



ASX Announcement

3rd August 2020

50% Increase to Rosie Nickel Resource

HIGHLIGHTS

Rosie Project (100% DKM)

- Updated Rosie Nickel Mineral Resource Estimate completed
- Rosie Nickel Resource increases to **2.56 Mt @ 2.9% NiEq**
- Updated Mineral Resource reports **49,100 tonnes contained nickel, 10,600 tonnes contained copper and 205,000 ounces of contained PGEs**
- **66% of the Rosie Mineral Resource is in the Indicated category**
- An **increase of 50%** contained nickel metal compared to the previous mineral resource estimate
- Updated Resource now includes the Nariz mineralisation
- Mineralisation remains open in all directions
- Total combined JORC resource for Rosie & C2 is now **87,100 nickel tonnes, 12,900 copper tonnes and 205,000 ounces PGE's**
- Next steps will include a Mining Study at Rosie, planned for H2 2020

Duketon Mining Ltd (DKM) is pleased to announce an updated JORC 2012 Indicated and Inferred Mineral Resource Estimate (MRE) for the Rosie Nickel Deposit in the Duketon Belt, 120km north of Laverton.

The Indicated and Inferred Mineral Resource Estimate for Rosie of **2.56 million tonnes at 2.9% nickel equivalent** is reported in accordance with the 2012 JORC Code. The resource



estimate is reported at >1% NiEq. Over 66% of the Resource is has been classified as Indicated and the mineralisation is open in all directions.

Table 1: Rosie Mineral Resource Statement (July 2020) >1.0% NiEq

Resource Category	Tonnes (kt)	Ni%	NiEq% ⁽¹⁾
Indicated	1,707	2.0	3.0
Inferred	850	1.7	2.8
Total	2,557	1.9	2.9

(1) Assumptions for the nickel equivalent are: Prices (in USD) \$7.00/lb Ni, \$3.20/lb Cu, \$14.00/lb Co, \$1,150/oz Pt, \$1,250/oz Pd and \$8,500/oz Rh. Recovery assumptions from metallurgical test work are: Pentlandite domain 96.9% Ni, 99.5% Cu, 95.1% Co, 78.2% Pt, 97.6% Pd and 83.4% Rh. Violarite domain 88.7% Ni, 94.5% Cu, 88.5% Co, 57.6% Pt, 87.3% Pd and 64.8% Rh.

This updated resource includes the Nariz mineralisation, discovered by DKM in 2014. This has resulted in a 50% increase in contained nickel metal in the resource compared to the 2012 resource estimate. The Mineral Resource contained metal now stands at 49,100 tonnes of nickel, 10,600 tonnes of copper, 1,400 tonnes of cobalt and over 205,000 oz of total PGEs (Table 3).

The resource also includes a reportable nickel equivalent number after metallurgical work was completed to determine recoveries (see ASX announcement 8th July 2020 & 10th July 2020). It is the opinion of DKM that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

The total JORC compliant nickel resource for the Bulge Area (Rosie & C2) now stands at **87,100 tonnes of nickel, 12,900 tonnes of copper and 205,000 ounces of PGE's** (Tables 4-6). Further work on the Bulge nickel deposits will include a mining study at Rosie, planned for the second half of 2020.



Table 2: Rosie Mineral Resource Grade

Rosie Nickel Resource >1% NiEq							
Classification	Sulphide	Tonnes	Ni (%)	Cu (%)	Co (ppm)	Total PGEs (g/t)	NiEq (%)
Indicated	Pentlandite	960,893	2.3	0.41	610	2.6	3.3
	Violarite	745,813	1.7	0.36	490	2.5	2.6
	Sub-Total	1,706,706	2.0	0.39	560	2.5	3.0
Inferred	Pentlandite	751,559	1.8	0.47	570	2.5	2.8
	Violarite	98,676	1.5	0.43	460	2.2	2.4
	Sub-Total	850,234	1.7	0.47	560	2.5	2.8
Total	All	2,556,940	1.9	0.42	560	2.5	2.9

Table 3: Rosie Mineral Resource Contained Metal

		Contained Metal			
Classification	Ore Type	Ni (t)	Cu (t)	Co (t)	Total PGEs (oz)
Indicated	Pentlandite	21,973	3,987	588	79,041
	Violarite	12,336	2,679	363	59,014
	Sub-Total	34,309	6,666	951	138,056
Inferred	Pentlandite	13,354	3,537	428	60,331
	Violarite	1,452	421	45	6,937
	Sub-Total	14,806	3,958	473	67,268
	Total	49,115	10,624	1,423	205,324

The following equations were used to calculate nickel equivalent – Cu and Co measured in ppm and PGEs measured in ppb – all converted to percentages for NiEq calculation:

Pentlandite domain: $NiEq = Ni\% + (Cu\% * 0.995 * (3.2/7)) + (Co\% * 0.951 * (14/7)) + (Pt\% * 0.976 * (1150 * 14.583/7)) + (Pd\% * 0.976 * (1250 * 14.583/7)) + (Rh\% * 0.834 * (8500 * 14.583/7))$

Violarite domain: $NiEq = Ni\% + (Cu\% * 0.945 * (3.2/7)) + (Co\% * 0.885 * (14/7)) + (Pt\% * 0.576 * (1150 * 14.583/7)) + (Pd\% * 0.873 * (1250 * 14.583/7)) + (Rh\% * 0.648 * (8500 * 14.583/7))$
 where 14.583 is the amount of troy ounces per pound.



