ASX Announcement **21st December 2022**

Bulge MLEM Update - Duketon Project

HIGHLIGHTS

Multiple MLEM anomalies identified from additional lines completed over the north-western Bulge[1]

- Significant MLEM anomaly identified to the west of Rosie on the C2 contact.
  - Identified over **600 metres of strike length** and 3 lines
  - Modelled as a **sub-vertical plate** with a possible southerly plunge
  - Conductance is **5,000 siemens**
  - Top of plate is modelled **350m below surface**
  - **Historic drilling up dip of plate** has intersected:
    - **3.25m @ 1.78g/t Pt + Pd & 0.74% Ni**
    - **4.56m @ 1.4g/t Pt + Pd & 0.53% Ni**
    - **5.25m @ 1.27g/t Pt + Pd & 0.87% Ni**
- Individual samples grade as high as 2.4% Ni and 3.8g/t Pt + Pd.
- This survey has also extended the MLEM response to the north and down dip of the northern extent of Rosie mineralisation.
- Other MLEM anomalies identified require further technical review.
- Drilling of these anomalies and other areas will recommence in the new year.

Duketon Mining Ltd (**ASX: DKM**, **"Duketon"** or **"the Company"**) is pleased to announce multiple Moving Loop Electromagnetic (MLEM) anomalies have been identified from additional lines over The Bulge ultramafic following up from previously announced exploration results[1].

Nine (9) lines in total were completed over The Bulge in two sections for 15 line kilometres and 150 stations.

1. See ASX announcement 2 November 2022

A large deep, sub vertical anomaly was modelled along strike from the C2 contact to the south, with a southerly plunge. The anomaly is broad and deep with this modelled scenario best fitting the known geology. The conductance is modelled at approximately **5,000 siemens** which is the right order of magnitude for nickel sulphides.

Historic drilling up dip of this plate at the base of the ultramafic has intersected significant nickel and PGE mineralisation including:

- **4.56m @ 1.40g/t Pt + Pd & 0.53% Ni**
- **3.25m @ 1.78g/t Pt + Pd & 0.74% Ni**
- **5.25m @ 1.27g/t Pt + Pd & 0.87% Ni**

This survey has also extended the MLEM response to the north and down dip of the northern extent of Rosie mineralisation. Several other anomalies were identified in the area but are attributed to known stratigraphic conductors. Further technical review is being undertaken.

