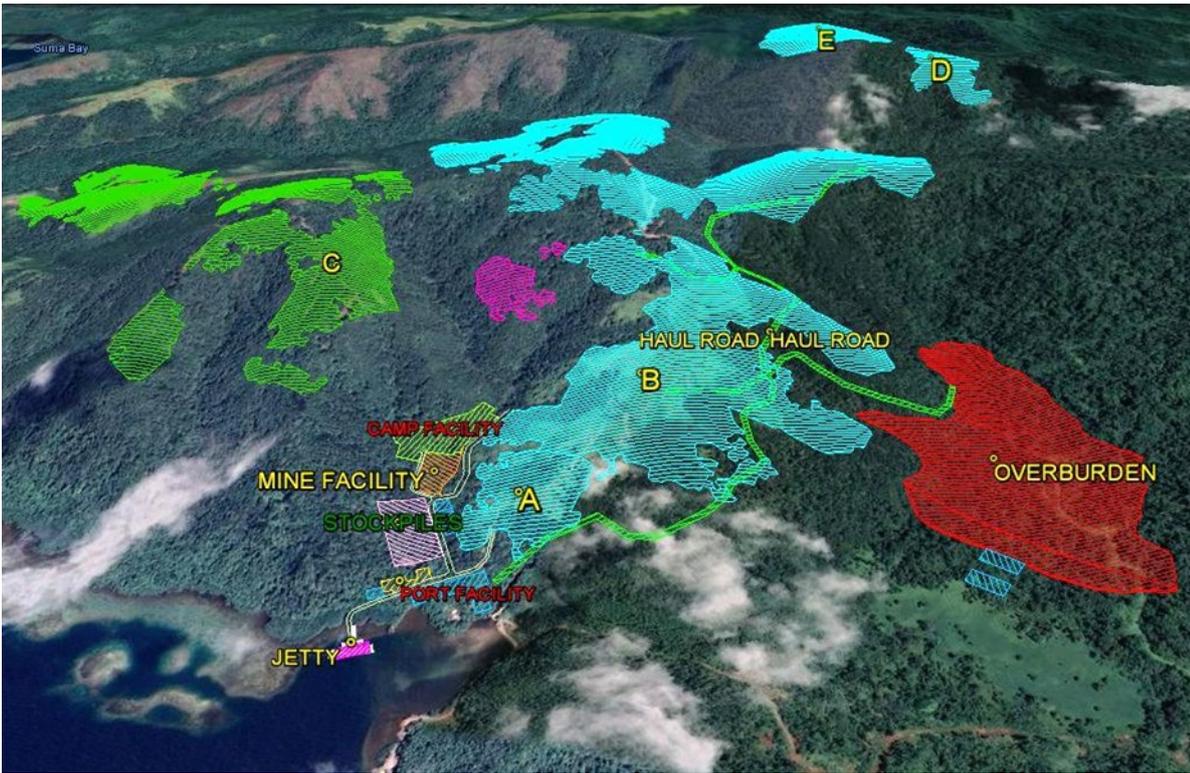


Figure 10. Project Layout

## Site Preparation

The facility elevations noted were determined based on expected depth of soil stability and rock layer to minimise the overall earthworks. As the result, the facilities elevations were designed to follow the natural contour profile with cascading pads for other facility areas, i.e. different facilities levels are at different levels to minimise earthworks and generally stepping down from inland towards the coastal area. Minimum excavation depth was determined based on the expected depth of firm foundation strata.

## Earthworks

The estimated earthworks quantity for the project development facilities, excluding mining pits and overburden stockpiles are listed in the following table.

Table 5 - Facility Earthworks Quantities

Earthworks Volume Summary						
No	Area	Area (m2)	Cut (m3)	Fill (m3)	Balance (m3)	Remarks
<b>A</b>	<b>Pads &amp; Platforms</b>					
1	Pads - Jetty (Embankment Fill)	4,138	-	36,987	(36,987)	Rock Armor
2	Port & Fuel Facility	4,376	15,587	240	15,347	
3	Stockpile Facility	27,471	67,646	5,040	62,606	
4	Stockpile Pond	3,796	11,299	1,288	10,011	
5	Mine & Camp Facility Pad	53,614	162,673	80,553	82,120	
<b>B</b>	<b>Road &amp; Access Roads</b>					
1	Haul Road - L = 497 m	12,425	29,718	11,245	18,473	
2	Access Road 1 (Intersections 1 - Mine Facility)	2,850	1,550	1,705	(155)	
3	Access Road 2(Intersections 2 - Camp Facility)	3,442	2,745	3,172	(427)	
<b>C</b>	<b>Others</b>					
1	Primary Ponds	9,765	18,187	4,751	13,436	
2	Primary Drainage	3,917	5,190	649	4,541	
<b>D</b>	<b>TOTAL</b>	<b>125,794</b>	<b>314,595</b>	<b>145,630</b>	<b>168,965</b>	

## Bathymetry

A bathymetric survey was undertaken to determine the depths with relation to tides for potential Jetty locations and the approaches that loaded barges would take in addition to offshore transshipment options. For this initial survey the Jetty option locations, depth and coral locations were the key investigation areas.