Table 4: C2 Nickel Resource > 0.5% Ni (see ASX Announcement 29 January 2015)

C2 Nickel Resource >0.5%Ni				
Classification	Oxidation	Tonnes	Ni (%)	Ni (t)
Inferred	Fresh	5,100,000	0.7	34,200
	Transitional	600,000	0.6	3,800
Total		5,700,000	0.7	38,000

Table 5: C2 Resource > 0.5% Ni with Auxiliary Attributes
(see ASX Announcement 29 January 2015)

C2 Nickel Resource >0.5%Ni							
Classification	Oxidation	Tonnes	Ni (%)	Cu (%)	Pt (ppb)	Pd (ppb)	S (%)
Inferred	Fresh	5,100,000	0.7	0.04	60	79	3.3
	Transitional	600,000	0.6	0.04	72	105	0.9
Total		5,700,000	0.7	0.04	61	82	3.1

Table 6: Combined Metal Inventory, The Bulge Area

Deposit	Ni tonnes	Cu tonnes	PGE oz
Rosie	49,115	10,624	205,324
C2	38,000	2,280	-
TOTAL	87,115	12,904	205,324

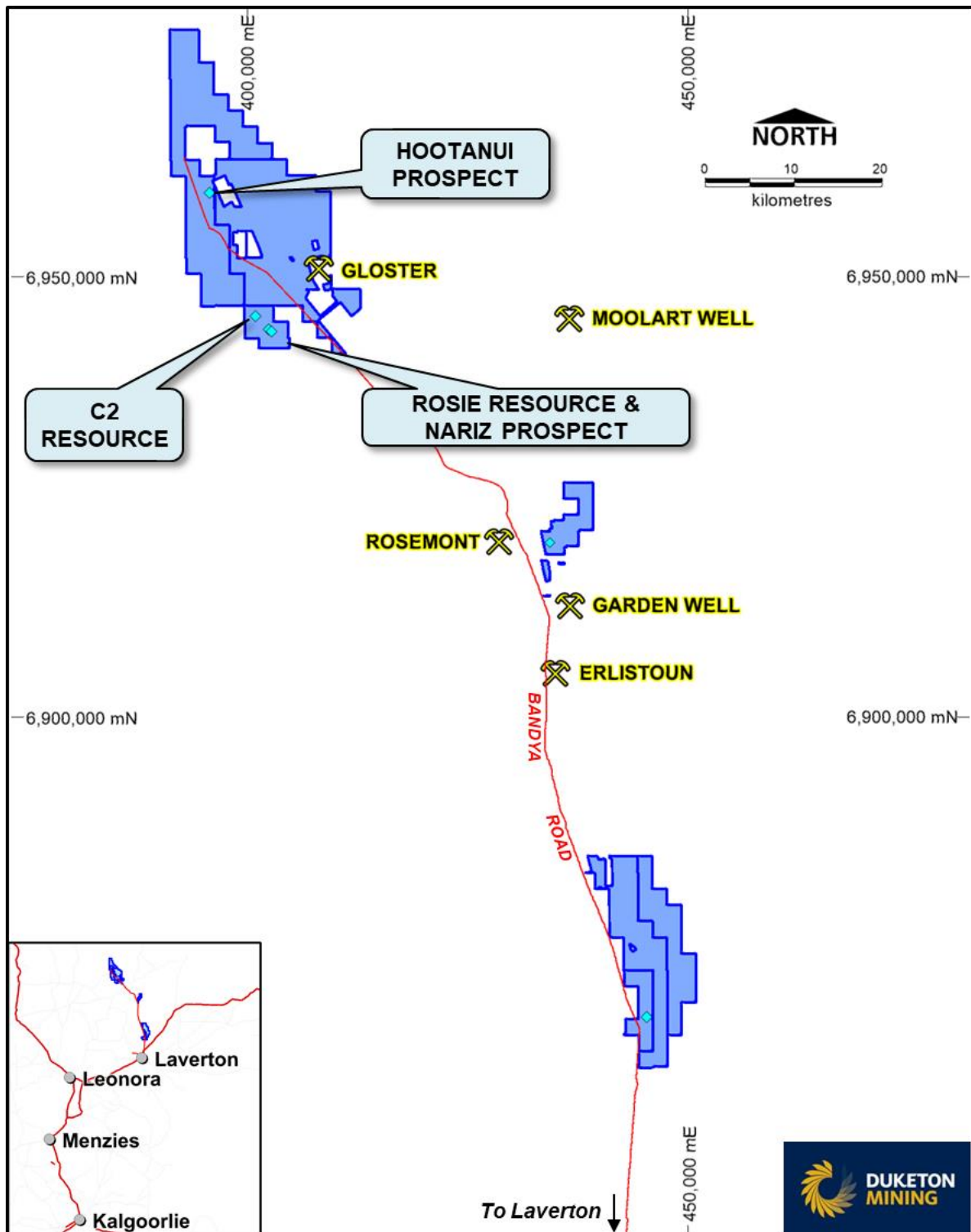


Figure 1: Plan of DKM Tenements showing Ultramafic, Nickel Resources and Prospects

