ASX RELEASE
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PNG NICKEL PROJECT EXPLORATION MODEL DEFINED

LCL Resources Ltd (ASX: LCL) (LCL or the Company) provides an update on its 100% owned PNG Nickel Project in southern Papua New Guinea.

LCL's 3,400km^2 portfolio of licences and applications, that form the PNG Nickel Project, are prospective for high grade nickel sulphide mineralisation. To date three prospects (Veri Veri, Iyewe and Doriri) have been identified within a 10km strike proximal to a major structure, the Keveri Fault (Figure 1).

A technical review of previous exploration, dating back to as far as the 1960s, in consultation with leading nickel expert Dr Martin Gole, has now been completed, resulting in the development of a distinct exploration model for high grade hydrothermal nickel sulphide mineralisation.

The model explains how nickel sulphides and associated gold and other metals, are mobilised into structural zones, such as faults and shears. The nickel is likely sourced from ultramafic host rock sequence which contain Ni-rich olivine (dunites), and as hydrothermal fluids interact with these host rocks, it leaches the Ni into the fluid. The likely heat source for the circulating hydrothermal fluids could be provided by proximal intermediate/felsic intrusions which also likely provide the source for the gold and molybdenum. See technical section below for more detail on the hydrothermal nickel model.

These intermediate/felsic intrusives are younger than the host sequence, with some manifesting as magnetic lows (Figures 2 and 3) in regional geophysical data sets. At Iyewe, previous explorers have mapped intermediate/felsic intrusives associated with prominent magnetic lows, and additional unexplained magnetic lows occur along the Keveri Fault east of Doriri and within the Veri Veri prospect area.

The nearest analogy to this style of mineralisation with a similar geological setting is the Avebury nickel deposit in Tasmania. Globally, hydrothermal nickel deposits are rare, Centaurus' (ASX:CTM) Jaguar deposit in Brazil and First Quantum's (TSX:FM) Enterprise deposit in Zambia are examples. However, LCL's Veri Veri and Iyewe prospects are unusual due to the ultra-high nickel grades (up to 49% Ni)[1] with associated gold (up to 13.7g/t Au) and molybdenum (up to 0.46% Mo).

Review of historical exploration over the large nickel stream anomalies at Wedei and Safia (Figure 1) has not established if the nickel anomalism is related to nickel laterite or nickel sulphide mineralisation.

A work program of field mapping and geophysics ahead of drilling[2]

Drilling is anticipated in Q1'24. Ahead of that, and armed with the benefit of the hydrothermal nickel model, the Company is planning for three lines of activity to define and extend its drill targets.

1. Mapping and trenching at the Iyewe and Veri Veri prospects (Figure 4).
2. Re-evaluation and re-interpretation of historical geophysics data.

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[1] *See announcement 4 October 2023. The Company confirms that it is not aware of new information that affects the information contained in the original announcement.*
[2] *Intended for the 2024 work program and subject to funding.*

3. Acquiring tight-spaced new generation geophysics over priority targets.

H1'24 reconnaissance field work will also investigate the large Wedei and Safia stream sediment anomalies.

LCL Managing Director, Jason Stirbinskis added "Our evolving nickel sulphide story is showing great promise. Results and the input of nickel experts are giving us confidence that we could be onto something of global interest".