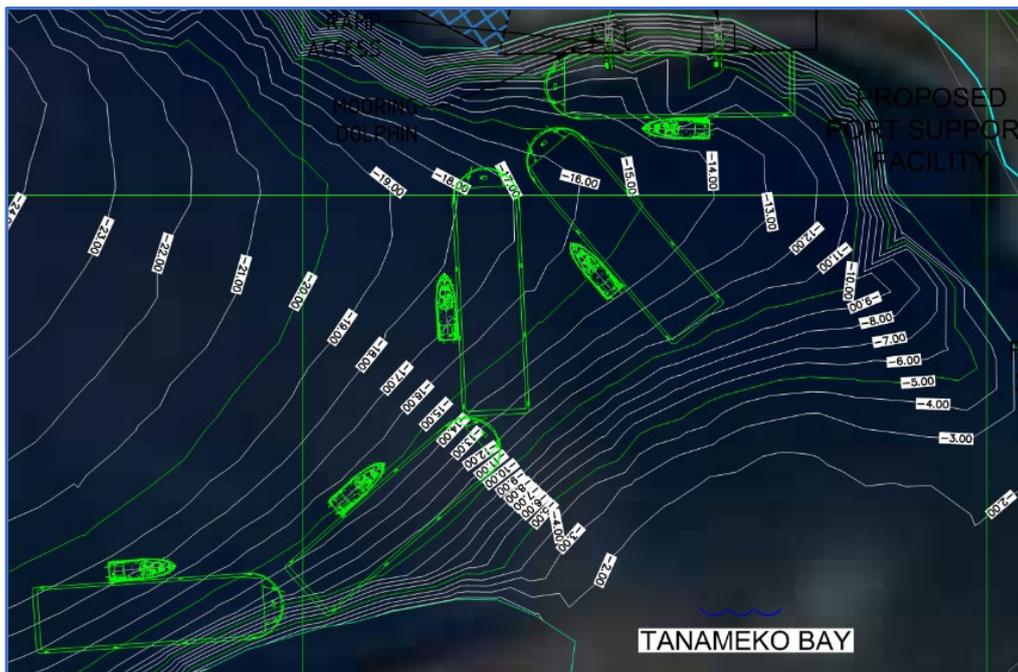


Figure 11 - Jetty placement based on Bathymetric Data

## Barging & Trans-Shipment

The Jetty is designed for 300 foot barges, 8000 DWT capacity (nominally) with the final barge and tug fleet engaged subject to tendering to barging contractors. i.e. barges may be as small as 4000 DWT however the larger barges provide more efficiency and are generally available throughout the region enabling a Solomon Islands contractor to gear up for the works.

Barges would be loaded by truck with excavator maximising the capacity per barge as usual nickel laterite ore shipment practice. Conveyors are not considered effective due to the ore characteristics, which is common for this type of operation throughout the region.

The barges will be towed by ocean class tug boats to a deep water trans-shipment point approximately one kilometre 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 will be despatched by the offtakers and are all geared vessels (fitted with self-loading cranes) as per standard practice for these operations.

Once moored to the bulk carrier loading to the vessel commences. Initially this is a faster process with the vessel's clamshell cranes dropping into the vessel holds. As the barge ore volume decreases and the vessel cranes capacity per transfer drop off, a small bobcat / mini-dozer is dropped by crane into the barge and used to 'clean up' the remaining ore into suitable piles that the clamshells can efficiently take.

Once barge cargoes are transferred, they return to the Jetty for loading and repeat the process until the vessel has reached capacity.

## Nickel Ore Product Distribution

The nickel ore is mined at a sufficiently high grade for direct export and will be sold as four consistent products as summarised below.

The ore will be placed in stockpiles for drying however no other processing is currently planned.

**Table 6 – Nickel Ore Distribution**

No.	Description	Unit	Ni Grade	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Totals
				2022	2023	2024	2025	2026	2027	
1	1.7% NiOre1	WMT	1.7% Ni	110,670	544,484	326,695	0	0	0	981,849
2	1.6% NiOre2	WMT	1.6% Ni	217,770	597,975	487,305	166,005	276,675	160,650	1,906,380
3	1.5% NiOre3	WMT	1.5% Ni	0	166,066	494,445	981,860	1,031,730	492,660	3,166,761
4	1.4% NiOre4	WMT	1.4% Ni	0	0	0	160,650	0	245,258	405,908
5	OB	WMT		708,170	2,846,349	3,098,794	2,576,650	2,837,642	1,915,561	13,983,166
6	OB	BCM		488,393	1,963,000	2,137,099	1,777,000	1,956,994	1,321,076	9,643,563
7	<b>Total Ni Ore Mined</b>			<b>328,440</b>	<b>1,308,525</b>	<b>1,308,445</b>	<b>1,308,515</b>	<b>1,308,405</b>	<b>898,568</b>	<b>6,460,898</b>
8	<b>Total WMT Movements</b>			<b>1,036,610</b>	<b>4,154,875</b>	<b>4,407,239</b>	<b>3,885,164</b>	<b>4,146,047</b>	<b>2,814,129</b>	<b>20,444,064</b>

**Notes.**

- 1) Basis is a Cut-off Grade (COG) of 1.2% Ni in the ore.
- 2) It is assumed that the excess Ni % in some shipments will offset the lower Ni% in others, so 4 products have been split based on this approach

### Ore Transportation Plan

Nickel ore will be transported from the Port drying stockpiles, as well as future drying stockpiles developed as the mining sequence progresses, then loaded to barges via Truck-on-Barge methods with excavator pull-up to maximise the loaded capacity per barge.