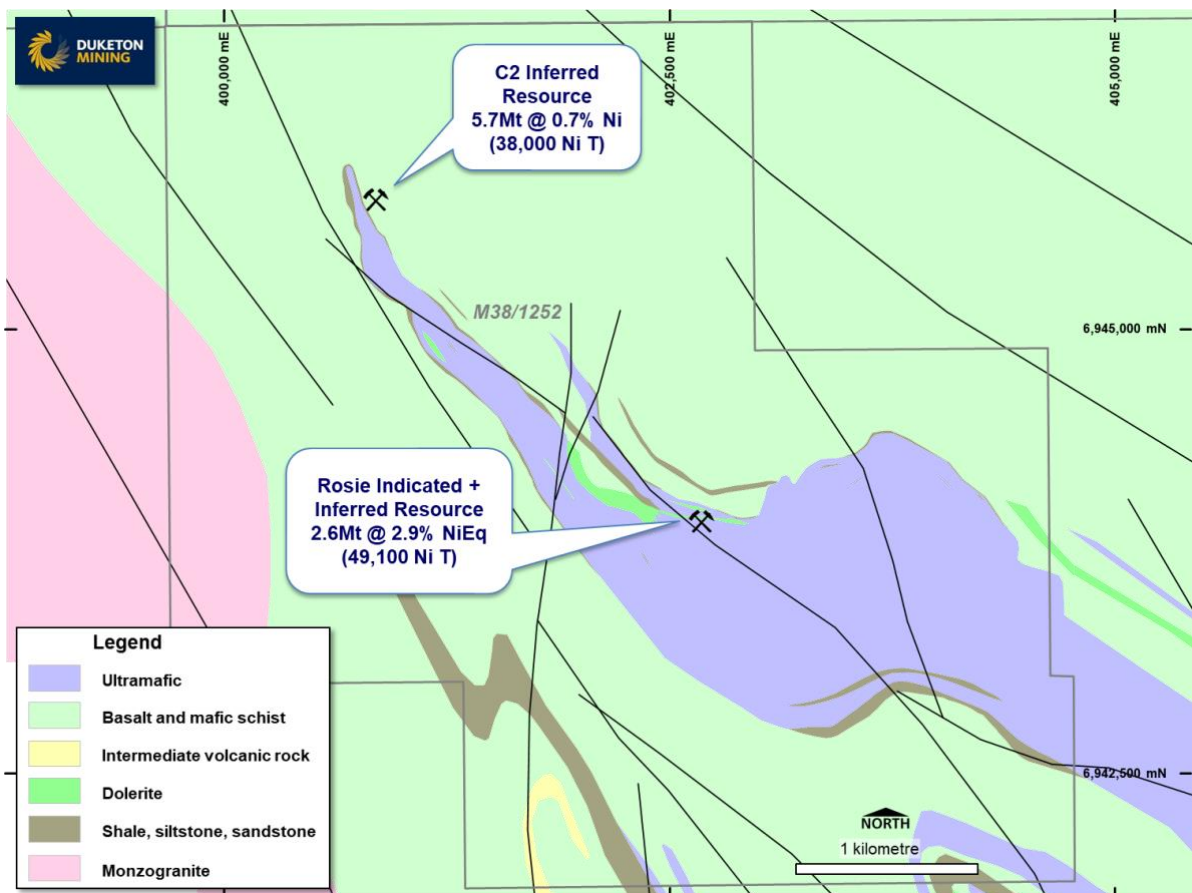


Figure 2: Plan of The Bulge Complex

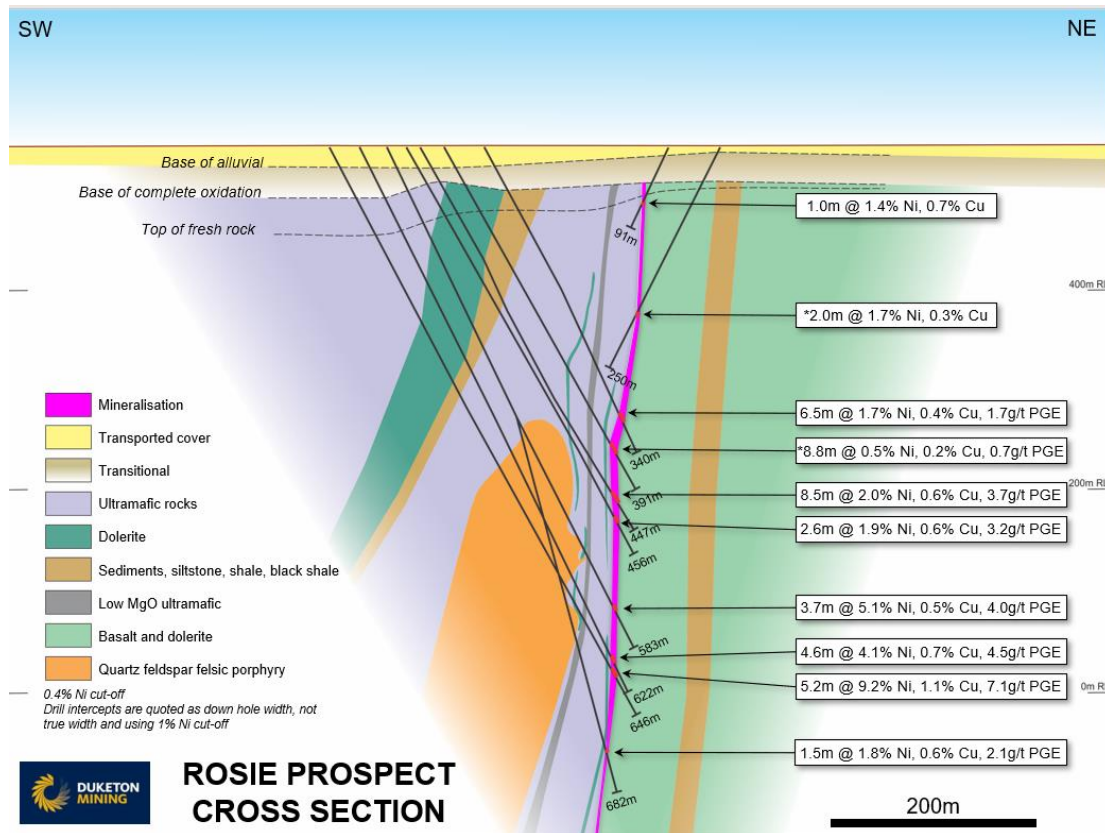


Figure 3: Rosie Cross Section, looking NW

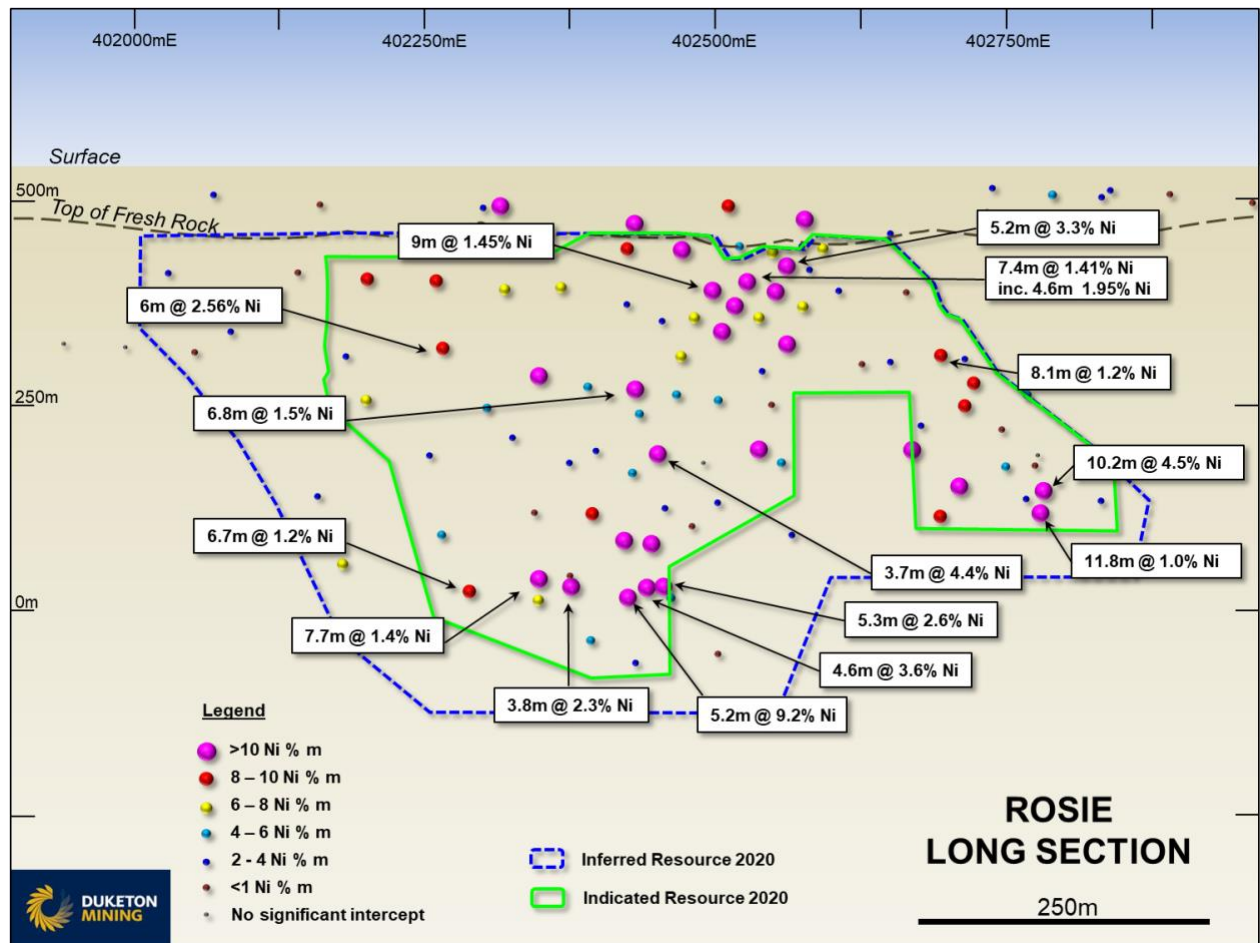


Figure 4: Rosie Long section, looking NE



Rosie Technical Summary – Mineral Resource Estimation and Data

The updated Rosie Nickel Mineral Resource was estimated by independent consultants from Cube Consulting Pty Ltd.

Geology and Geological Interpretation

The Rosie Nickel Deposit is located within the Duketon Greenstone Belt, approximately 120km north of Laverton in Western Australia. The host unit of the nickel sulphide mineralisation is locally termed the Bulge Ultramafic Complex, this can be traced over 10km of strike and is also host to the C2 disseminated Nickel Sulphide Deposit (5.7Mt @ 0.7% Ni for 38,000 Ni tonnes) (Tables 4-5).

The Bulge Ultramafic Complex has been a focus for nickel exploration for a number of workers over the last ten years, most significantly at the Rosie Prospect by Independence Group NL. During this time, a JORC 2004 compliant resource of 1.9Mt @ 1.7% Ni (32,700 Ni t), 0.38% Cu and 1.9 g/t Pt + Pd was defined (see ASX announcement 24th July 2014).

