

malachite
resources

ASX Announcement

ASX Code: MAR

19 November 2020

INITIAL JORC RESOURCE ESTIMATE AT KOLOSORI

Malachite Resources Limited (Malachite or Company) (**ASX: MAR**) is pleased to advise that the Company has completed an initial JORC (2012) nickel Mineral Resource estimate for Prospecting Licence PL 05/19 (Kolosori tenement) on Isabel Island, Solomon Islands. The Mineral Resources estimate was carried out by Mining One Pty Ltd (Mining One) an independent consultant to the Company.

OVERVIEW

- In October 2020 Malachite 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 05/19¹.
- The Agreement is subject to Malachite shareholder approval with an Extraordinary General Meeting to be held as soon as practicable.
- **Total mineral resource estimate at Kolosori of 5.89 million tonnes at 1.55 % Ni** at a 1.2% Ni cut off.
- Conceptual resource extension targets at Kolosori of 1.94 million to 3.19 million tonnes at 1.2% to 1.6% Ni identified.
- Further exploration targets identified within close proximity of the known resource.
- Significant historical drilling intercepts in PL 05/19 include:
 - **HA-506: 13.8m @ 2.30% Ni** from 2m
 - **HA-285: 11m @ 2.29% Ni** from 5m
 - **HA-680: 17.8m @ 2.03% Ni** from 2m
- Resource estimate to form the basis of a feasibility study at Kolosori which has now commenced.

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. The Mineral Resource estimate is classified in accordance with the 2012 JORC guidelines with relevant details provided in JORC (2012) Table 1 criteria (Sections 1 to 3) provided in Appendix A of this announcement.

¹ ASX Announcement - MALACHITE SECURES 80% INTEREST IN THE KOLOSORI NICKEL PROJECT 26 October 2020

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

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

TABLE 1 – KOLOSORI JORC (2012) RESOURCE ESTIMATE

The transitional and saprolite ores are saleable products for the direct ship ore (DSO) market, which will be the basis of the feasibility study.

PROGRESSING TO FEASIBILITY STUDIES

This recently completed resource estimate will form the basis of a feasibility study at Kolosori which will commence immediately. An infill drilling program is currently being designed by Mining One to increase the confidence and test for extensions of the resource estimate. The program will utilise a number of infill holes at a closer spacing to increase the measured and indicated resource estimates in these categories. Infill drilling is expected to commence following the completion of the initial 25 hole drilling program at the Company's Jejevo tenement.

The Company holds two nickel projects in the Solomon Islands, the Kolosori Project and the Jejevo Project. Both projects are advanced stage direct shipping ore nickel laterite project with excellent potential for development. The projects have a number of positive features including their close proximity to the coast, no processing requirements, low capital route to direct shipping ore production

and local landowner support. The locations of the Kolosori and Jejevo projects are shown in Figures 1 and 2.