The ore will then be transported by tug and barge sets approximately one km to a deep water offshore anchorage location. At this location geared bulk cargo vessels will transfer the nickel ore to their hatches, typically 55 - 60kt capacity Handymax vessels are expected, however will be subject to off-taker's arrangements.

### Nickel Ore Pricing

Pacific Nickel has undertaken a current review of the Nickel Ore pricing on a CIF basis and has summarised the sales price as follows with the Pacific Nickel products .

**Table 7 – Nickel Laterite Ore Pricing**

No.	Description	Unit	USD CIF Rate
1	1.7% Ni Ore 1	WMT	\$103
2	1.6% Ni Ore 2	WMT	\$91
3	1.5% Ni Ore 3	WMT	\$85
4	1.4% Ni Ore 4	WMT	\$76

The chart below shows the connection between the quoted FerroAlloy.net price and the discount against LME for the Nickel Laterite sales.

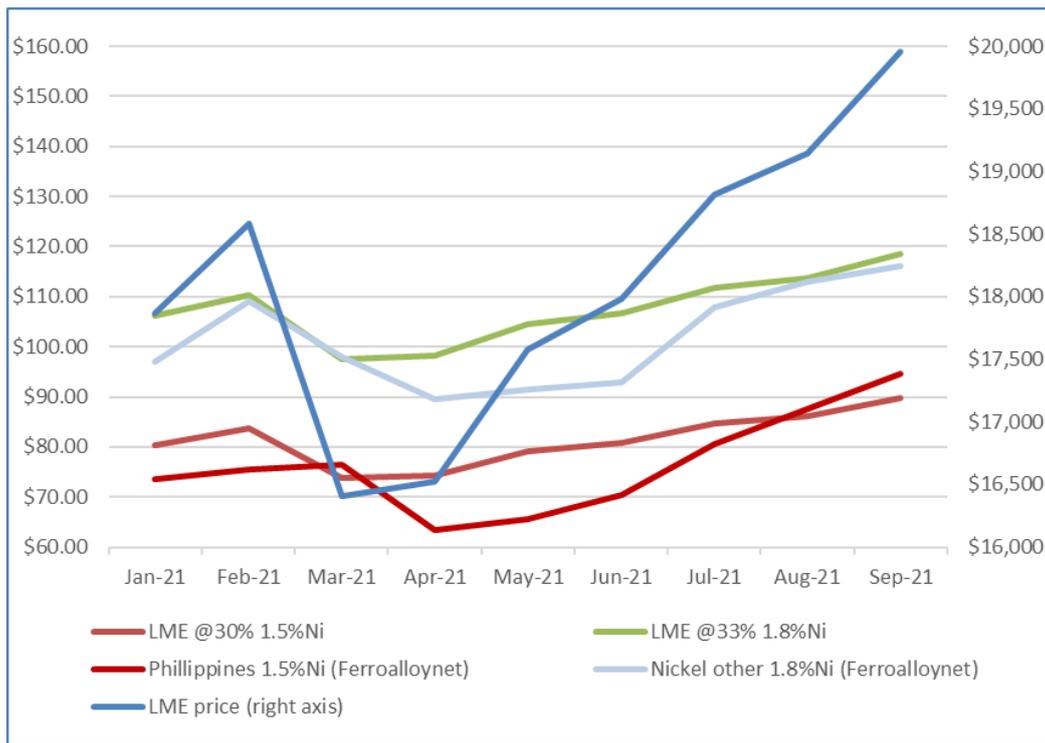


Figure 12 – Ferro Alloy Net Price & Discount against LME for Nickel Laterite Sales

### Market for Laterite Ore from Kolosori

The laterite ore from Kolosori is destined for the Rotary Kiln Electric Arc Furnace (RKEF) plants in China.

The RKEF plant produce a nickel pig iron product which is then used to make stainless steel.

The demand in China for saprolite ore is high due to the ban on DSO nickel ore exported from Indonesia. The 1.5% Ni DSO is the new benchmark from the Philippines who deliver approximately 80% to 90% of the saprolite ore to China.

#### RKEF AND DOWNSTREAM NPI USAGE PROCESS FLOW DIAGRAM

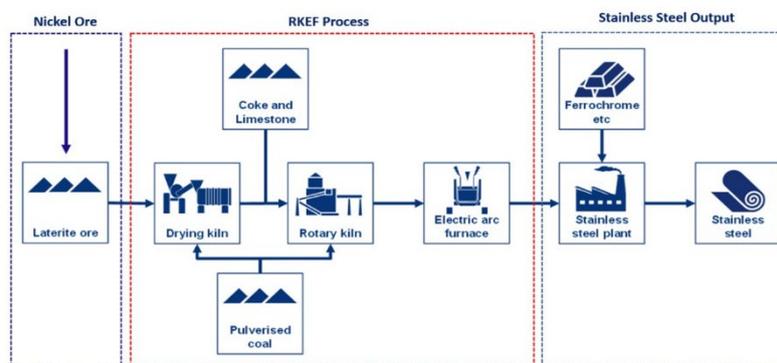


Figure 13 Laterite Downstream Processing

### Background to the global nickel mine supply industry

Lateritic 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 appliances, cutlery, surgical instruments and widely throughout the world's chemical, paper and water industries.

