ASX Release **6 October 2014**

First round of drilling highlights potential to increase nickel resources at Rosie deposit, WA

Known nickel mineralisation extended a further 180m along strike, with EM survey identifying significant conductor nearby

HIGHLIGHTS

- **Drilling at The Rosie Nickel Project in WA has intersected nickel, copper and PGE mineralisation 180m to the north-west of previous high-grade intercepts**
- **Hole DKMRCD003 intersected 3.65m at 1.64%Ni, 0.71%Cu and 1.31g/t Pt+Pd**
- **Hole DKMRCD002 intersected 7.20m at 1.30%Ni, 0.13%Cu and 1.12g/t Pt+Pd**
- **Down-hole electro-magnetic (DHEM) survey indicates significant potential for mineralisation between hole DKMRCD003 and the previous intersections 180m to the south-east.**
- **Follow-up drilling at Rosie will target this 180m-long corridor as well as areas further to the north-west and south-east as part of the strategy to grow the existing JORC resource of 33,000t of nickel and 8,000t of copper (see Table 5)**

Duketon Mining Limited (ASX: DKM) is pleased to announce that drilling at its Rosie Nickel Project in WA has extended the known nickel mineralisation 180m along strike, highlighting the potential for further increases in the existing resource.

Hole DKMRCD003 intersected 3.65m at 1.64% nickel, 0.71% copper and 1.31g/t PGEs.

Importantly, down-hole electro-magnetic (DHEM) surveying of this hole has confirmed a significant in-hole conductor. The DHEM data has been conservatively modelled as a 70m by 70m body extending to the south-east towards the previous drilling (see Figure 1 below), indicating the potential to extend the existing nickel resource 180m along strike.

The cluster of earlier holes at the southern end of this 180m corridor returned strong results such as 5.20m at 9.18% nickel, 1.10% copper and 7.18gpt PGEs in hole TDBDD098.

An external review of historical DHEM data at Rosie has indicated that the DHEM may not have been optimised to identify any conductors in this 180m corridor. Significantly, hole TBDD139 was blocked, preventing DHEM surveying.

Hole DKMRCD002 intersected 7.20m at 1.30%Ni, 0.13%Cu and 1.12g.t Pt+Pd to the south-east of the known mineralisation confirming that it remains open in this direction.

The Rosie nickel resource remains open to the north-west and the south-east and will continue to be explored to add additional nickel and copper tonnes along strike from the current resource limits.

Duketon Mining Limited ACN 159 084 107
31 Ventnor Avenue West Perth WA 6005 T: +61(0) 8 6315 1490 F: +61(0) 8 9486 709

The next round of drilling is planned to commence in Q4 2014 at the Bulging East prospect and at the Thompson Bore gold prospect before moving into further drilling at the Rosie Nickel Project.

Duketon Mining Managing Director Stuart Fogarty said the latest results supported the Company's view that there was significant scope to grow nickel and copper resources at Rosie.

"The intersection of nickel mineralisation 180m away is extremely promising and supports further extensions to the Rosie Project," Mr Fogarty said.

"This is now a significant new corridor which we plan to test with follow-up drilling in addition to stepping out further to the north-west and south-east of the resource where the mineralisation remains open."