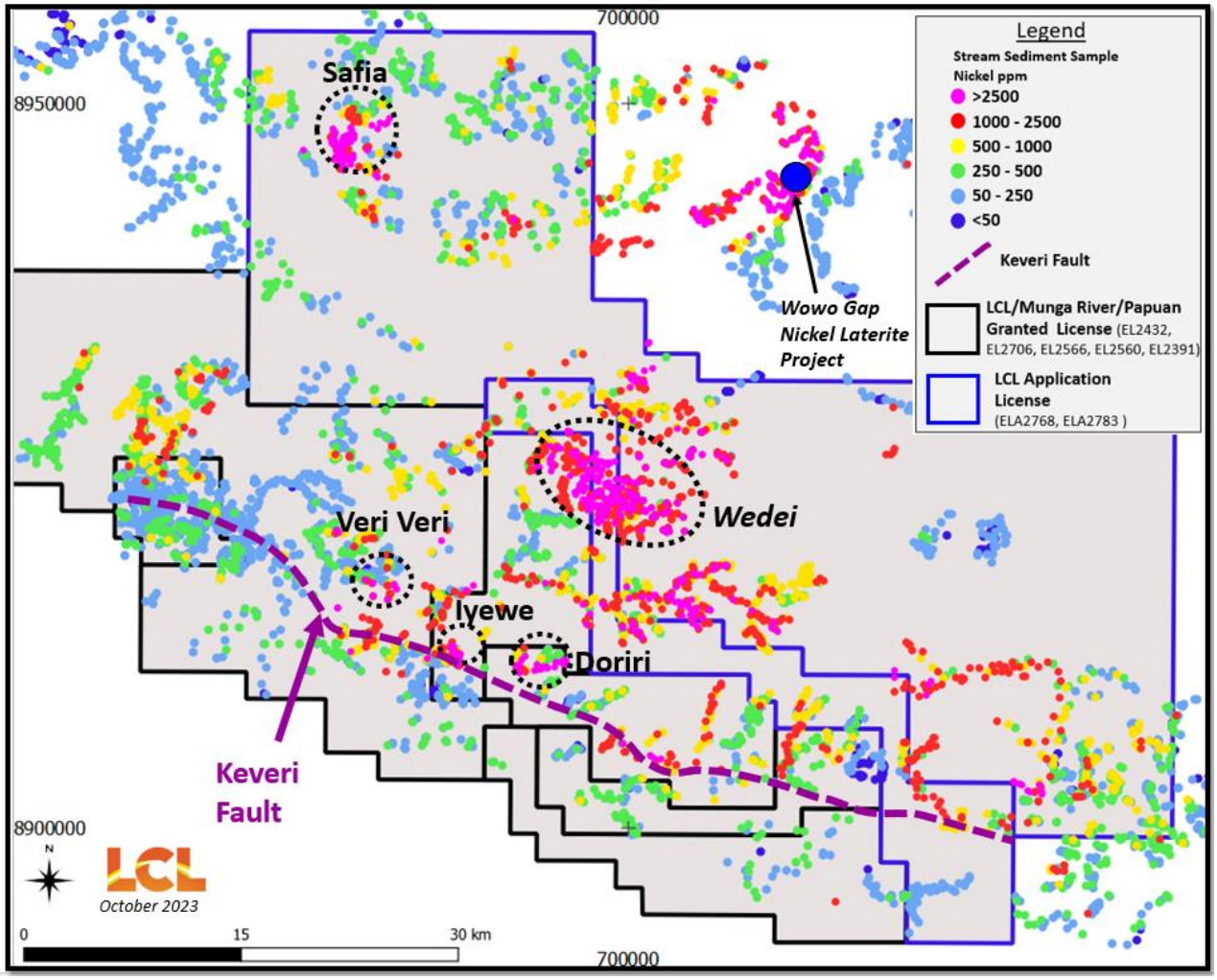

Figure 1: *LCL's 3,400km² nickel exploration portfolio includes multiple nickel targets. Figure shows stream sediment geochemical assays and LCL's exploration licences and applications.*