Nickel supply is driven by two main types of nickel ore, nickel sulphides derived from primary nickel orebodies (now a mature industry) and nickel laterites formed from the weathering and subsequent enrichment of nickel-bearing rock types. These laterite deposits are further subdivided into limonite and saprolite. Limonite ores are the commonest and make up some 70% of global laterite resources.

Higher purity nickel feedstock ("Class 1") is largely derived from the smelting of nickel concentrate from sulphide mines makes up some 25-30% of demand from the stainless producers. However, Class 1 feed is progressively being diverted into the manufacture of nickel sulphate for rechargeable batteries, driven by the seemingly exponential demand for electric vehicles and energy storage in general.

Increasingly, stainless steel producers have been using so-called Class 2 or charge nickel products such as nickel pig iron (NPI) and ferro-nickel (FeNi) which contain <99.8% Ni and are commonly produced from very large nickel laterite deposits.

### Capital Estimate Summaries

The following summarises the capital estimates for infrastructure. Values presented are the final value including Contractor Directs and Indirects inclusive of a contingency of 20%.

WBS	Description	Total Cost (US\$m)
I	Camp Facilities	\$ 4.70
II	Mining Facilities	\$ 5.95
III	Haul Road, Sediment Ponds, Bulk Earthworks	\$ 3.33
IV	Port Area incl. Fuel Storage	\$ 1.05
V	Temporary Facilities	\$ 0.56
VI	Jetty	\$ 3.22
VII	Waste & Recycling Facilities	\$ 0.76
		<b>\$ 19.6</b>

Table 8 Capital Cost Estimates

### Operating Cost Estimates

Operational Costs were developed based on manning requirements, cost of employment and unit rates for plant, equipment and maintenance. This includes the organisation structure to develop and carry out the operations.

Operating Cost	Typical Year 3 (US\$m)	Total Operating Cost (US\$m)	% of Total
Mining cost	\$15.7	\$ 80.9	20%
Port Cost	\$1.7	\$ 9.2	2%
Power	\$1.9	\$ 9.6	2%
Owner Costs	\$3.5	\$ 16.7	4%
<b>Sub Total</b>	<b>\$22.8</b>	<b>\$ 116.4</b>	<b>29%</b>
Barge Transport	\$5.8	\$ 29.8	7%
Marine Transport	\$49.4	\$ 254.5	64%

Table 9 Operating Cost Estimates

## Financial Model Parameters

The economic analysis is developed and based on the capital and operational costs developed for the Study, relevant taxes, royalties as required by the Solomon Islands Government and current finance market conditions including forex for the primary rate of USD:SI\$.

### Economic Assumptions

Discount Rate	8.0%	discount rate to be used
Community Contribution	0.5%	from total revenue
Royalty Rate	3.20%	from total revenue
Corporate Tax	30%	corporate Annual Income Tax and prepaid tax for the following year
Employee Tax	30%	employees Income Tax, used the highest rate
Withholding Tax	0%	Solomon Islands only applies to dividends, interest etc., Not general transactions
GST / VAT	10%	VAT In / Out
Land & Building Tax Rate	0.20%	rate for mining industry
Fuel Price	1.19	Solomon Islands US\$ Fuel Price / Litre
Exchange Rate	8.02	Conversion rate from Solomon Island \$(SBD) to USD

### Production Assumptions

Handling & Transport Losses	2.0%	
Marketing Fee	1.5-2.5%	Traders Fee per WMT FOB Vessel.
Vessel Rate/WMT	USD\$38.4	Rate to deduct from CIF to estimate FOB Vessel for Marketing Fee (Sept2021)

**Table 10 Economic and Production Assumptions**

## Economic Analysis

The economic analysis was undertaken using Discounted Cash Flows, the updated capital and operating costs, taxes and royalties as noted with the annual income statement and cash flow forecast developed.

The resultant base case model represents a very robust economic project with an NPV of US\$58.4m

The investment evaluation for the Kolosori mine production schedule analysis by Mining One is summarised as follows;

- The project delivers a combined net profit after tax of US\$63.0 million from a total capital investment of US\$22.2 million with a resultant payback period of one year.
- Without Inferred Resources, the undiscounted cash flow (excluding Capex) decreases by nearly 60%, from US\$80 million down to US\$34 million, which is nevertheless an economic project. Deducting US\$20 million pre-production Capex, the project still delivers a US\$14 million surplus.

A sensitivity analysis was undertaken to determine the effect of key parameter changes; Ore Sales Price, Capital Costs and Operational Costs with the results summarised in tables below,

Percentage Variance from Base Case					
Ore Price (USD\$/WMT)	NPV	IRR	NPV Delta from Base Case	Comment	
-5.0%	\$43,113	119.5%	-26.1%		
	\$58,357	152.2%	0.0%	Base Case	
5.0%	\$73,600	184.3%	26.1%		

Table 11 Sensitivity to Ore Price

The following Table varies the Capex and Opex of the project to consider its robustness.