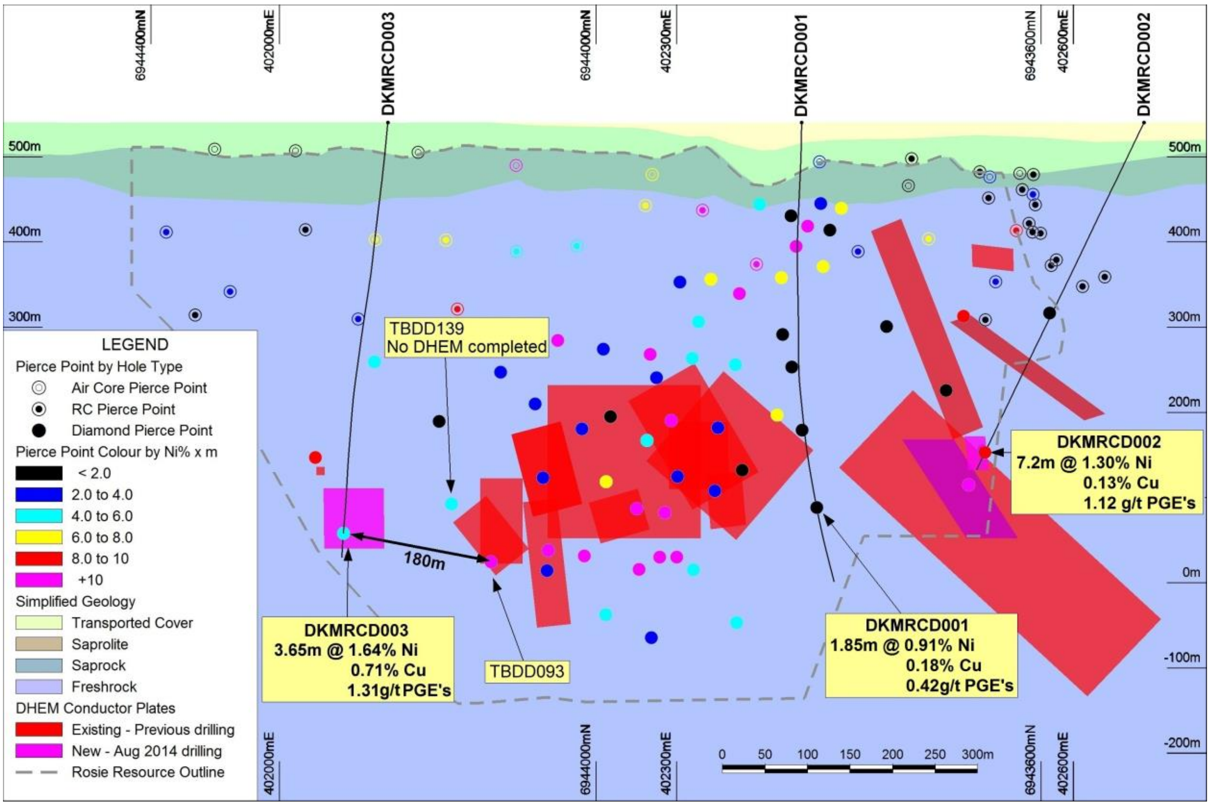

Figure 1. Long section of Rosie looking toward the east showing significant intercepts and DHEM plates*.

Terminator (Gold)

Two holes were drilled into the Terminator position following up on TBDD126 (3.8m @ 37.2g/t) with no significant gold assays returned. However, an area of nickel sulphides was intersected in DKMRC008 – **2m @ 1.06%Ni, 0.08%Cu and 0.54 g/t Pt+Pd**. This is interpreted to be approximately 1km along strike from the C2 mineralisation. DHEM of this intersection did not identify any conductors however the potential for further mineralisation remains.

Bulging East (Nickel)

Three additional holes were drilled into stratigraphic positions within the Bulge Ultramafic Complex that returned no significant assays. These were the first holes of reasonable depth into a prospective contact that is over 10km long. There still remains a significant amount of prospectivity in the Bulging East area.

Rosie Project (Nickel) – Intercepts Table

Table 1. Significant intercepts, Rosie Drilling 2014

HOLE ID	East	North	RL	Dip	Azi	From(m)	To(m)	Ni%	Cu%	PGE(g/t)
DKMRCD003	402015	6944131	540	-60	39	562.35	562.57	1.41	0.42	3.39
						562.57	562.88	1.78	0.14	1.99
						562.88	563.55	1.51	1.84	2.61
						563.55	563.75	2.41	0.16	2.32
						563.75	564.1	0.42	0.91	0.21
						564.1	564.88	1.36	0.64	0.48
						564.88	565.67	1.63	0.37	0.72
						565.67	566	3.44	0.23	0.56
DKMRCD002	402767	6943603	540	-60	353	440.88	441.26	2.35	0.17	0.36
						441.26	442	1.04	0.13	0.33
						442	443	0.19	0.01	0.72
						443	444	0.1	0.01	0.31
						444	444.4	0.43	0.04	0.35
						444.4	444.77	6.05	0.54	1.03
						444.77	445.34	3.73	0.46	0.29
						445.34	446.4	0.77	0.11	0.17
						446.4	447.38	0.59	0.07	0.32
						447.38	448.08	2.09	0.12	5.37
DKMRCD001	402340	6943769	540	-60	45	503	503.34	0.63	0.1	4.88
						503.34	503.78	0.34	0.05	0.39
						503.78	504.21	0.98	0.24	0.31
						504.21	504.85	1.41	0.28	1.58