The Rosie deposit is a komatiite-hosted nickel sulphide deposit. The mineralisation is characterised by accumulations of massive, matrix, breccia and disseminated Ni-Cu-PGE magmatic sulphides at the basal contact of a komatiite ultramafic rock, overlying a mafic pillow basalt footwall +/- fine grained siltstone sediments which also contain sulphides in varying amounts. The deposit has been drilled with a combination of Aircore, RC and Diamond drilling (NQ2) from surface to a vertical depth of approximately 600m over a strike length of ~1500m, however mineralisation has been intersected over a strike length of ~1km.

Duketon Mining Ltd discovered a second prospect within The Bulge called Nariz in 2014. The best intercept at Nariz to date is 5.65m @ 7.1% Ni, 0.5% copper and 3.8 g/t Pt + Pd within massive sulphides in hole DKMD0005 (see ASX announcement 2nd December 2014). Subsequent drilling returned a further intercept of 3.7m @ 2.04% Ni, 0.5% Cu and 1.9 g/t Pt + Pd (see ASX announcement 15th January 2015).

Further drilling at Nariz has intersected significant areas of disseminated, blebby and stringer nickel bearing sulphide but is yet to produce an interval as significant as that encountered in DKMD-0005.



Drilling Techniques

The Rosie/Nariz deposit has been drilled by a combination of diamond and RC drilling. The majority of drilling has been NQ2 diamond drilling. A total of 82 drillholes have intersected the contact mineralised surface and were used in this resource estimate.