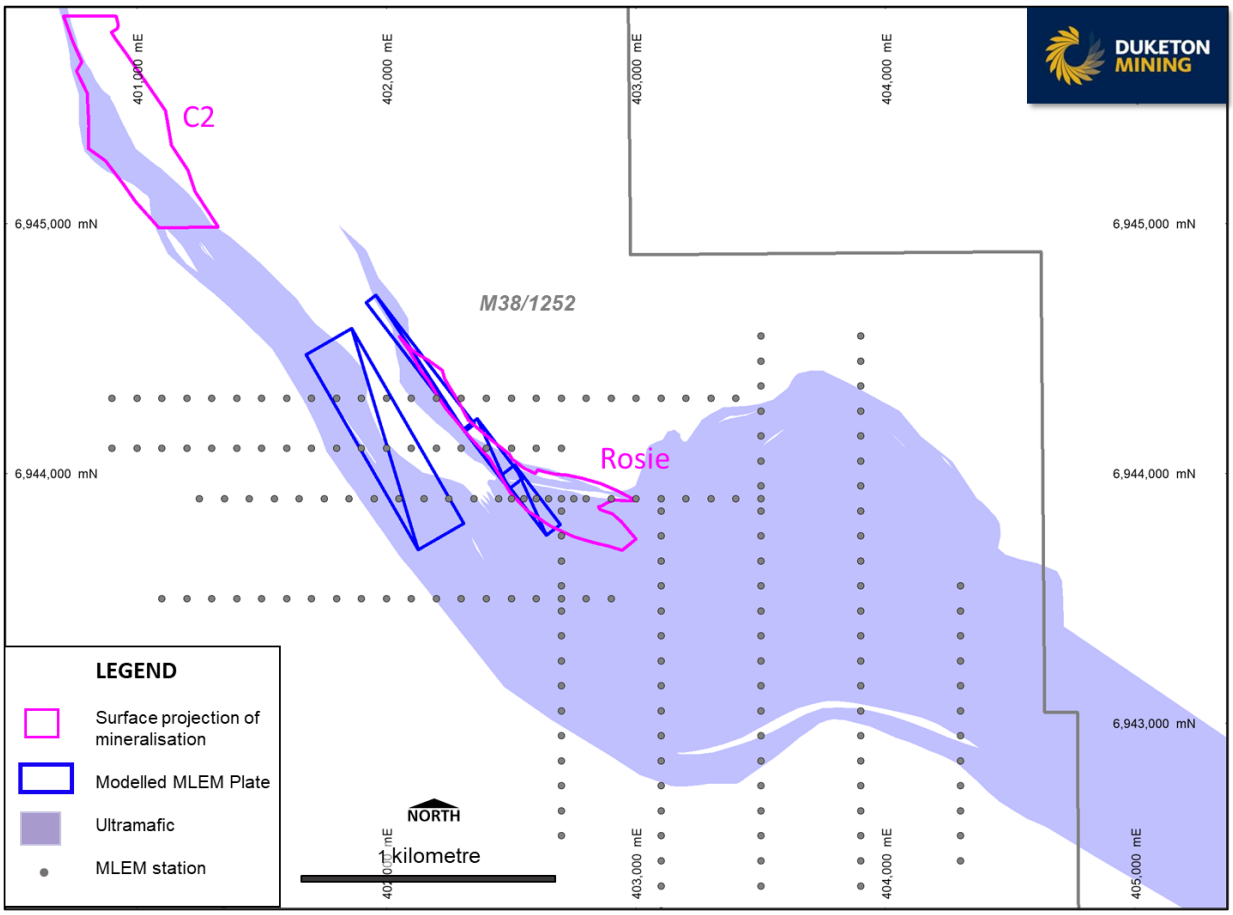

Figure 1. *Map of modelled MLEM plates over an interpreted geology image showing the host ultramafic.*