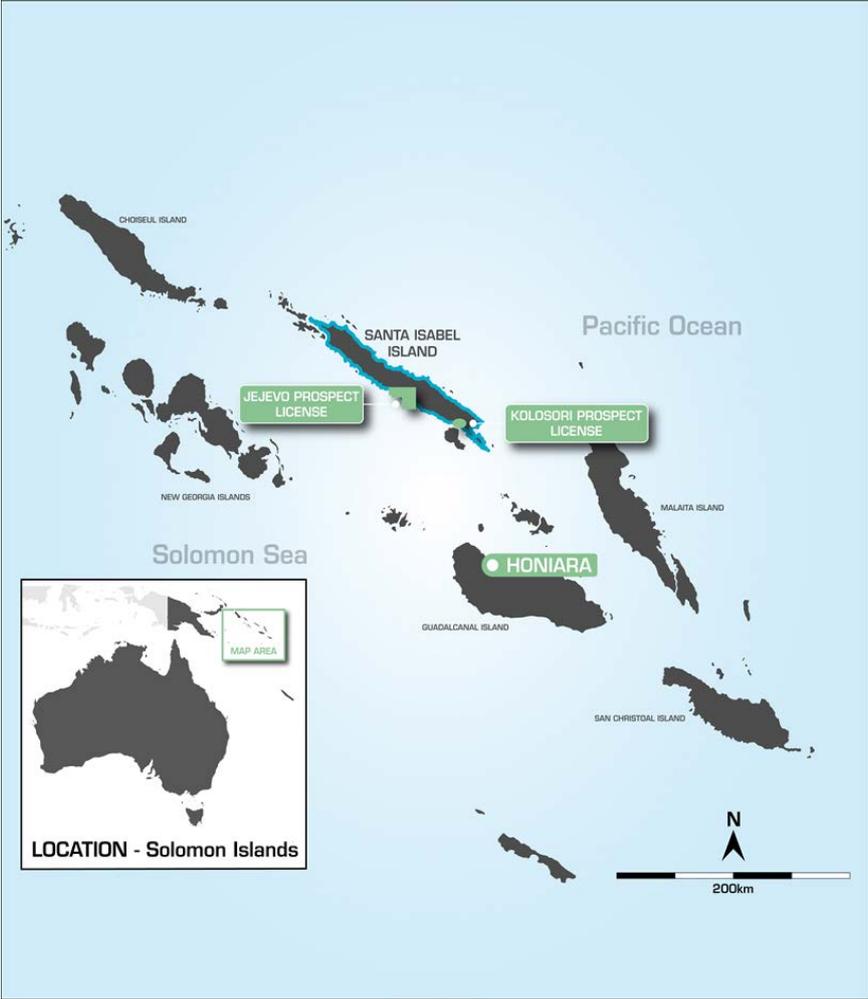


Figure 1 – Kolosori and Jejevo Project Location Map

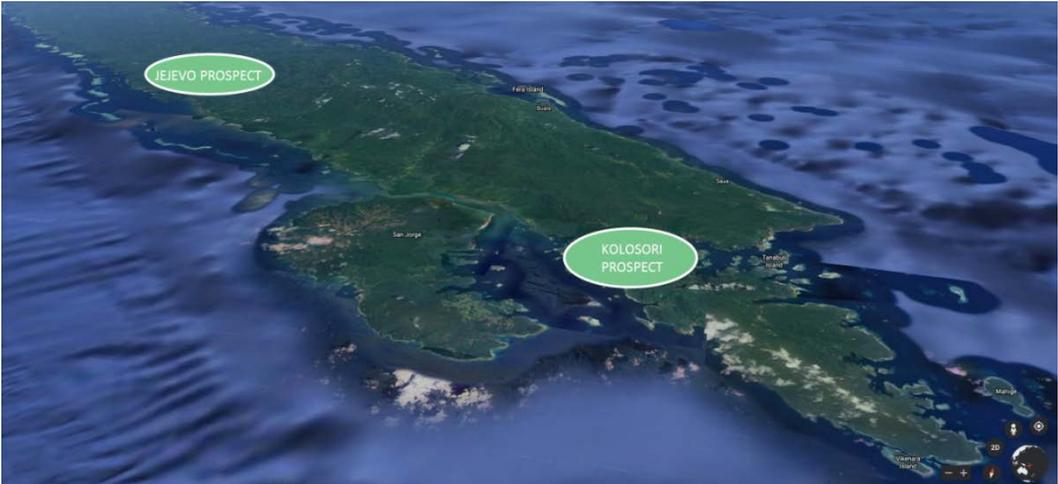


Figure 2 – Location of Kolosori and Jejevo projects on Isabel Island, Solomon Islands

KOLOSORI RESORCE ESTIMATE INFORMATION

Historical drilling for the Kolosori area comprised 1,821 individual drill holes drilled down to a 25m x 25m spaced grid in places. The drilling methods used included diamond coring and hand auger with the majority being diamond holes drilled between 2014 and 2016.

Significant intercepts encountered within downhole drillhole intervals in the historical drilling programs are listed in Table 2 below. These holes have been selected to demonstrate several significant results as distributed across the deposit, the location of these holes are also shown in Figure 3.

A cross section is also shown in Figure 4 in addition to the typical regolith profile encountered within the Kolosori project area (Figure 5).