Sampling and Subsampling Techniques

RC drillholes were sampled initially as 4m composites and subsequently 1m samples using a riffle splitter. Diamond core was sampled as half core across the mineralised intervals with a 5m buffer either side. Samples were generally 1m in length however can be less than 20cm in places based on geology and mineralisation.

Sample Analysis Method

All samples were analysed at Bureau Veritas in Canning Vale, WA. Samples were dried, split then pulverised to 90% passing 75um. A sub-sample was digested by 4-acid and analysed by ICP-OES for Ag, As, Bi, Co, Cr, Cu, Me, Mg, Ni, S, Ti and Zn. A 40g sub-sample was analysed for Au, Pt and Pd using a Fire Assay Charge with ICP-OES finish. High sulphide content diamond core samples were also analysed for the full suite of Platinum Group Elements (Pt, Pd, Rh, Ru, Os and Ir) using the Fire Assay Nickel Sulphide Collection – a 25g charge with ICP-MS finish, to 1ppb detection limit.

Estimation Methodology

Estimates for nickel (Ni), arsenic (As), gold (Au), cobalt (Co), copper (Cu), palladium (Pd), platinum (Pt), sulphur (S), iridium (Ir), osmium (Os), rhodium (Rh), ruthenium (Ru) and density ('SG') were made using ordinary kriging (OK) via a two-dimensional (2D) estimation methodology. The 2D method utilises full-seam grade composites multiplied by horizontal thickness and density to create an additive variable known as an 'accumulation'.

Kriging is then run in the 2D plane for the thickness, 'tonnage' (thickness x density) and grade accumulation variables. Grades are calculated by dividing the estimated accumulation by the estimated tonnage, and density is derived by dividing the estimated tonnage by the estimated thickness. These estimated variables were then translated back into the original 3D space.



Cut Off Grade

Cut-off grade for reporting is 1% NiEq. The cut-off grade of 1% NiEq represents a stratigraphic cut-off as all of the material within the contact sulphide domain is above this cut-off.

Prospects for Economic Extraction

The grade and geometry of the Rosie nickel deposit is amenable to small scale underground mining, like many “Kambalda-style” nickel deposits. The deposit is located on a mining lease. There is no apparent reason the Rosie nickel deposit could not be mined, but a desktop mining and processing study needs to be completed.

Mining Methods and Parameters

Grades and geometry are amenable to small-scale underground mining, like many ‘Kambalda-style’ nickel deposits. Given the narrow width of the basal contact zone (average 2 – 3m thickness), some mining dilution would occur.

Metallurgical Methods and Parameters

Metallurgical testwork was completed on two composite samples, representing both the massive (pentlandite dominant) and upper (violarite dominant) domain. Samples were assessed by flotation to determine the possibility of recovering nickel and copper to concentrates at a saleable grade and to determine the deportment of platinum group elements prevalent in the ore. Sixteen (16) flotation tests were conducted, nine on the massive sample and seven on the upper. Separate saleable nickel concentrates and or bulk copper nickel concentrates can be generated in a conventional flotation circuit.

Resource Classification Criteria

Indicated Mineral Resource has a drill spacing of 50 mN x 50 mRL or closer, and search pass 1 in violarite and pentlandite sulphide domains.

Inferred Mineral Resource has a drill spacing greater than 50 mN x 50 mRL, less than 100 mN x 100 mRL, and search passes 1 or 2 in violarite and pentlandite sulphide domains.

Not Classified – oxide domain.



Authorised for release by:

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The information in this report that relates to Mineral Resources for the Rosie Nickel Deposit is based on, and fairly represents, information and supporting documentation prepared by Mr Michael Job who is a Fellow of the Australasian Institute of Mining and Metallurgy. At the time that the Mineral Resources were compiled, Mr Job was a full-time employee of Cube Consulting Pty Ltd, an independent mining consultancy. Mr Job 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 Job has provided his written consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

PREVIOUSLY REPORTED INFORMATION

The information in the announcement that relates to Mineral Resources for the C2 resource is extracted from the Company's ASX announcement dated 29th January 2015 and is available to view on the Company's website (www.duketonmining.com.au). 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 and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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 from the original market announcement.

This report 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 announcements as follows:

- 11th February 2020.
- 15th January 2015
- 2nd December 2014

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. 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 announcements.



JORC Table 1

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

Section 1 Sampling Techniques and Data – Rosie MRE 2020

(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 have been 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 half core in areas of mineralisation with a 5m buffer sampled at either side of the mineralised zone. The samples are generally 1m intervals, however 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 rocktypes 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 Rosie/Nariz deposit has been drilled with a combination of Aircore, RC and Diamond drilling (NQ2). The primary method of drilling has been oriented diamond core (NQ2) using the Ace and EziMark orientation tools from surface to a vertical depth of approximately 600m over a strike length of ~1,500m, however mineralisation has been intersected over a strike length of ~1km and is still open in all directions.
Drill sample recovery	- Method of recording and assessing core and chip sample recoveries and results assessed. - Measures taken to maximise sample recovery and ensure	The majority of the resource drilling to date has been diamond core and sample quality on the whole was excellent. Wet samples have been recorded for RC drilling, however the wet samples were not used in the resource estimate. At Rosie, RC sample weights