Table 2. Significant intercepts, Terminator Drilling 2014

HOLE ID	East	North	RL	Dip	Azi	From(m)	To(m)	Au(g/t)	Ni%	Cu%	PGE(g/t)
DKMRC007	401937	6944088	540	-60	040	No Sig					
DKMRC008	401864	6944241	540	-60	045	141	142	0.009	1.06	0.07	0.47
						142	143	0.007	1.05	0.08	0.61

Table 3. Significant intercepts, Bulging East Drilling 2014

HOLE ID	East	North	RL	Dip	Azi	From(m)	To(m)	Ni%	Cu%	PGE(g/t)
DKMRC011	407831	6940741	500	-60	045	No Sig				
DKMRC012	407018	6941393	500	-63	046	No Sig				
DKMRC013	406455	6941850	500	-63	046	No Sig				

Table 4. Additional significant intercepts, Thompson Bore Drilling 2014

HOLE ID	East	North	RL	Dip	Azi	From(m)	To(m)	Au(g/t)
DKMRC003	403250	6939123	500	-60	225	91	92	1.40
DKMRC004	403259	6939206	500	-60	220	114	115	3.78
DKMRC006	403212	6939221	500	-59	225	79	80	1.84

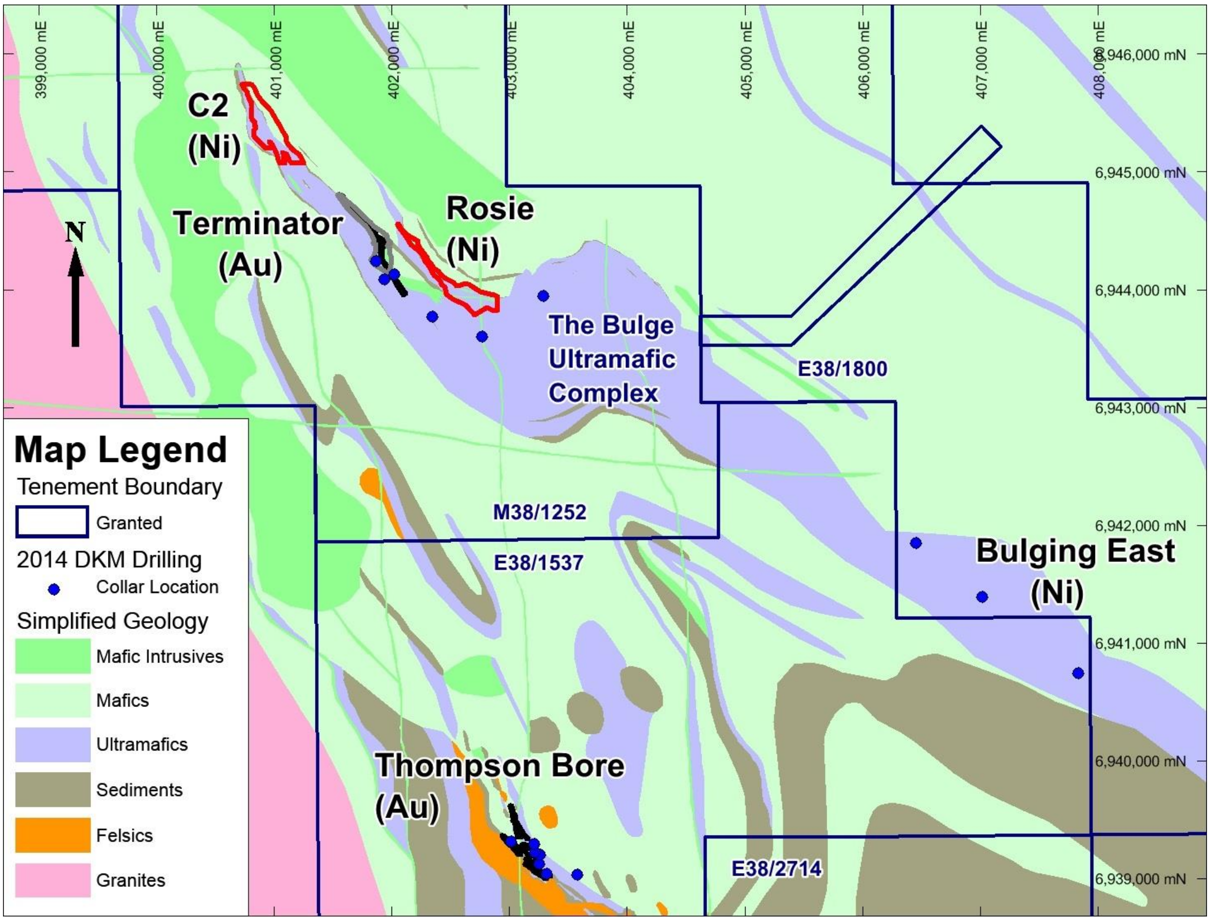

Figure 2. Drill Collar Location Plan for August 2014 drilling.

*Note: not all DHEM data is shown due to a significant overprint of false positive responses relating to non-nickel sulphides

For further enquiries, please contact:

Investors:
Stuart Fogarty
Duketon Mining - Managing Director
+61 8 6315 1490

Media:
Paul Armstrong/Nicholas Read
Read Corporate
+61 8 9388 1474/0421 619 084

ABOUT DUKETON MINING LIMITED

Duketon Project

The 100% owned Duketon Project is located 80km north of Laverton in WA's rich Duketon Greenstone Belt.

The project is in the Eastern Goldfield Province, which contains several large nickel sulphide deposits, including Mt Keith, Perserverance, Honeymoon Well, Yakabindie, Cosmos, Black Swan and the Kambalda-Widgiemooltha district.

It is also strategically situated within the same corridor as major deposits such as Regis Resources' 3Moz Garden Well deposit, the 2.7Moz Moolart Well deposit and the 1.7Moz Rosemont deposit.