Percentage Variance from Base Case					
Capex	Opex	NPV USD ('000's)	IRR	NPV Delta from Base Case	Comment
		\$58,357	152.2%	0.00%	Base Case
	10.0%	\$35,109	104.0%	-39.8%	Opex increase
10.0%		\$56,655	135.4%	-2.9%	Capex Increase
20.0%		\$54,954	121.5%	-5.8%	Capex Increase
10.0%	10.0%	\$33,408	91.0%	-42.8%	Capex & Opex Increase

Table 12 Sensitivity to Capex & Opex

The Project's net present value is most sensitive to nickel price and shipping rates. The project is less sensitive to operational and capital costs.

## Recommendations

The Company is already proceeding with a Definitive Feasibility Study. In the early works program, the aim is to carry out test pits to check grade control, moisture levels and mining sequence. Material from the test pit is to be stockpiled to confirm moisture levels prior to barging.

The following forward works proposed for the DFS are as follows;

- 1) Reserves Report based on JORC – waiting for assays from drilling completed
- 2) Mining Schedule based on JORC reserves.
- 3) Geotech Evaluation. Drilling or test pits, laboratory analysis and report covering the following areas;
  - a) Jetty area; barge or raft mounted rig

- b) Facilities areas; Camp, Mining Facilities, Onshore Port area, Haul Road.
  - c) Quarry area.
- 4) Review barging sequencing and port size for flexibility of barge movements
  - 5) Review moisture content of stockpiles
  - 6) Hydrology Evaluation. For catchment areas, covering all facilities areas and mining areas, rainfall, flooding evaluation.
  - 7) From the above data update documents, mainly;
    - a) Earthworks model and volumes (mining as well as infrastructure)
    - b) Determine/ confirm and update pad heights, road heights, crossing (culvert) sizing, berms to protect pits and facilities, sediment pond sizes, etc.
    - c) Confirm local rock for all purposes.
  - 8) Owner Costs. G&A: Full evaluation and budget costs for requirements.
  - 9) Estimated costs for Community Development programs.
  - 10) Further bathymetry work; deep water and confirm Jetty area for standby barge mooring.
  - 11) Ocean Study. Coastal Port with approx. three (3) months not useable due to heavy seas stated, requires validation.
  - 12) RFQ's and responses from Contractors and Vendors;
    - i. Mining
    - ii. Bulk earthworks and road construction for facilities
    - iii. Barging
    - iv. Vessels
    - v. Jetty construction (infill with rock armour and sheet piling on berthing face)
    - vi. Buildings (local)

A summary of the material assumptions relating to the Project is considered below and is included alongside material assumptions previously provided in the body of the Scoping Study Executive Summary.

## **DRILLING AND SAMPLING METHODS**

### **Sampling Methods**

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. 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.

Core samples from these 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.

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**

Sample recovery averaged greater than 97% given the containment of each sample run within a plastic sleeve within the core barrel.

### **Sub-Sampling Techniques**

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.

### **Quality of Assay Data and Laboratory Tests**

All diamond core samples were analysed at the Intertek laboratory located in Australia. The glass fusion XRF method was used where the nickel laterite multi-element suite was completed. Assays were determined for:

- Ni%, Co%, Mg%, Cr%, Fe%, Mn%, Al%, Si%, Ca% and K%.

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.

No material biases were noted in the QAQC sampling results.

### **Verification of Sampling and Assaying**

No verification drilling or sampling has been completed since the last drilling campaign was completed in 2015.

Areas of the deposit have however been drilled down to a 25m x 25m spacing where correlation between sample results for Ni% and Co% are high and are in line with the distribution expected within a nickel laterite deposit.

Mining One Consultants have completed a review of the drilling dataset and have made recommendations on requirements for confirmatory and infill drilling to provide QAQC support for the historical dataset.

There were no adjustments to any assays other than the replacement of below detection values with half the detection limit.

## **MINERAL RESOURCE ESTIMATION**

### **Database Integrity**

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 between different phases of drilling.

The Axiom series of holes were also accompanied by QAQC samples including Standards, Blanks and Duplicates

### **Site Visit**

No site visit has been completed by Stuart Hutchin (CP Geo) due to the COVID-19 travel restrictions. Local Solomon Islands technical teams have however been completing drilling programs and surface mapping within the Kolosori project areas.

## Geological Interpretation

Nickel is concentrated in a lateritic profile that overlays ultramafic rocks. The lateritic profiles are developed primarily on ridge lines within the project area.