Criteria	JORC Code explanation	Commentary
	<i>representative nature of the samples.</i> • <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>	(total for 1m) were noticeably variable through each 6m rod run, tending to increase with penetration depth per rod. In addition, individual sample weights per 1m drilled also varied considerably. The cone splitter was swapped for a riffle splitter which alleviated some of the blockage and contamination issues seen in the cone split samples. An area of concern was that there might be a grade/weight bias in the RC 1m samples. Statistical analysis for the riffle splitter has shown that although there was a weight bias, it did not necessarily affect the grades. The cone split sample weights have not been able to be statistically analysed due to mixed methods of primary vs field duplicate sample selection in the field, an issue which was rectified later in the program.
Logging	• <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> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i>	• Logging has been 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. All logging is of a level sufficient in detail to support resource estimation. • All diamond holes are logged on paper logs using the company geological codes library and a detailed written description is recorded for each interval. The logs are then data entered into an excel spreadsheet before being uploaded to the database. • RC chip samples have been logged with a detailed geological description. All logging is of a level sufficient in detail to support resource estimation. • Core photography has been completed both wet and dry for the majority of the diamond drilling over the entire length of the hole. The photographs are labelled and stored on the Perth server. Geotechnical logging has been completed for 30m either side of the footwall contact/mineralisation – and involved measuring fracture frequency, depth, hardness, fracture type, alpha, beta angle, profile of the fracture, the roughness of the joint surface, the infill type and characteristics. This data is recorded on paper logs, entered into an excel spreadsheet which is then loaded into the SQL database by the database administrator.

Criteria	JORC Code explanation	Commentary
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <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> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	- RC samples split with a riffle splitter. - Diamond core samples are half core, cut with an Almonte core saw. - Where field duplicates are taken the core is cut into two quarters. Field duplicates for RC samples are taken as riffle splits. - 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. - Laboratory standards taken at the pulverizing stage and selective repeats conducted at the laboratories discretion - Sample size considered appropriate for the grainsize of the material supplied
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <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> <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>	1m split RC samples and all diamond core samples have been analysed for: - 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%) –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 (0.15g 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). - High Sulphide content Diamond Core samples have also been analysed for 6 PGEs:

Criteria	JORC Code explanation	Commentary
		Pt(1ppb), Pd(1ppb), Rh(1ppb), Ru(1ppb), Os(1ppb), Ir(1ppb) – the samples have been analysed by Fire Assay using Nickel sulphide as the collecting medium. Here a nominal 25g sample is mixed with a Nickel Carbonate / Sulphur based flux and fused at 1,120°C for 1.25 hours. The resultant Nickel Sulphide button is pulverised and a portion is digested to remove the Nickel Sulphide base. • Inter-laboratory (Umpire) Checks on pulps from the Rosie deposit were completed at Genalysis, Maddington, WA. The pulps were analysed by a comparative method and for the same suite of elements as those completed at Ultra Trace (detailed above). • Standards were submitted with a minimum 3/100 samples, blanks minimum 2/100 samples, duplicates minimum 2/100 samples, in Aircore and RC drilling. In 2012 the standard insertion rate was increased to 5/100 samples. With diamond drillholes, every zone of mineralisation generally had 2 or more standards, 1 or more blanks and 1 or more duplicates spread throughout the zone of mineralisation. • Various Geostats Pty Ltd Certified Reference Materials standards have been used from 0.5%, 1%, 2%, 3% Nickel, up to 11.65% Nickel for high grade massive sulphide. A Gold, Platinum and Palladium standard has also been used where Nickel Sulphide Fire Assays have been completed for the PGE suite of elements. Standards were submitted within mineralised intervals in a suitable location based on the expected grade of the zone being sampled and using a comparable grade standard, i.e., disseminated mineralisation would have a ~0.5% Ni standard inserted into the sample run, whereas matrix sulphide mineralisation may have a 3% Ni standard inserted and so on.
Verification of sampling and assaying	• <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i>	• All data has been checked internally for correctness by senior DKM geological and corporate staff. • No adjustments have been made to assay data. • There have been no twinned holes drilled at this point. • Field Marshall was used for RC logging and the files were loaded directly into the Datashed database. • All diamond holes were logged onto paper logs using the company geological codes library and a detailed written description is recorded for each interval. The logs are then data entered into an excel spreadsheet before being uploaded to the SQL database.

Criteria	JORC Code explanation	Commentary
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.	• For drilling completed prior to 2012 collars were surveyed using DGPS equipment to sub 0.5m accuracy. Co-ordinates were surveyed in the MGA94 grid system. • For drilling completed after 2012 collars were surveyed using a handheld GPS to an accuracy of +/-5m. Co-ordinates were surveyed in the MGA94 grid system. • Dip and azimuth readings have been completed using DHA SEG Target INS– North Seeking Gyroscope for all diamond holes where possible. All gyro downhole surveys have to pass DHS internal audit by cross referencing the in-run and out-run which equates to <10m misclose between IN and OUT run over 1,000m (1%). RC drilling has been surveyed approximately every 50m down hole with a Reflex EZ single shot digital camera.
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.	• For the Rosie resource the contact domain was reviewed in longitudinal projection showing the drill intercept locations. The drill spacing was variable with some well-informed areas where drill spacing was approximately 30 x 30m and some areas where the drilling spacing was in excess of 50 x 50m, to 100 x 100m in parts. The data spacing and distribution is sufficient to establish geological and grade continuity appropriate for the Mineral Resource estimation procedure and classification applied. • All sample/intercept composites have been length and density-weighted. Most diamond core samples have measured density values assigned to them. All RC assay results were assigned a density based on a regression formula calculated from the measured density and Ni, Cu, Co and S content of the diamond core samples. Where S values were not present, a modified regression formula calculated from the measured density and Ni, Cu and Co was used.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• The contact mineralisation intersected to date is sub-vertical in orientation and forms a semi-continuous sheet of mineralisation approximately 1m true width with an average grade of ~2% Ni (plus Cu, Co and PGE), with thicker accumulations in places. The mineralisation is syn-genetic and as such is not primarily structurally-controlled, however structural modification is apparent with the formation of breccia-ore. The deposit could be classified as a moderately deformed magmatic sulphide deposit. The details of the structural modification and extent of over-printing relationships are a work in progress and not well understood at this stage. The drillholes were orientated to pierce the mineralisation approximately perpendicular to the strike, at an angle of approximately 60 degrees dip, this may vary from time to time depending on the depth and amount of deviation encountered within the drillhole. Drillhole intersections through the mineralisation are suitable for resource