The Rosie deposit within the Duketon Project already has a JORC-compliant resource of 1.9 million tonnes at 1.7% nickel, 0.4% copper and 1.9gpt PGE for 33,000 tonnes of nickel metal, 8,000 tonnes of copper metal and 118,000oz of platinum and palladium.

Drilling results at Rosie include intercepts as high as 5.2m at 9.14% nickel and 7.14gpt PGE.

The immense growth potential at Rosie and the surrounding area is highlighted by the fact that the resource is open in all directions in an extensive area where less than 15 per cent of the prospective geology has been explored. Duketon's C2 nickel prospect sits several kilometres to the north of the Rosie deposits and is further indication of this prospectivity.

The Duketon Project also includes the Terminator and Thompson Bore gold prospects. At Terminator, a host of high-grade drilling results has outlined mineralisation over a 250m strike length, contained in a broader zone of mineralisation over 800m, where it remains open in both directions. Drilling at Thompson Bore shows substantial gold mineralisation extends to a vertical depth of at least 110 metres below surface, where it remains open along strike in both directions and at depth.

Table 5. Rosie Nickel Resource

Classification	Oxidation	Tonnes	Ni%	Ni tonnes	Cu%	Pt (g/t)	Pd (g/t)	Pt+Pd (g/t
Indicated	Fresh	1,380,000	1.7	23,700	0.4	0.8	1.0	1.8
	Transitional	30,000	1.2	400	0.4	0.7	0.9	1.6
	Sub-Total	**1,410,000**	**1.7**	24,100	**0.4**	0.8	1.0	1.8
Inferred	Fresh	520,00	1.6	8,400	0.4	0.9	1.3	2.2
	Transitional	10,000	1.3	200	0.4	0.7	1.1	1.8
	Sub-Total	**530,000**	**1.6**	8,600	**0.4**	0.9	1.3	2.2
Total		**1,940,000**	**1.7**	**32,700**	**0.4**	**0.8**	**1.1**	**1.9**