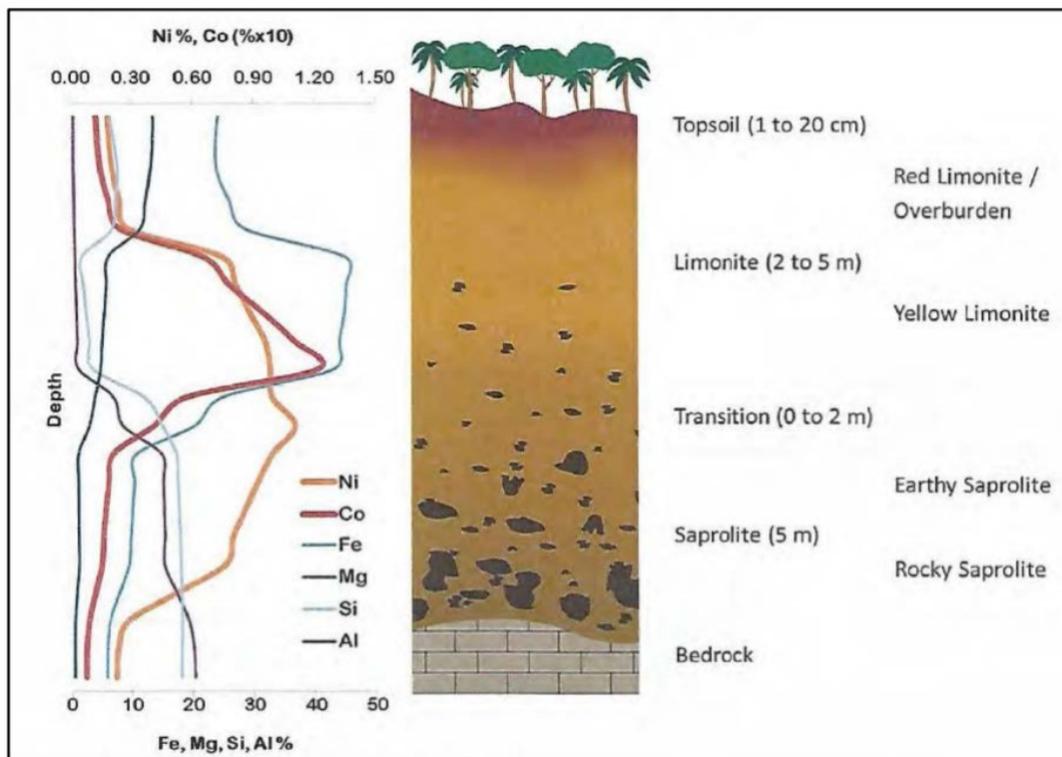
The resource has been modelled based on the following regolith domains from the top of the deposit to the base:

- Overburden/Fe Cap
- Limonite
- Transitional
- Saprolite
- Weathered Bedrock

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.

An example of the typical regolith sequence encountered within the Kolosori deposit is shown in the Figure below.



Example Regolith Profile within the Kolosori Deposit

## Deposit Dimensions

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.

## Resource Estimation and Modelling Techniques

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<sub>2</sub>O<sub>3</sub> (%), MgO (%), Al<sub>2</sub>O<sub>3</sub> (%), CaO(%), Cr<sub>2</sub>O<sub>3</sub> (%), K<sub>2</sub>O (%), MnO (%), Na<sub>2</sub>O (%), P<sub>2</sub>O<sub>5</sub> (%), SO<sub>3</sub> (%), SiO<sub>2</sub> (%), TiO<sub>2</sub> (%) and LOI (%). In situ 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.

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.

No correlation between variables was used apart from using the MgO%, Fe<sub>2</sub>O<sub>3</sub>%, SiO<sub>2</sub>% 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 high-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**

Tonnages are estimated based on a dry tonnage basis. Moisture contents are reported within the model however dry tonnages are reported.

### **Cut-Off Parameters**

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 (15,800USD/t)

### **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.

### **Summary of Mineral Resource Accuracy and Confidence**

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.

Within the drilled areas there is a moderate to high level of confidence in the grade and thickness estimates of the deposit.

No production has been completed to date to verify the resource estimation results.

## **Capital Estimate Basis**

The Capital Costs Estimates are based on accepted benchmarks for this level of Study with actual unit prices utilised for equipment and construction coupled with recent and current similar works.

Based on the level of quotations utilised, the new greenfields development of the Project in the Solomon Islands, a nominal contingency of 20% has been applied across the Capex.

The study utilised information developed during the study process, including; site visit data, third party sources, relevant correspondence and the like.

The costs presented herein consist of procurement of permanent and temporary materials, construction and installation of all work described, including all supporting plant/equipment, consumable materials, installation support (scaffolds, form working etc.) and construction of temporary works as required.

The indirect costs are included and consist of preliminary site installation (staff/labour housing & offices, power generation, set up site facilities, etc.), mobilisation of labour, materials (temporary) and plant/equipment; demobilisation all (plant/equipment, labour, materials, temporary site office etc.), general running cost (insurance, running staff/labour facilities, general/specific expenses, messing, etc.), running cost general plant (diesel Gensets, vehicle, fuel truck etc.), staff/field staff cost.

The capital estimate has an accuracy of +/- 25% for this Study.

## **Operational Costs**

Operating costs were developed based on manning requirements, cost of employment and unit rates for plant, equipment and maintenance. This includes the organisation structure to develop and carry out the operations. Detailed operational costs have been developed for input to the model.

## **Project Economics**

A financial model for the Project has been developed as a key part of the Scoping Study. Cashflows are discounted using a rate of 8% pa real. The Project's net present value is most sensitive to nickel price and shipping rates. The project is less sensitive to operational and capital costs.

## **Statement from Geological Competent Person**

The information in this report that relates to Exploration Targets, Exploration Results or Mineral Resources is based on, and fairly represents, information and supporting documentation prepared by Mr Stuart Hutchin a Member of the Australian Institute of Geoscientists. Mr Hutchin is a full-time employee of Mining One Consultants and has sufficient experience which is relevant to the style of mineralisation and type of deposit and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Hutchin consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

In addition, Pacific Nickel Mines confirms that all material assumptions and technical parameters underpinning the estimate of the Mineral Resource at Kolosori in the announcement "Initial JORC Resource Estimate at Kolosori" dated 19 November 2020 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.