Criteria	JORC Code explanation	Commentary
		estimation and do not introduce sampling bias.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Chain of custody was managed by company representatives and is considered appropriate.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No external audits or reviews have been conducted apart from internal company review.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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> <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>	The 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.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Cominco explored the area for nickel in 1966 and found nickel sulphide veinlets in ultrabasic rocks and gossanous material. INSEL explored the area between 1969 and 1973 later followed by Kennecott and Shell Minerals between 1973 and 1974 who identified high magnesium (+34%MgO) and low aluminium dunites. There was no further activity until Independence Group commenced exploration in the mid 2000 culminating in the discovery of the C2 and Rosie mineralisation. South Boulder Mines discovered the Terminator gold deposit during 2009.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	The Rosie/Nariz Nickel Deposit is a komatiite-hosted nickel sulphide deposit. The mineralisation is characterised by accumulations of massive, matrix, breccia and disseminated Ni-Cu-PGE magmatic sulphides at the basal contact of a komatiite ultramafic rock, overlying a mafic pillow basalt footwall +/- fine grained siltstone sediments which may also contain sulphides in varying amounts.

Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</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: - 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.	All significant intersections for Rosie have been previously reported.
<i>Data aggregation methods</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. - 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.	N/A
<i>Relationship between mineralisation widths and intercept lengths</i>	- These relationships are particularly important in the reporting of Exploration Results. - If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. - If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).	Mineralization is very steep to sub-vertical and strikes approximately northeast-southwest.
<i>Diagrams</i>	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	Refer to figures in document.

Criteria	JORC Code explanation	Commentary
	<i>drill hole collar locations and appropriate sectional views.</i>	
<i>Balanced reporting</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.	The thickness of the modelled mineralisation ranges from 0.2m to 4.5m wide.
<i>Other substantive exploration data</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.	N/A
<i>Further work</i>	- 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 on the Rosie Deposit will involve Mining Studies

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
<i>Database integrity</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. - Data validation procedures used.	All data is managed by Maxwell Geoservices and stored in a SQL database. Data was recorded on paper logs, Field Marshall or Ocris logging software with inbuilt validation and sent to Maxwell for uploading into the database. Assay files are sent directly from the laboratory to Maxwell for merging with the database.
<i>Site visits</i>	- Comment on any site visits undertaken by the Competent Person and the outcome of those visits. - If no site visits have been undertaken indicate why this is the case.	- No site visit has been conducted by the Competent Person for the MRE at this stage due to travel restrictions. All drill core has been photographed both dry and wet and available for viewing from the company database. - The Competent Person for data collection and quality has visited the site and inspected the core on numerous occasions.

Criteria	JORC Code explanation	Commentary
<i>Geological interpretation</i>	- Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. - Nature of the data used and of any assumptions made. - The effect, if any, of alternative interpretations on Mineral Resource estimation. - The use of geology in guiding and controlling Mineral Resource estimation. - The factors affecting continuity both of grade and geology.	- There is a high confidence level in the geological interpretation and that of the mineralisation. The resource estimate has been guided by the geology as the mineralisation is syn-genetic and directly linked to the basal contact horizon of the base of the ultramafic rock unit in which it resides. The grade distribution of the mineralisation has been used as a controlling guide for the wireframes for the estimation, the rock type of the mineralised envelope will vary in places but is in general restricted to ultramafic rocks and minor zones of the footwall sediments and basalts. The grades are highest in the ultramafic rocks and weakest within the sediments and basalts of the footwall units. The main factors affecting continuity of grade are rock type and amount of structural deformation within the zone of mineralisation. Some minor remobilisation into the footwall units has been observed. - The deposit is similar in style to many komatiitic nickel-copper deposits. - The basal contact mineralised zone, and the lower-grade hanging wall and footwall units were modelled using the vein-modelling tool in Leapfrog software.
<i>Dimensions</i>	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The drilling used for the estimate of the Mineral Resource to date spans a vertical depth of approximately 600m over a strike length of ~1,500m, however mineralisation has been intersected over a strike length of ~1km and is still open in all directions. The main basal contact mineralised zone is approximately 0.2m-4.5m wide (true width) and sub-vertical in a sheet like orientation striking approximately north-west to south-east. The mineralisation projects to the surface, however is obscured from direct detection by a thin veneer of transported overburden (~10-20m thick).
<i>Estimation and modelling techniques</i>	- 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	- Estimation of nickel, cobalt, copper, arsenic, gold, platinum, palladium, iridium, osmium, rhodium, ruthenium, sulphur and bulk density was by two-dimensional Ordinary Kriging within the basal contact mineralised zone, using Datamine software. The 2D method utilises full-seam grade composites multiplied by horizontal thickness and density to create an additive variable known as an 'accumulation'. - These accumulations are then projected to a 2D plane – as the contact mineralized zone is sub-vertical, the projected plane was vertical. - Kriging is then run in the 2D plane for the thickness, 'tonnage' (thickness x density) and grade accumulation variables. Grades are calculated by dividing the estimated accumulation by the estimated tonnage, and density is derived by dividing the estimated tonnage by the estimated thickness. These estimated variables were then