Competent Persons

The information in this report that relates to exploration results is based on information compiled by Mr Trevor Saul, Member of the Australian Institute of Mining and Metallurgy ("AusIMM") and a consultant for Duketon Mining Limited. Mr Saul 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. Mr Saul consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by the Company and reviewed by Malcolm Castle, a competent person who is a Member of the Australasian Institute of Mining and Metallurgy Malcolm Castle is a consultant geologist employed by Agricola Mining Consultants Pty Ltd. Mr Castle has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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" (JORC Code). Malcolm Castle consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to geophysical results and interpretation is based on information compiled and interpreted by Southern Geoscience Consultants Pty Ltd under the supervision of Mrs. Anne Tomlinson, a Principal Geophysicist and full time employee of Southern Geoscience Consultants, who reviewed the electromagnetic survey interpretation. Mrs. Tomlinson is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the type of activity being undertaken 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 and consents to the inclusion in this report of the matters reviewed by her in the form and context in which they appear.

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

Section 1 Sampling Techniques and Data – Rosie, C2, Terminator and Thompson Bore

(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.*	• The Rosie deposit and C2 prospect were sampled using Reverse Circulation (RC) and Diamond Drill (DD) holes on sections spaced at 100m or less down to approximately 30m x 30m in places. The primary method of drilling for the Rosie deposit has been oriented diamond core (NQ2) using the Ace and EziMark orientation tools. • Current Drillhole collars were surveyed using handheld GPS to 5m accuracy. All previous Drillholes were surveyed using DGPS equipment to sub 0.5m accuracy. A combination of licensed surveyors and company field technicians was used during various programs to determine accurate collar positions. Co-ordinates were surveyed in the MGA94 grid system. No local grid has been established as yet. 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. • Diamond holes have also been systematically analysed on 1m intervals using a handheld XRF machine (Innov-X Systems) where no physical sampling has taken place. Also, the XRF machine is used to analyse the mineralisation prior to core-cutting, giving a good approximation to the grade intercepted, prior to the receipt of the assay results from the lab. The XRF data have not been used in the resource estimate and are purely used as a guide to the geological interpretation. • The Terminator and Thompson Bore were sampled using Aircore(AC), RC and in places DD holes that are randomly spaced as a result of the early exploration stage that these prospects are in. DD

Criteria	JORC Code explanation	Commentary
		holes were part of the Rosie drilling and therefore have the same criteria as described above. The aircore and RC drilling was sampled on a 4 meter length and then subsequently subsampled to 1m where appropriate. • Drillhole collars were surveyed to an accuracy of +/- 5m although some drill holes are historical and the survey methods cannot be confirmed. MGA 94 Co-ordinates were used for all grids and no local grids were established. • DHTEM has been surveyed on many holes in the project with variable station spacing based on the geological logging and EM results to ensure that anomalies are optimally sampled. At least two readings were taken at taken at each station to ensure data repeatability. Quality assurance and quality control of the DHTEM data was independently verified by Southern Geoscience consultants in Perth. • DHTEM used a: Receiver: SMARTem 24 Transmitter: HP 100+ Sensor: DigiAtlantis Probe
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 deposit and the C2, Terminator and Thompson bore prospects have been drilled with a combination of Aircore, RC and Diamond drilling (NQ2). The primary method of drilling for the Rosie deposit 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 ~1500m, however mineralisation has been intersected over a strike length of ~1km and is still open to the east and down-dip. .
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.*	• The majority of the Rosie 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 (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

Criteria	JORC Code explanation	Commentary
		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. • The drilling at C2, Terminator and Thompson Bore prospects do not have historical sample weights and therefore any potential bias cannot be determined
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 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 SQL database with an AcQuire front end. All original paper logs are stored in the Perth Office in lever-arch folders and digital records are stored on the server. • Field Marshall software is used for RC logging and the files are loaded directly into the SQL database. • 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. These data are recorded on paper logs, entered into an excel spreadsheet which is then loaded into the SQL database by the database administrator. • The handheld Innov-X XRF machine stores a multi-element analysis of the point at which the reading was taken. These data have been used as an aid to the geological interpretation of the drilling where