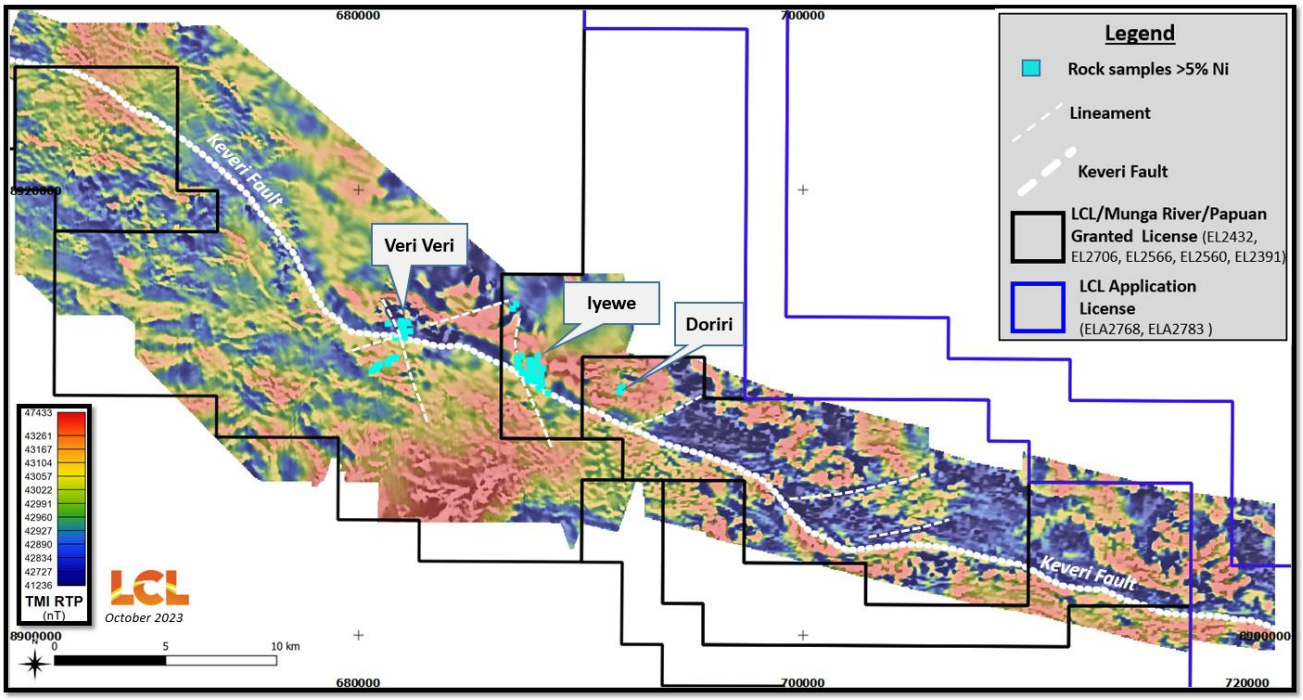

Figure 2: *Airborne magnetics clearly defines the Keveri Fault and secondary lineaments that potentially describe structural controls to mineralisation such as the Veri Veri shear corridor mapped at 070 strike orientation and the Iyewe mineralised shear at 350 strike.*