Hole ID	Intercept	From (m)	Including	From (m)
HA-420	11m @ 1.80% Ni	6m	6m @ 2.21% Ni	9m
HA-393	11m @ 1.78% Ni	4m	3m @ 2.39% Ni	4m
HA-428	4.5m @ 2.42% Ni	5m	3.5m @ 2.62% Ni	6m
HA-506	13.8m @ 2.30 % Ni	2m	8m @ 2.70% Ni	7m
HA-659	8m @ 2.17% Ni	10.3m	5.7m @ 2.39% Ni	10.3m
HA-285	11m @ 2.29% Ni	5m	8m @ 2.52% Ni	5m
HA-598	8m @ 2.00% Ni	7m	2.3m @ 2.64% Ni	12.7m
HA-680	17.8m @ 2.03% Ni	2m	10.5m @ 2.28% Ni	2.5m
HA-564	12m @ 1.58% Ni	1m	2m @ 2.41% Ni	2m
KO-915	9m @ 1.76% Ni	4m	3m @ 2.11% Ni	8m

TABLE 2 – KOLOSORI HISTORICAL DRILLING EXAMPLE SIGNIFICANT INTERCEPTS

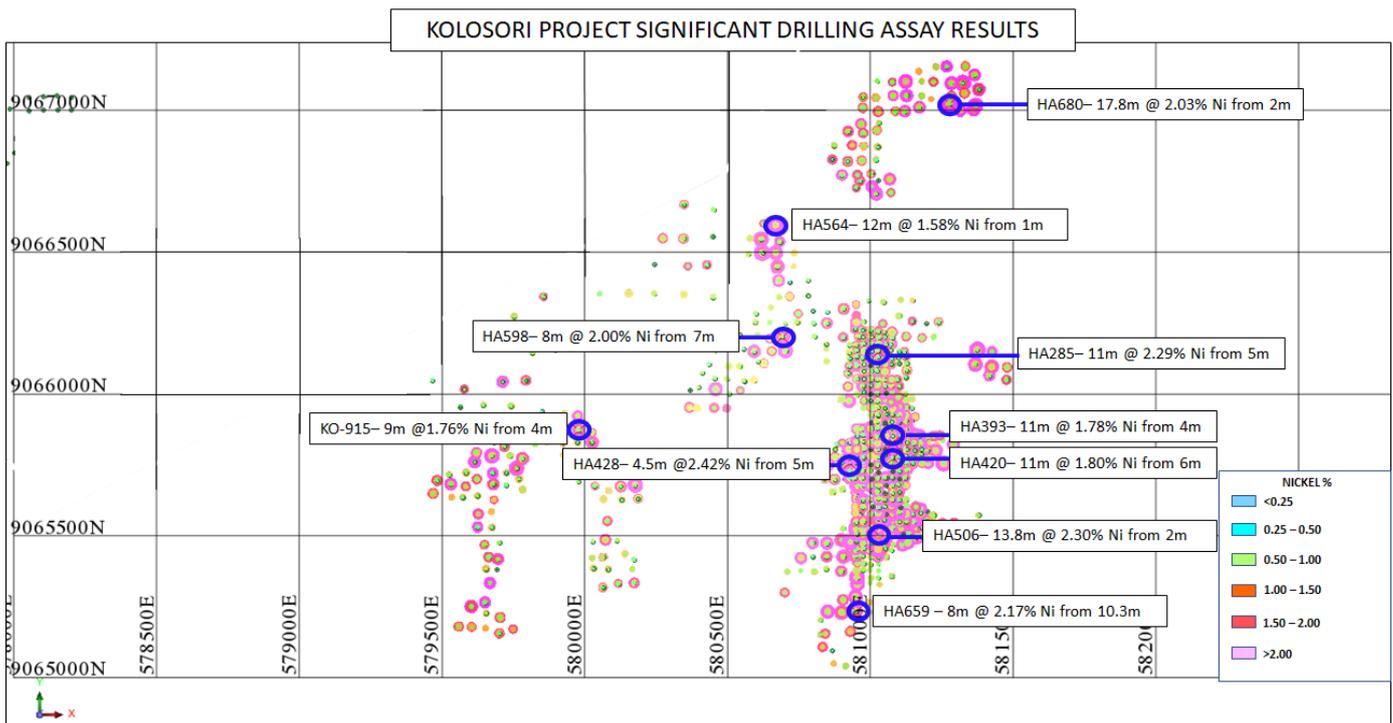


Figure 3 – Kolosori – Historical Drilling Assay Results and Significant Assays (Ni%)