Criteria	JORC Code explanation	Commentary
	<i>economic significance (eg sulphur for acid mine drainage characterisation).</i> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective mining units.</i> <i>Any assumptions about correlation between variables.</i> <i>Description of how the geological interpretation was used to control the resource estimates.</i> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i>	translated back into the original 3D space. - Grade caps were not used for nickel, as there were no extreme outlier values, but grade capping was used for all the other variables. These caps were applied to the raw data before the accumulation calculations. - Variography was performed using Snowden Supervisor software for the twelve grade accumulations, plus the thickness and 'tonnage' variables. - The minimum number of accumulations/thickness required was two, with a maximum of ten. There are 95 full seam accumulations available for most variables, but only 58 for the less-sampled minor PGEs (Ir, OS, Rh, Ru). - First pass search ellipse radii were similar to the variogram ranges, with similar anisotropy as the variogram models; 200m down plunge (40° to the south in the 2D projected plane) and 100m across plunge. - If a block was not estimated with this first search pass, a second pass twice the size of the first was used, and a third pass five times the original search was used if required. Over 95% of the blocks were informed on the first or second pass. - The 2D parent block size was 32 mN and 32 mRL, with the 3D parent block size 16 mE x 16 mN x 16 mRL. The final 3D block model was not rotated, but rotation of the 2D model and grade accumulations was required to project to the 2D plane (the contact mineralized zone trends towards 315°). Average drill hole spacing through the basal contact zone is 50m N x 50m RL, with some infill to 25 x 25. - Hard boundaries were used for grade estimation, with each mineralised zone estimated separately (i.e. no data sharing between zones). - The block model was validated for all variables by checking tonnage-weighted grade estimates against input sample data per shoot, semi-local comparisons of model and sample accumulations and estimated grades by using swath plots, and by extensive visual inspection of the block grades and input data on screen. All these methods show that the grade estimates honour the input data satisfactorily. - The model was also coded for the pentlandite dominant (massive) zone and violarite dominant (upper) zone as used for the metallurgical studies (see below). It is assumed that oxidised areas above the violarite zone will have no metallurgical recovery, and have been excluded from the mineral resource. - The low-grade hanging wall and footwall zones were estimated by conventional 3D ordinary kriging, but are not part of the mineral resource, and are only required for dilution for future mine planning studies.

Criteria	JORC Code explanation	Commentary
		- There has been no mining at the Rosie deposit. This mineral resource estimate supersedes the previous estimate from 2012. There is a significant increase in tonnage (+28%) and Ni grade (+15%) compared to the previous estimate due to additional drilling that has extended the deposit to the south and at depth. - A conventional 3D ordinary kriged check estimate model was run in parallel to the 2D estimate, with the results within 1% for tonnage and 4% for Ni grade.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	- The mineralised shoots have been defined stratigraphically. A cut-off grade of 1% nickel equivalent (NiEq) has been used for reporting, but this represents the entire basal contact mineralised zone. - NiEq has been calculated with the following prices (US \$) and recoveries for Pentlandite (P) and Violarite (V): - Ni \$7.00/lb., P = 96.9%, V = 88.7% - Cu \$3.20/lb., P = 99.5%, V = 94.5% - Co \$14.00/lb., P = 95.1%, V = 88.5% - Pt \$1,150/oz., P = 78.2%, V = 57.6% - Pd \$1,250/oz., P = 97.6%, V = 87.3% - Rh \$8,500/oz., P = 83.4%, V = 64.8%
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	- Grades and geometry are amenable to small-scale underground mining (most likely long-hole stoping), like many 'Kambalda-style' nickel deposits. - Given the narrow width of the basal contact zone (average 2 – 3m thickness), some mining dilution would occur.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to	Metallurgical testwork was completed on two composite samples, representing both the massive (pentlandite dominant) and upper (violarite dominant) domain. Samples were assessed by flotation to determine the possibility of recovering nickel and

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	copper to concentrates at a saleable grade and to determine the deportment of platinum group elements prevalent in the ore. - Sixteen (16) flotation tests were conducted, nine on the massive sample and seven on the upper. - Separate saleable nickel concentrates and or bulk copper nickel concentrates can be generated in a conventional flotation circuit.
<i>Environmental factors or assumptions</i>	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.	- As any potential mine would be relatively small-scale underground mining, haulage of waste rock to surface would be minimal, and any potentially acid forming material would be encapsulated in the waste rock dump. Surface disturbance would be minimal, given the scale of the project. - The deposit is in an area of Western Australia that has numerous mining operations, both underground and open-cut, and any proposed mine would comply with the well-established environmental laws and protocols in the Goldfields area of WA.
<i>Bulk density</i>	- 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.	- Bulk densities were determined by Bureau Veritas and field staff for the majority of significant interval diamond core samples from the Rosie deposit. The water displacement method was used. The samples were weighed in air (DryWt) and then submerged in water and the water displacement measured (WetWT) and the formula $Density = \frac{DryWT}{(DryWT - WetWT)}$ was applied. - For the RC samples, there were no measured densities, hence the sample intervals were assigned a density based on a regression formula calculated from the measured density and Ni, and Fe content of the diamond core samples. Note that RC drilling represents less than 20% of the data available within the mineralized zone. Densities were used for all downhole compositing and metal accumulation variables. Density was interpolated into the resource model as with the grade (metal accumulation) attributes.
<i>Classification</i>	- The basis for the classification of the Mineral Resources into varying confidence categories. - Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input	- Indicated Mineral Resource has a nominal drill spacing of 50 mN x 50 mRL, and used search pass 1. Inferred Mineral Resource has a nominal drill spacing of greater than Indicated but below 100 mN x 100 mRL, and using search pass 1 or 2. - There is high confidence in the geological interpretation, and the input data has

Criteria	JORC Code explanation	Commentary
	<i>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>	been thoroughly checked and is reliable. The geometry and consistency of the mineralised shoots is similar to many 'Kambalda-style' nickel deposits. • The results reflect the Competent Person's view of the deposit.
<i>Audits or reviews</i>	• <i>The results of any audits or reviews of Mineral Resource estimates.</i>	• No independent external audits have occurred, but the work has been internally peer reviewed by Cube Consulting.
<i>Discussion of relative accuracy/ confidence</i>	• <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>	• Confidence in the estimate is reflected in the Mineral Resource Classification. Geostatistical metrics (e.g., kriging variances) have been used to assist with classification, but are not the only measure of confidence. • The Mineral Resource relates to global tonnage and grade estimates. • No mining production has occurred at the Rosie nickel deposit.