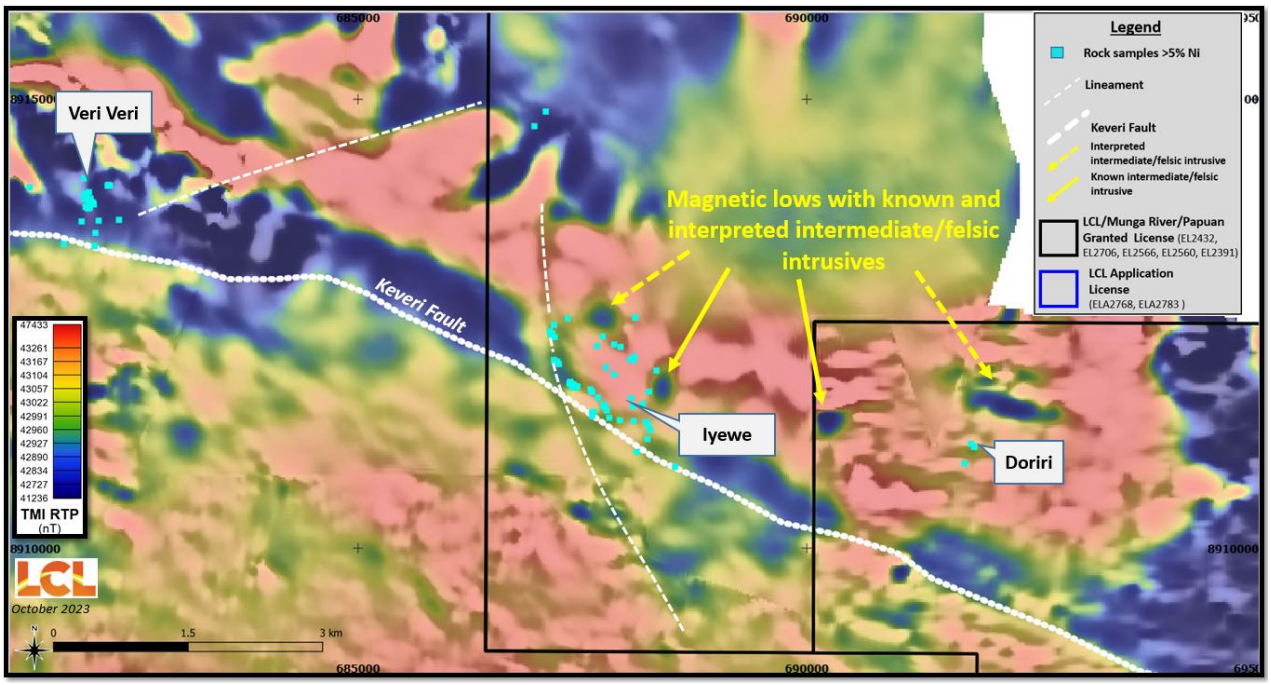

Figure 3: *Airborne magnetics with each blue square a rock sample of >5% nickel. Several magnetic lows have associated known intermediate/felsic intrusives, while other similar features occur throughout the region. These intrusives may be the source of heat and hydrothermal fluids described in the mineralisation generative model.*