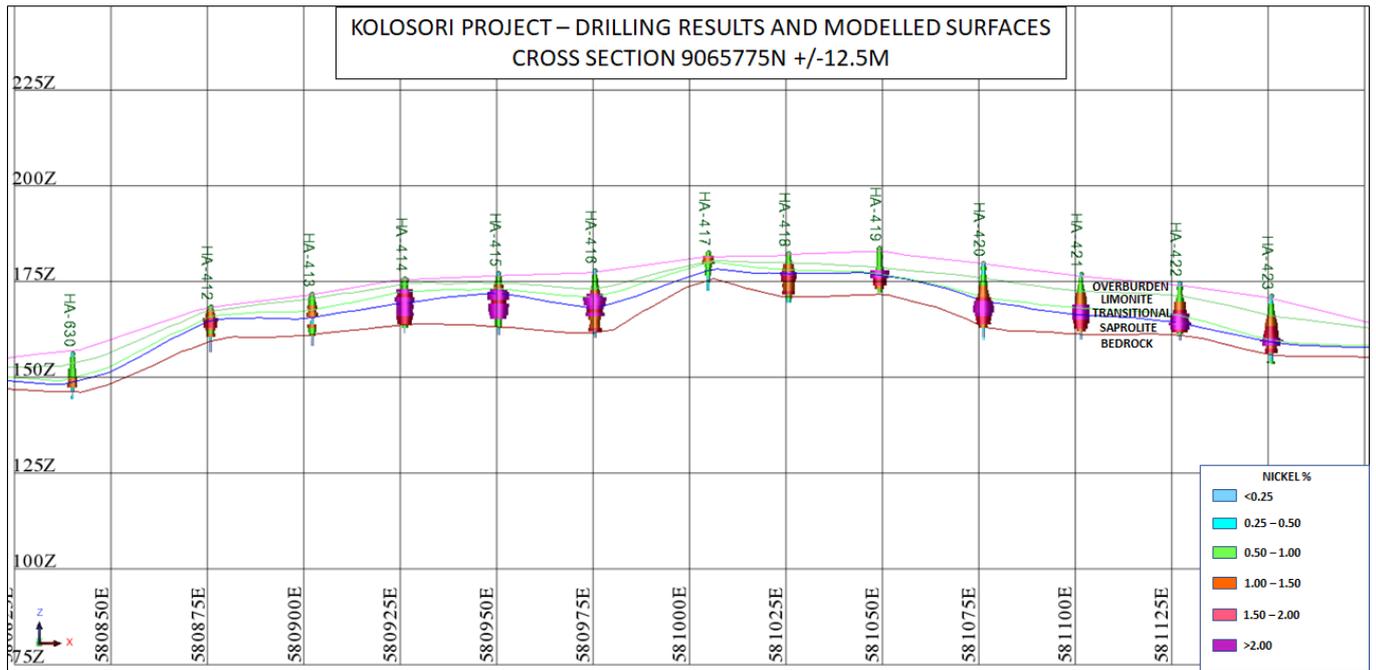


Figure 4 – Kolosori Deposit Cross Section [9065775 North +/- 12.5m]

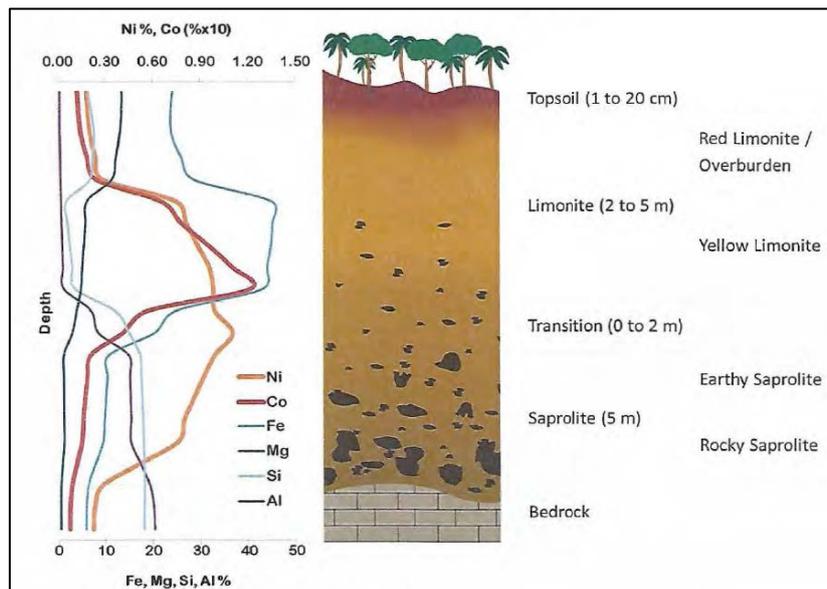


Figure 5 – Example Nickel Laterite Profile (Golder Associates Jejevo Technological Report August 2014)

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 model results are shown in Figure 6 and Figure 7 below.