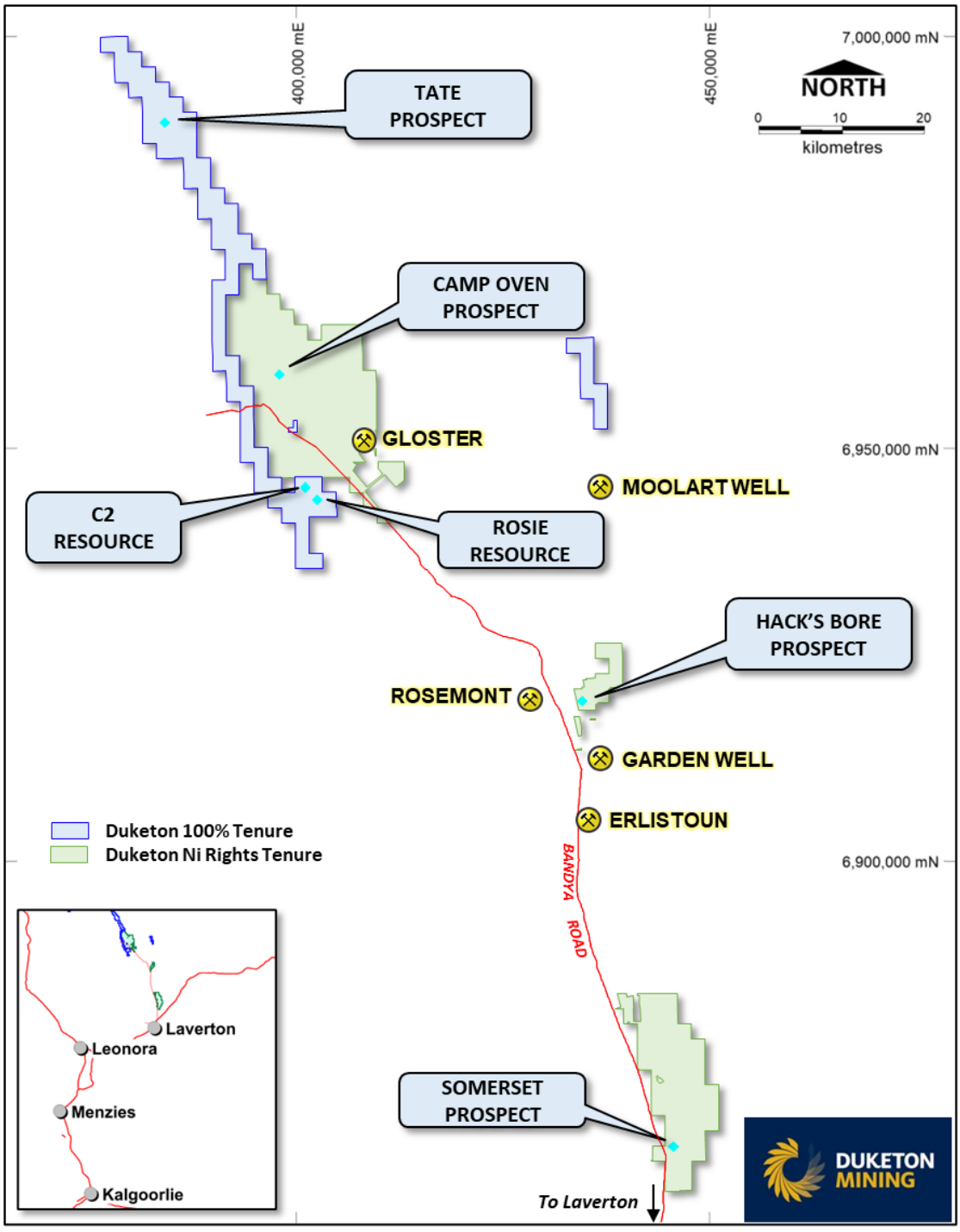

Figure 2. *Location map of the Duketon tenement holdings and location of DKM prospects.*

Table 1. *Significant Intercept Table (Significant Intercepts are 0.5m > 500ppb Pt + Pd, maximum internal dilution of 2 metres, intersections are downhole widths)*

Hole ID	Depth From (m)	Depth To (m)	Intercept Width (m)	Ni %	Cu %	Pt (ppb)	Pd (ppb)	Pt + Pd g/t	Comments
DKRC0226	125	126	1	0.70	0.21	252	555	0.81	1m @ 0.81g/t Pt + Pd
TBDD126	220.36	221.65	1.29	0.80	0.09	296	461	0.76	1.29m @ 0.76g/t Pt + Pd
and	223.56	228.12	4.56	0.53	0.11	452	953	1.40	**4.56m @ 1.40g/t Pt + Pd**
TBDD127	108.05	111.3	3.25	0.74	0.14	817	964	1.78	**3.25m @ 1.78g/t Pt + Pd**
TBDD141	288.04	288.6	0.56	0.54	0.24	690	975	1.67	**0.56m @ 1.67g/t Pt + Pd**
and	292.65	297.9	5.25	0.87	0.24	492	778	1.27	**5.25m @ 1.27g/t Pt + Pd**
inc.	293.03	297.9	4.87	0.89	0.24	494	801	1.29	**4.87m @ 1.29g/t Pt + Pd**
TBRC156	222	224	2	0.96	0.13	320	433	0.75	2m @ 0.75g/t Pt + Pd
TBRC157	179	180	1	0.63	0.16	325	515	0.84	1m @ 0.84g/t Pt + Pd
and	194	197	3	0.65	0.14	623	740	1.36	**3m @ 1.36g/t Pt + Pd**
inc.	194	196	2	0.67	0.14	780	923	1.70	**2m @ 1.70g/t Pt + Pd**
TBRC158	219	220	1	1.03	0.11	1120	700	1.82	**1m @ 1.82g/t Pt + Pd**
TBRC159	246	249	3	0.96	0.21	670	843	1.51	**3m @ 1.51g/t Pt + Pd**

Table 2. *Drillhole collar details*

Hole ID	Easting	Northing	RL	Hole Depth (m)	Dip	Azimuth
DKRC0226	402028	6943977	541	140	-58	41
TBDD126	401913	6944066	540	300	-64	45
TBDD127	402009	6944017	540	175	-65	45
TBDD141	401953	6943962	541	340	-65	38
TBRC156	401834	6944200	540	250	-60	54
TBRC157	402037	6943907	540	280	-64	67
TBRC158	401713	6944801	538	280	-50	252
TBRC159	401777	6944699	539	286	-59	250

Authorised for release by:
Stuart Fogarty
Duketon Mining Limited - Managing Director
+61 8 6315 1490

Competent Person Statement:

The information in this release that relates to exploration results is based on information compiled by Ms Kirsty Culver, Member of the Australian Institute of Geoscientists (AIG) and an employee of Duketon Mining Limited. Ms Culver has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a competent person as defined in the JORC Code 2012. Ms Culver consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

This release includes information that relates to exploration results which were prepared and first disclosed under the JORC Code 2012. The information was extracted from the Company's previous ASX announcement as follows:

- 2 November 2022

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

JORC Table 1

JORC Code, 2012 Edition – Table 1 report – Duketon Project

Section 1 Sampling Techniques and Data – MLTEM & Historical Drilling

(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.*	• RC drillholes were sampled initially as 4m composites, and subsequently 1m samples. RC 1m samples were split with a riffle splitter into calico bags where mineralisation has been encountered. • Diamond core (NQ2) has been sampled as quarter core in areas of mineralisation with a 5m buffer sampled at either side of the mineralised zone. The samples are generally 1m intervals, however they can be less than 20cm in places based on geology and mineralisation styles. Geological boundaries are deemed sample boundaries, in order to gain multi-element analysis of the complete suite of rock-types observed, and not to contaminate one rock type with another, and/or mineralisation.
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).*	• The prospect has been drilled with a combination of RC and Diamond drilling (NQ2).