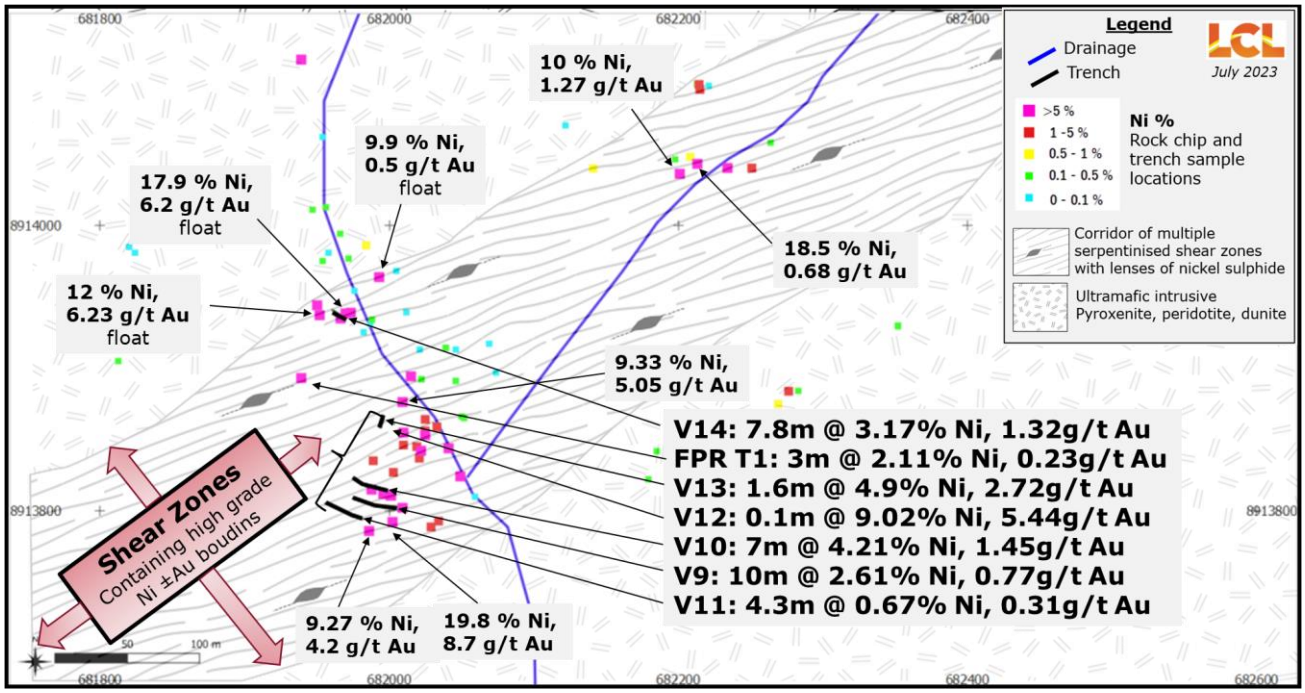

Figure 4: *Veri Veri nickel prospect. A corridor of shear zones, ~200m wide and open along strike, has been mapped containing boudins of very high-grade Ni ± Au mineralisation[3]. The high grade and volume of boudins, and repetitive nature of the shear zones, provides the potential to 'bulk up' to grades of interest, as evidenced by assays from the numerous trenches across the corridor. Note unusually high gold grades, which is attributable to the influence of intermediate/felsic fluids in the generative model.*

Hydrothermal Model - Technical

Mineral, element and structural signatures suggest nickel was emplaced through extreme metasomatic processes. Hydrothermal fluids passed through ultramafic country rock (dunites) leaching nickel from olivine. Nickel is transported within the hydrothermal fluid then deposited to form nickel sulphide minerals in favourable structures such as the Veri Veri shear zone corridor. The hydrothermal solution was low in sulphur and so sulphide minerals such as heazlewoodite and millerite formed preferentially over the classic nickel sulphide minerals – pentlandite and pyrrhotite, which require more available sulphur for their formation. This unique sulphide mineral suite caused by low sulphur levels, permits nickel grades ranking as some of the highest grades in the world, with multiple samples above 30% Ni and as high as 49% Ni.[1]

Elevated levels of gold, molybdenum, phosphorus (as hydrothermal apatite) in nickel sulphide mineralised specimens suggest the influence of an intermediate/felsic hydrothermal fluid from a local intermediate/felsic intrusive body (Figure 3). This revelation not only addresses the unique high grade gold present in some specimens but also provides critical information for target identification given the role of intermediate/felsic intrusions as a source of heat and a component of the hydrothermal fluid. Previous studies at Doriri have also confirmed a potential intermediate/felsic intrusive signature to the alteration fluids (González-Álvarez et al., 2013).

Nickel sulphide targets, Veri Veri, Doriri and Iyewe appear to meet these criteria (Figures 2 and 3), with local magnetic lows representing intermediate/felsic intrusions (some known, some interpreted), as might several other un-named targets based on geophysical signatures and limited surface data.

As far as the Company knows, all nickel sulphide prospects that occur within PNG are captured within its portfolio (Figure 1). The Company thanks Dr Martin Gole, a recognised nickel expert

[3] *See announcement 20 July 2023. The Company confirms that it is not aware of new information that affects the information contained in the original announcement.*

consultant, and Geophysics consultant, Barry Bourne (Terra Resources Pty Ltd) for their contributions.

For the purpose of ASX Listing Rule 15.5, the Board has authorised this announcement to be released.