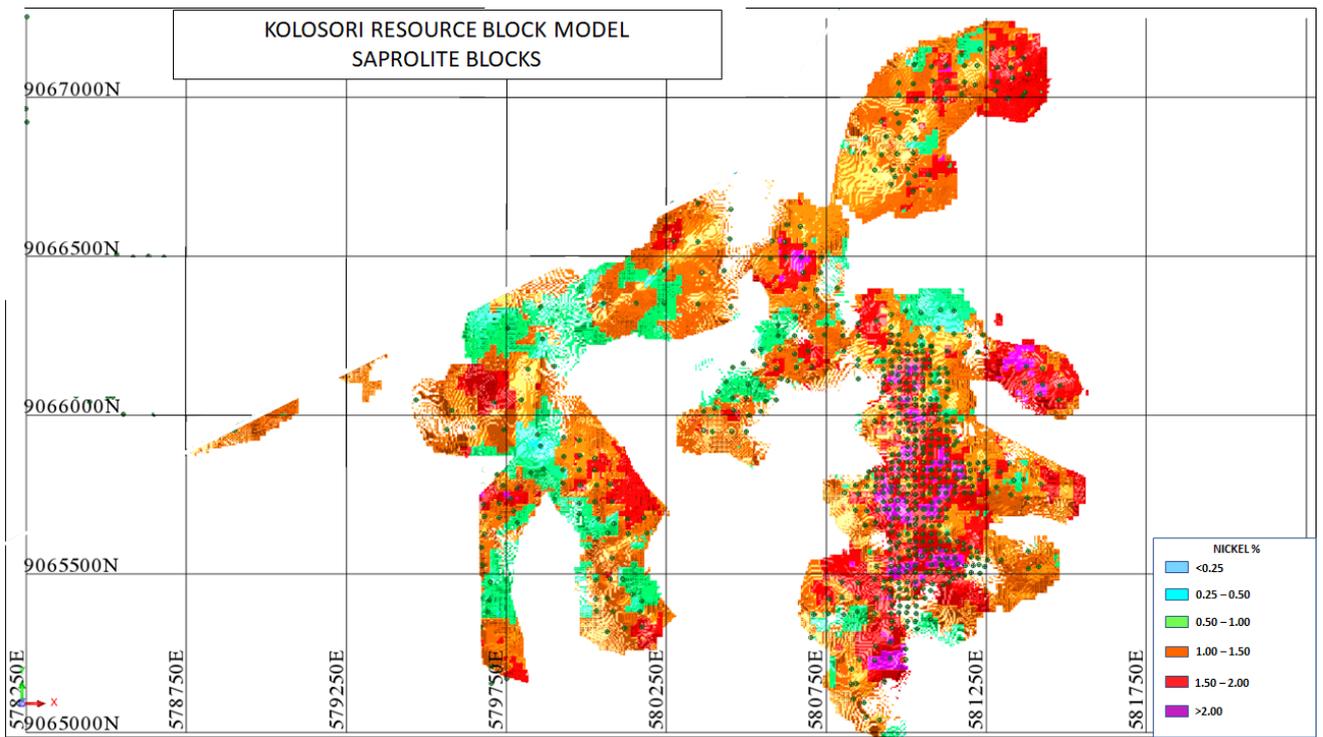


Figure 6 Kolosori Resource Block Model – Saprolite Blocks (Ni%)