# APPENDIX A: JORC 2012 Table 1 criteria assessment

## Section 1: Sampling Techniques and Data

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

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>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.</p> <p>The Diamond drilling was completed over multiple phases that are described as:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• 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.</li> <li>• 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.</li> </ul> <p>Core samples from these 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.</p>
Drilling techniques	<p><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>Diamond drilling was completed using a small portable drilling rig that was moved between drill sites using a track based crawler.</p> <p>A larger diamond drill rig was also used between November 2014 and June 2015 that was able to drill HQ size core</p> <p>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.</p> <p>Holes were drilled vertically through the limonite and saprolite zones into underlying basement.</p>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to</i></p> <p><i>maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<p>Sample recovery averaged greater than 97% given the containment of each sample run within a plastic sleeve within the core barrel.</p>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Logging	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>All holes were:</p> <ul style="list-style-type: none"> <li>marked up for recovery calculations</li> <li>geologically marked up and logged for geology, fractures and recovery</li> <li>marked up for sampling interval</li> <li>photographed</li> </ul> <p>Geology logging includes lithology, minerals, colour and texture.</p>
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>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.</p> <p>The principal sampling method from the drill core resulted in samples averaging 3-5 kg in weight for each 1m sample.</p> <p>The Intertek laboratory in Australia, a commercial laboratory facility, used standard perpetration methods that included:</p> <ul style="list-style-type: none"> <li>24 hour drying at 90° C</li> <li>jaw crushing to &lt;5 mm</li> <li>riffle split to 1.2 to 1.6 kg</li> <li>pulverised with LM2 sampled to 50 g and 200 g pulps.</li> </ul>
Quality of assay data and laboratory tests	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></p>	<p>All diamond core samples were analysed at the Intertek laboratory located in Australia. The glass fusion XRF method was used where the nickel laterite multi-element suite was completed. Assay were determined for:</p> <ul style="list-style-type: none"> <li>Ni%, Co%, Mg%, Cr%, Fe%, Mn%, Al%, Si%, Ca% and K%.</li> </ul> <p>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.</p> <p>No material biases were noted in the QAQC sampling results.</p>
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>No verification drilling or sampling has been completed since the last drilling campaign was completed in 2015.</p> <p>Areas of the deposit have however been drilled down to a 25m x 25m spacing where correlation between sample results for Ni% and Co% are high and are in line with the distribution expected within a nickel laterite deposit.</p> <p>Mining One Consultants have completed a review of the drilling dataset and have made recommendations on requirements for confirmatory and infill drilling to provide QAQC support for the historical dataset.</p> <p>There were no adjustments to any assays other than the replacement of below detection values with half the detection limit.</p>
Location of data points	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used. Quality and adequacy of topographic control.</i></p>	<p>Collar locations were surveyed by hand-held GPS. No elevation was recorded, GPS reading accuracy was to approximately 5 m.</p> <p>Collar elevations have been assigned based on the topographic surface that covers the deposit area.</p> <p>All exploration and evaluation work is completed in UTM WGS 84 Zone 57S.</p> <p>Topography data includes a processed DTM grid with an average accuracy of within 1m.</p>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
<i>Data spacing and distribution</i>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>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.</p> <p>Drill core samples are generally 1 m in length, the regolith horizons encountered within the deposit are generally greater than 1m in thickness.</p> <p>The drill spacing and sampling intervals are assessed as acceptable for this style of mineralization.</p>
<i>Orientation of data in relation to geological structure</i>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<p>The nickel laterite deposit is formed as a weathered geomorphic surface sourced from ultramafic bedrock units.</p> <p>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.</p> <p>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.</p>
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	<p>Axiom reported that samples were escorted from the drill sites to a secure facility at the site camp.</p> <p>Samples were placed in zip tied bags and then escorted to the transport depot located in Honiara.</p>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<p>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.</p>

## • Section 2: Reporting of Exploration Results

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
<i>Mineral tenement and land tenure status</i>	<p><i>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.</i></p> <p><i>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.</i></p>	In October 2020 Pacific Nickel 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.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	INCO, Kaiser Engineering and Axiom Mining Limited have completed the majority of historical exploration work completed within the Resource area.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Wet tropical laterite. In-situ chemical weathering of the ultramafic rocks with nickel and cobalt enrichment through both residual and supergene processes.
<i>Drill hole Information</i>	<p><i>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:</i></p> <ul style="list-style-type: none"> <li>• <i>easting and northing of the drill hole collar</i></li> <li>• <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>• <i>dip and azimuth of the hole</i></li> <li>• <i>down hole length and interception depth</i></li> <li>• <i>hole length.</i></li> </ul> <p><i>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.</i></p>	<p>Diamond drilling programs were primarily completed by Axiom Mining between 2014 and 2016.</p> <p>These holes were drilled on various spacings ranging from 100m x 100m down to 25m x 25m.</p> <p>Diamond drilling was completed using a small portable drilling rig that was moved between drill sites using a track based crawler.</p> <p>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.</p> <p>Holes were drilled vertically through the limonite and saprolite zones into underlying basement.</p> <p>Details of the drillhole locations are shown in Figure 1 within this ASX release.</p>
<i>Data aggregation methods</i>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated</i></p>	Weighted averages are used for reporting all assay intervals from the diamond drillholes.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
<i>Relationship between mineralisation widths and intercept lengths</i>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	<p>The laterite is thin but laterally extensive. The intercepts are almost perpendicular to the mineralisation.</p> <p>Drilling so far has been confined to the major ridgelines due to access and deposit geometry.</p>
<i>Diagrams</i>	<p><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported.</i></p> <p><i>These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></p>	<p>Maps are provided in this ASX release that show the distribution of drilling across the Kolosori deposit.</p>
<i>Balanced reporting</i>	<p><i>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.</i></p>	<p>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.</p>
<i>Other substantive exploration data</i>	<p><i>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.</i></p>	<p>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 PL05/19.</p>
<i>Further work</i>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>Future work will include:</p> <ul style="list-style-type: none"> <li>• Completion of infill and extensional drilling within the Kolosori deposit area</li> <li>• Testing of regional exploration targets within Prospecting License P05/19</li> <li>• Conceptual mining and processing studies for Kolosori</li> </ul>