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Recoveries have been recorded, due to early nature of the drilling it is uncertain if there is a relationship between RC recoveries and grade.
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.*	• Logging was completed in detail for diamond core including rock type, grain size, texture, colour, foliation, mineralogy, alteration and a detailed description written for every interval. In sections of oriented diamond core structural measurements of fractures, foliation, veins and shearing have been measured systematically using the Kenometer, with Alpha and Beta measurements taken for each feature where possible. If the core is not orientated only an Alpha reading has been taken. RC chip samples have been logged with a detailed geological description.
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.*	• Quarter core samples were taken in areas of mineralisation, cut with an Almonte core saw. • RC samples split with a riffle splitter. • All samples were sorted and dried in ovens for up to 24 hours (approx +/-) at 105°C. Primary sample preparation has been by crushing the whole sample. For RC samples, the whole sample was crushed to a nominal 3mm. For diamond core the whole sample was crushed to a nominal 10mm (primary crush) and then further crushed to a nominal 3mm. All samples were then split with a riffle splitter to obtain a sub-fraction, a nominal 2.4 kg sample where possible. All material was retained after splitting. Samples were then milled using a robotic preparation system to 90% passing -75um. Sample catch weight was 0.15g for Mixed acid digest.
Quality of assay data and	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• Assay results reported were determined at Ultra Trace Pty Ltd (now Bureau Veritas Group), Canning Vale, WA. • 1m split RC samples and all diamond core samples have been analysed for:

Criteria	JORC Code explanation	Commentary
laboratory tests	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Au(1ppb), Pt (5ppb), Pd(5ppb) – the samples have been analysed by firing a 40g portion of the sample. Lower sample weights may be employed for samples with very high sulphide and metal contents. This is the classical fire assay process and will give total separation of gold, platinum and palladium in the sample. Au(FA), Pt(FA), Pd(FA) have been determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES). • As(1ppm), Co(5ppm), Cu(2ppm), Cr(10ppm), Fe(0.01%), Ti(50ppm), Ni(2ppm), Zn(2ppm), Mg(0.01%) and S(0.01%) – 0.15g was digested and refluxed with a mixture of acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. This extended digest approaches a total digest for many elements however some refractory minerals are not completely attacked. The mixed acid digest (0.3g sample weight) is modified to prevent losses of sulphur from high sulphide samples. The samples are peroxidised using an oxidant that converts the sulphides present to sulphates. • As has been determined by Inductively Coupled Plasma Mass Spectrometry (ICP-MS). Co, Cu, Cr, Ti, Fe, Ni, Zn, Mg, S have been determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES). • MLEM parameters: ➢ Loop Size – 200m x 200m (single turn) ➢ Transmitter – DRTX ➢ Sensor – 3-component B-field fluxgate magnetometer ➢ Receiver – SMARTem 24 ➢ Line Spacing – 200-400m ➢ Station Spacing – 100m ➢ Transmitter Frequency – 0.5 to 1Hz ➢ Current – 50-75A ➢ Stacks – 128 ➢ Readings – minimum 2 per station
Verification of sampling	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• No twinned holes have been drilled.

Criteria	JORC Code explanation	Commentary
and assaying	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	
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.*	• MLTEM data was recorded with handheld GPS which is sufficiently accurate for 200m loop size. • Drill hole locations were surveyed using a DGPS
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.*	• MLTEM data recorded with 200m EM loops, 100m stations and 200m to 400m data. • Intercept composites have been length weighted.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drillholes were oriented perpendicular to local geology
Sample security	• *The measures taken to ensure sample security.*	• Due to the historic nature of the drilling, this cannot be determined
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external audits or reviews have been conducted.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Tenement M38/1252 is 100% owned by Duketon Mining Limited and is in good standing and there are no known impediments to obtaining a licence to operate in the area
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous drilling in this area was completed by Independence Group (IGO). • This work has been checked for quality as far as possible.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The anomalies presented in the historic data are sourced from typical Archaean Greenstone rocks of the Yilgarn Craton.
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.*	• Significant intercepts are provided in a table within the text of this announcement.

Criteria	JORC Code explanation	Commentary
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.*	• No top-cuts applied • First assay from the interval is reported (Ni1) • Aggregate sample assays calculated using a length weighted average
Relationship between mineralisation widths and intercept lengths	• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Mineralisation orientations have not been determined.
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.*	• Refer to figures in document.
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.*	• All drillhole locations are reported and a table of significant intervals is provided in the release text.
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.*	• Refer to document.

Criteria	JORC Code explanation	Commentary
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 work may involve drilling of holes, reverse circulation (RC) and diamond, and more ground geophysical surveys.