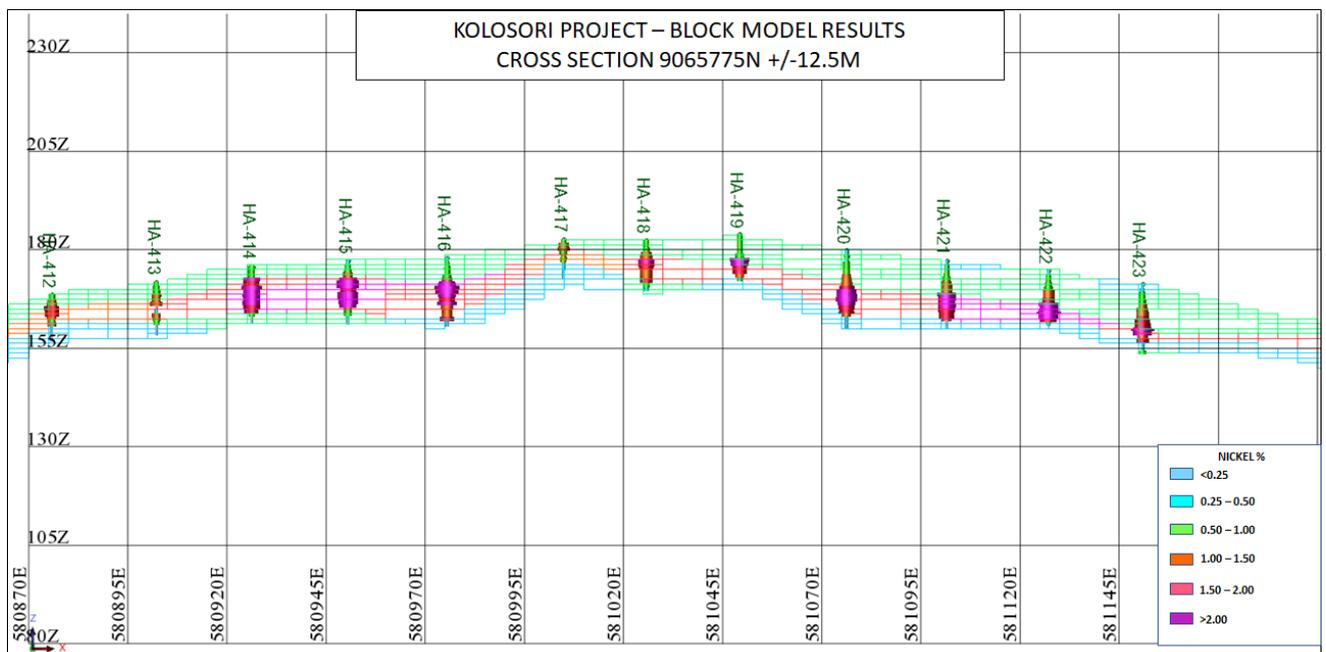


Figure 7 – Kolosori Deposit Cross Section [9065775 North +/- 12.5m]

KOLOSORI RESOURCE EXTENSIONAL 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 2-3million 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 Table 3. A plan of the target areas is also shown in Figure 8 below.

TARGET AREA	AREA (m ²)	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
TOTAL CONCEPTUAL TARGETS (EXTENSIONAL)			1.94	3.19	1.2	1.6