## • Section 3: Estimation of Mineral Resources

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Data validation procedures used.</i></li> </ul>	<p>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.</p> <p>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.</p> <p>The Axiom series of holes were also accompanied by QAQC samples including Standards, Blanks and Duplicates</p>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case</i></li> </ul>	<p>No site visit has been completed as yet due to the COVID-19 travel restrictions.</p>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>Nickel is concentrated in a lateritic profile that overlays ultramafic rocks. The lateritic profiles are developed primarily on ridge lines within the project area.</p> <p>The resource has been modelled based on the following regolith domains from the top of the deposit to the base:</p> <ul style="list-style-type: none"> <li>• Overburden/Fe Cap</li> <li>• Limonite</li> <li>• Transitional</li> <li>• Saprolite</li> <li>• Weathered Bedrock</li> </ul> <p>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.</p> <p>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.</p>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Dimensions	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>The Kolosori deposit exists over a large area of approximately 2km by 3km on Isabel island (Solomon Islands).</p> <p>Individual regolith domains average in thickness ranging between 3m and 10m.</p> <p>The deposits all occur within 50m depth of the topography surface.</p>
Estimation and modelling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<p>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.</p> <p>Leapfrog™ and Surpac™ software was used to build the domain models and create the block model respectively.</p> <p>Blocks were estimated for Ni (%), Co (%), Fe<sub>2</sub>O<sub>3</sub> (%), MgO (%), Al<sub>2</sub>O<sub>3</sub> (%), CaO(%), Cr<sub>2</sub>O<sub>3</sub> (%), K<sub>2</sub>O (%), MnO (%), Na<sub>2</sub>O (%), P<sub>2</sub>O<sub>5</sub> (%), SO<sub>3</sub> (%), SiO<sub>2</sub> (%), TiO<sub>2</sub> (%) 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.</p> <p>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.</p> <p>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 fitch heights and the lateral block size to be mined within an open pit scenario.</p> <p>No correlation between variables was used apart from using the MgO%, Fe<sub>2</sub>O<sub>3</sub>%, SiO<sub>2</sub>% and CaO% values to guide the coding of the regolith domains</p> <p>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.</p> <p>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.</p> <p>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.</p>
Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<p>Tonnages are estimated based on dry tonnages. Moisture contents are reported within the model however dry tonnages are reported.</p>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<p>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 (15,800USD/t)</p>

CRITERIA	JORC CODE EXPLANATION	COMMENTARY																										
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	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.																										
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	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.																										
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	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.																										
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<p>1792 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.</p> <p>The densities were assigned via the following criteria.</p> <table border="1"> <thead> <tr> <th>Domain</th> <th>Ni%</th> <th>Density</th> </tr> </thead> <tbody> <tr> <td>FeCap/Overburden</td> <td>-</td> <td>1.35</td> </tr> <tr> <td rowspan="3">Limonite</td> <td>&lt;1%</td> <td>1.35</td> </tr> <tr> <td>1% to 1.20%</td> <td>1.30</td> </tr> <tr> <td>&gt;1.2%</td> <td>1.20</td> </tr> <tr> <td>Transitional</td> <td>-</td> <td>1.10</td> </tr> <tr> <td rowspan="2">Saprolite</td> <td>&gt;1.6%</td> <td>0.95</td> </tr> <tr> <td>&lt;1.6%</td> <td>1.00</td> </tr> <tr> <td rowspan="2">Bedrock</td> <td>&gt;0.6%</td> <td>1.20</td> </tr> <tr> <td>&lt;0.6%</td> <td>1.40</td> </tr> </tbody> </table>	Domain	Ni%	Density	FeCap/Overburden	-	1.35	Limonite	<1%	1.35	1% to 1.20%	1.30	>1.2%	1.20	Transitional	-	1.10	Saprolite	>1.6%	0.95	<1.6%	1.00	Bedrock	>0.6%	1.20	<0.6%	1.40
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<i>Classification</i>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>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).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>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.</p> <p>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.</p> <p>The classification criteria is assessed as appropriate in relation to the style of mineralisation and the average drill spacing through the deposit area.</p>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<p>No audits or reviews have yet been completed on this estimate.</p>
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<p>The block model is based on geological domain layers that represent the commonly encountered regolith profile in nickel laterite deposits.</p> <p>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.</p> <p>Within the drilled areas there is a moderate to high level of confidence in the grade and thickness estimates of the deposit.</p> <p>No production has been completed to date to verify the resource estimation results.</p>