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FORWARD LOOKING STATEMENTS This document contains forward looking statements concerning LCL Resources. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes. Forward looking statements in this document are based on LCL's beliefs, opinions and estimates of LCL as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments. Although management believes that the assumptions made by the Company and the expectations represented by such information are reasonable, there can be no assurance that the forward-looking information will prove to be accurate. Forward-looking information involves known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any anticipated future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, the actual market price of gold, the actual results of future exploration, changes in project parameters as plans continue to be evaluated, as well as those factors disclosed in the Company's publicly filed documents. Readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws. No representation, warranty or undertaking, express or implied, is given or made by the Company that the occurrence of the events expressed or implied in any forward-looking statements in this presentation will actually occur.

JORC STATEMENTS - COMPETENT PERSONS STATEMENTS

The technical information related to LCL's assets contained in this report that relates to Exploration Results is based on information compiled by Mr John Dobe, who is a Member of the Australasian Institute of Mining and Metallurgy and who is a Geologist employed by LCL on a full-time basis. Mr Dobe has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Dobe consents to the inclusion in the release of the matters based on the information he has compiled in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1- Awala Licence EL2706, Sinua Licence EL2432, Safia Licence ELA2768, Silimidi Licence ELA2783, Abau EL2566, Adau EL2391, Doma Licence EL2560.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Not applicable to this release
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Not applicable to this release
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure*	• Not applicable to this release

Criteria	JORC Code explanation	Commentary
	representative nature of the samples. • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Not applicable to this release
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Not applicable to this release
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the*	• Not applicable to this release

Criteria	JORC Code explanation	Commentary
	analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *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.*	
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Not applicable to this release
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The grid system for data in this release is WGS84 UTM zone Z55S. • The airborne magnetic data has been has been spatially verified and validated by a geophysical consulting experts Terra Resources Pty Ltd.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The airborne magnetic data has been spatially verified and validated by a geophysical consulting experts Terra Resources Pty Ltd. The line spacing for all three historical airborne magnetic surveys was 100m.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed*	• NA

Criteria	JORC Code explanation	Commentary
	and reported if material.	
Sample security	• *The measures taken to ensure sample security.*	• NA
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• NA.

Section 2 Reporting of Exploration Results – Awala EL2706, Abau EL2566, Adau EL2391

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Exploration Titles were validly issued as Exploration Licences pursuant to the 1992 Mining Act. • The Exploration Licence grants its holders the exclusive right to carrying out exploration for minerals on that land. There are no outstanding encumbrances or charges registered against the Exploration Title at the National Registry. • Exploration Licence Applications (ELA) remain subject to granting by PNG authorities. • LCL has a binding agreement to secure 100% of EL 2566, EL 2391, EL 2560 subject to renewals.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Veri Veri & Iyewe Projects: GMX 2006-2013. Drilling, stream sampling, soils, rock chips, trenching, aeromagnetics, VTEM. GMX sampling of rocks and trenches within this report was undertaken prior to 2009. • Doriri Project: Historical explorers include INSEL, CRAE, Highlands Gold, PPM, PML. Historical work includes stream, soils, rock chips, trenching, drilling aeromagnetics, ground magnetics and ground EM.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The discussed nickel projects are hydrothermal shear hosted nickel-sulphide targets.

Criteria	JORC Code explanation	Commentary

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• NA

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• NA
Relationship between mineralisation widths and	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole*	• NA

Criteria	JORC Code explanation	Commentary
intercept lengths	*angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Maps showing the location of regional airborne magnetics surveys with respect to nickel occurrences are contained within the body of this report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Reporting is considered balanced.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Historical drilling and sampling results, including trenching are described in the text of this ASX release. • The airborne magnetics data contained within this release is compiled from historical third party exploration groups. The magnetic data has been spatially verified and validated by a geophysical consulting experts Terra Resources Pty Ltd. Three surveys were combined and re-gridded at an optimal resolution. The magnetics images within Figures 2 and 3 are TMI-RPT combined with a 1VD.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further surface work is being planned at the Iyewe prospect, and re-logging of the historical Doriri drill core.