TABLE 3 – KOLOSORI RESOURCE EXTENSIONAL TARGETS

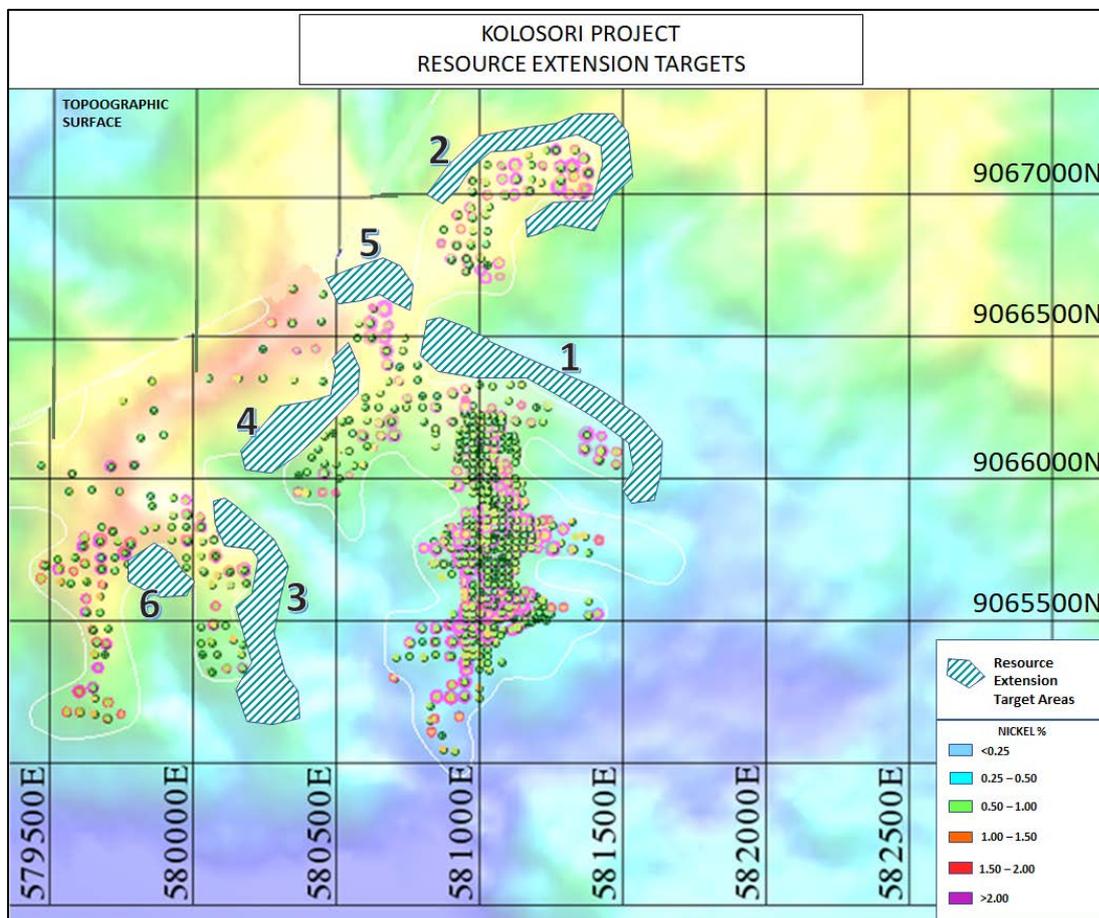


Figure 8 Kolosori Resource Extension Targets – Plan View

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 Figure 9. Work programs are currently being designed to test these target areas.