Criteria	JORC Code explanation	Commentary
		sampling and analysis by a laboratory has not taken place. The XRF machine is also used to analyse the mineralisation prior to sampling, which gives a good approximation to the grade intercepted and allows a visual estimate to be obtained from the core prior to the receipt of the assay results from the lab. No handheld XRF data have been used in the resource estimate.
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.*	• For the Rosie resource 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. • 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%) – 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). High Sulphide content Diamond Core samples have also been analysed for 6 PGE: Pt(1ppb), Pd(1ppb), Rh(1ppb), Ru(1ppb), Os(1ppb), Ir(1ppb) – the samples have been analysed by Fire Assay using

Criteria	JORC Code explanation	Commentary
		Nickel sulphide as the collecting medium. Here a nominal 25g sample is mixed with a Nickel Carbonate / Sulphur based flux and fused at 1120°C for 1.25 hours. The resultant Nickel Sulphide button is pulverised and a portion is digested to remove the Nickel Sulphide base. Ultra Trace ensures recovery of the platinoids by carrying out this stage in a reducing environment which is coupled with Tellurium co-precipitation. The insoluble Platinoid Sulphides are separated by filtration, digested, and the resulting solution is analysed by ICP-MS. If gold has been reported the result may be low. This is a method limitation. 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). 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).
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 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.*	• Prior to 2012, 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. • In 2011, three standards consistently returned a low result, irrespective of the laboratory used: GBM310-12 expected value 2.993%Ni, mean value obtained 2.880%Ni, and mean bias -3.79%. GBM305-13 expected value 2.971%Ni, mean value obtained 2.693%Ni, and mean bias -9.34%. GBM307-11 expected value

Criteria	JORC Code explanation	Commentary
		1.128% Ni, mean value obtained 1.029% Ni, and mean bias -8.80%. • In discussion with various laboratories to ascertain the reason for these standards returning lower than expected values on a consistent basis, concluded that the standards returned reduced values as a consequence of oxidation of the standard pulps. • New standards were purchased for the 2012 drilling, sourced from Geostats Pty Ltd, O'Connor, Western Australia. All of the standards were stored in sealed, separate plastic containers to prevent contamination and with oxygen absorbing sachets in the containers to prevent oxidation. The suite of standards used in diamond drilling and RC drilling were slightly different, and were spread across the expected grade range of the ore forming sulphide minerals of the Rosie deposit. The main economic minerals targeted are Nickel (Ni), Copper (Cu), Cobalt (Co), Platinum (Pt) and Palladium (Pd). The nickel sulphide mineralisation observed historically at the Rosie deposit typically ranges in grade from around 0.4%-9.9% Ni and around 0.02-1.5% Cu, with around 500ppm Co and 2g/t Pt combined with Pd. • Duplicates have been taken for RC drilling using conventional cone and riffle splitters and for diamond drilling, using ¼ NQ2 core. • External laboratory (umpire) checks for 2012 have been completed on 4.8% of the total sample count. IGO protocol minimum (5%). • Total Blank count for the 2012 resource drilling is 4.0% of samples. IGO protocol minimum (5%). • Total Standard count for the 2012 resource drilling is 6.3% of samples. IGO protocol minimum (5%). • Total Field Duplicates for the 2012 resource drilling is 2.6%. IGO protocol minimum (2%). • Laboratory results for 2012 have been reasonably high quality, with good accuracy and minimal bias.
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.*	• Duketon Mining has visually verified the significant intersections in diamond core • There have been no twinned holes drilled at this point • Field Marshall software is used for RC logging and the files are loaded directly into the SQL database. • 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

Criteria	JORC Code explanation	Commentary
		spreadsheet before being uploaded to the SQL database with an AcQuire front end. All original paper logs are stored in the Perth Office in lever-arch folders and digital records are stored on the server. • No adjustments or calibrations were made to any assay data used in this estimate • All primary electromagnetic digital data were recorded with a SmarTEM24 receiver by Outer Rim Exploration. Data were electronically transferred by email to Southern Geoscience Consultants for independent evaluation and have been securely archived.
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.*	• Drillhole collars were surveyed using DGPS equipment to sub 0.5m accuracy for the Rosie resource drilling. A combination of licensed surveyors and company field technicians was used during various programs to determine accurate collar positions. 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 1000m (1%). RC drilling has been surveyed approximately every 50m down hole with a Reflex EZ single shot digital camera. • No local grid has been established as yet.
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