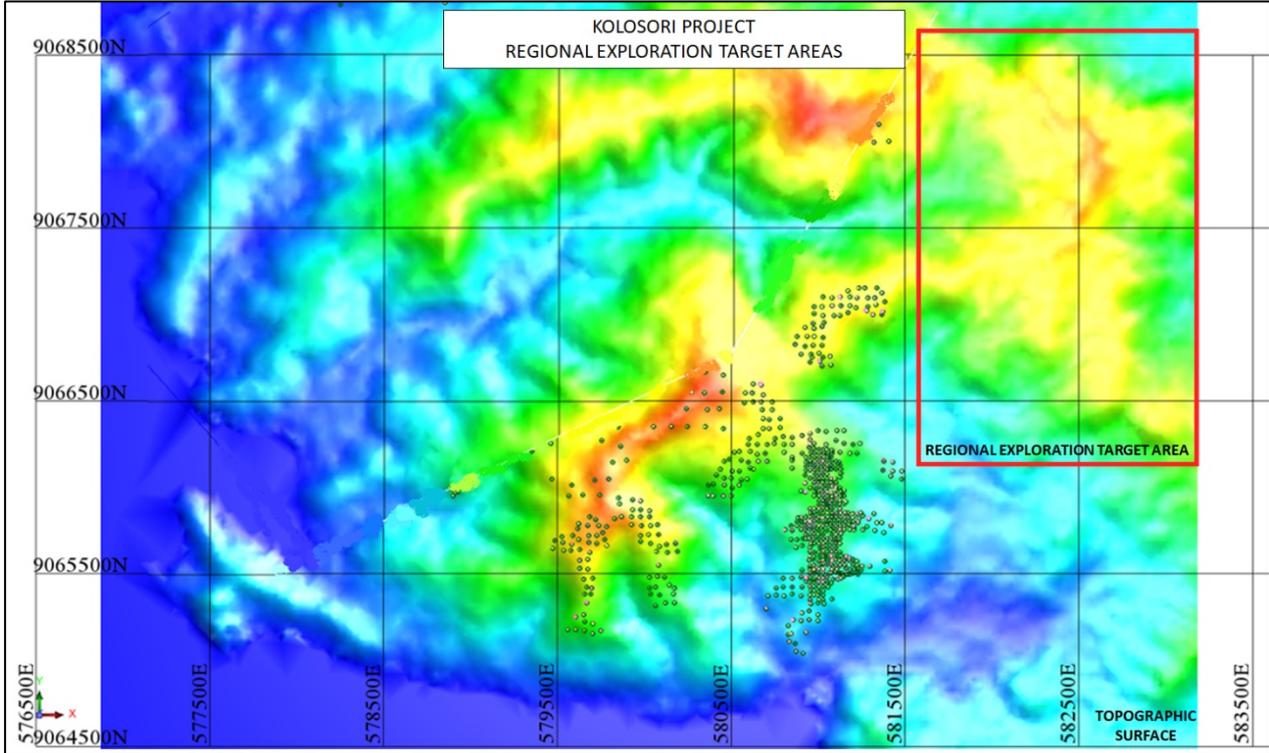


Figure 9 Kolosori Regional Exploration Target Area – Plan View

IMPACT OF COVID-19 ON ACTIVITIES

The Company has engaged local geologists and environmental scientists in the Solomon Islands capable of completing the necessary works. This will ensure minimal impact to activities in light of restrictions on travel internationally and protect against any unwarranted spread of the virus within the local communities. The local specialists are being directed by the Company and its consultants to ensure that the work carried out complies with 2012 JORC and ASX reporting requirements.

JORC COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results at the Jejevo project 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.

Authorised by the board:

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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"> 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. <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 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"> marked up for recovery calculations geologically marked up and logged for geology, fractures and recovery marked up for sampling interval photographed <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"> 24 hour drying at 90° C jaw crushing to <5 mm rifle split to 1.2 to 1.6 kg pulverised with LM2 sampled to 50 g and 200 g pulps.
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"> Ni%, Co%, Mg%, Cr%, Fe%, Mn%, Al%, Si%, Ca% and K%. <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.</i></p> <p><i>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>	<p><i>The measures taken to ensure sample security.</i></p>	<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>	<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<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 Malachite 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"> • <i>easting and northing of the drill hole collar</i> • <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> • <i>dip and azimuth of the hole</i> • <i>down hole length and interception depth</i> • <i>hole length.</i> <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 Malachite 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"> • Completion of infill and extensional drilling within the Kolosori deposit area • Testing of regional exploration targets within Prospecting License P05/19 • Conceptual mining and processing studies for Kolosori

Section 3: Estimation of Mineral Resources

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
<i>Database integrity</i>	<ul style="list-style-type: none"> • <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> • <i>Data validation procedures used.</i> 	<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"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> • <i>If no site visits have been undertaken indicate why this is the case</i> 	<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"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i> 	<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"> • Overburden/Fe Cap • Limonite • Transitional • Saprolite • Weathered Bedrock <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"> 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. 	<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"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<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 (%), Fe₂O₃ (%), MgO (%), Al₂O₃ (%), CaO(%), Cr₂O₃ (%), K₂O (%), MnO (%), Na₂O (%), P₂O₅ (%), SO₃ (%), SiO₂ (%), TiO₂ (%) 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 flitch 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%, Fe₂O₃%, SiO₂% 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"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<p>Tonnages are estimated based on dry tonanges. Moisture contents are reported within the model however dry tonnages are reported.</p>
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<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) therefore values the material at between \$230 and \$246 USD/t.</p>

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<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	The potential mining method will be open pit. The block model has been constructed with parent and sub cell sizes to account for this. The deposit occurs from surface down to a maximum depth of 50m. Given the shallow nature of the reported mineral resources and the value per tonne ascribed to the blocks the criteria of the reasonable prospects for eventual economic extraction are met.																										
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	The block model contains grade estimation of nickel and cobalt and all elements (compounds) that effect the metallurgical processing of the nickel laterite ore. The resources are therefore reported to enable assessment of the processing amenability of the material.																										
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	Environmental studies are ongoing however the project will likely comprise a series of shallow open pits where waste material will be stored in surface waste dumps and/or backfilled into the mined pits in a staged process. The product is likely to comprise direct shipping ore, onsite tailings dams and processing infrastructure is therefore not envisaged to be required.																										
<i>Bulk density</i>	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<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><1%</td> <td>1.35</td> </tr> <tr> <td>1% to 1.20%</td> <td>1.30</td> </tr> <tr> <td>>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>>1.6%</td> <td>0.95</td> </tr> <tr> <td><1.6%</td> <td>1.00</td> </tr> <tr> <td rowspan="2">Bedrock</td> <td>>0.6%</td> <td>1.20</td> </tr> <tr> <td><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"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <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> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<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"> <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<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"> <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> <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> <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<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>