Criteria	JORC Code explanation	Commentary
		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 estimation and do not introduce sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody was managed by Independence Group (JV partner at the time of calculation)
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external audits or reviews have been conducted apart from internal company review. • All geophysical data collected were reviewed by independent geophysical consultants Southern Geoscience Consultants. • Several sources of conductors in the bedrock are possible, including but not limited to: concentrations of massive sulphide, graphite, conductive clays, saline groundwater etc. • Downhole electromagnetic models of conductive sources are made from a combination of measured data and assumptions made according to industry best practice. The resultant models should therefore be considered a “best estimate” of the conductive sources, and not definitive characterization.

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.*	• The reporting of historical exploration results have been limited to what is considered significant intercepts for the Rosie (Ni), Terminator (Au) and Thompson Bore (Au) prospects. Both the Rosie and the Terminator prospects sit on M38/1252 a granted mining tenement. Thompson Bore is located on a granted exploration tenement E38/1537 • Both tenements are 100% owned by Duketon Mining Limited and are 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.*	• 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 aluminum dunites. There was no further activity until Independence Group commenced exploration in the mid 2000 culminating in the discovery of the C2 and Rosie mineralization. South Boulder Mines discovered the Terminator gold deposit during 2009 and further delineated the Thompson Bore area following up preliminary work by Wiluna Mines.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• 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 may also contain sulphides in varying amounts. • The gold mineralization is a combination of narrow high grade and wide low grade mineralization usually located within shear zones along the contact between ultramafic and variably basaltic or felcis contacts.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information*	• All significant intersections for Rosie, Terminator and Thompson Bore are tabulated in the attached table. For Terminator and Thompson

Criteria	JORC Code explanation	Commentary
	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.*	Bore only the intersections that have greater than 0.5 g/t Au with a maximum internal waste of 2 meters are considered material. For Rosie only intersections that have greater than 0.1%Ni, no upper cut, maximum internal waste of 2 meters and only 0.5%Ni plus intercepts are reported.
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 length weighting has been applied due to the nature of the sampling technique. No top-cuts have been applied. • Not applicable for the sampling method used • No metal equivalent values have been used for reporting of results
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').*	• Rosie mineralization is sub, vertical and strikes approximately north, north west-south, south east. All significant intercepts are down hole lengths and true width are not calculated. • Terminator mineralization is sub vertical and strikes approximately north, north west-south, south east. All significant intercepts are down hole lengths and true width are not calculated. • Thompson Bore mineralization is sub horizontal. All significant intercepts are down hole lengths and true width are not calculated.
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 for Rosie, Terminator and Thompson Bore.
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 significant results above the stated reporting criteria have been reported regardless of the width or grade.
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 for Rosie will be focused on the metallurgical components and defining possible mineralisation along strike. • RC drilling will be completed to further delineate the nature and extent of the Terminator and Thompson Bore prospects.

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
Database integrity	• *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.*	• No database integrity and data validation procedures have been completed to date. Standard validation procedures are in place for data upload to the SQL database via the AcQuire front end. Assays are merged from electronic files supplied by the laboratory. The downhole survey database table was overhauled and magnetic and true north azimuths corrected for magnetic declination and grid convergence to the MGA94 grid, prior to wireframing. Cube Consulting did not detect any errors during the resource estimation work.
Site visits	• *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 at this stage. All drill core has been photographed both dry and wet and available for viewing from the company database. • It has not been deemed necessary to conduct a site visit by the Competent Person as the drilling has been competed at the time of the resource estimation
Geological interpretation	• *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 due mostly to the fact that the mineralisation is syn-genetic and directly linked to the 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

Criteria	JORC Code explanation	Commentary
		deformation within the zone of mineralisation. Some minor remobilisation into the footwall units has been observed. • The deposit appears similar in style to many komatiitic nickel-copper deposits
Dimensions	• *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 ~1500m, however mineralisation has been intersected over a strike length of ~1km and is still open to the east and down-dip. The main mineralised envelope (+1% Ni) 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).
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Isatis v11.2 and Surpac v6.3 software were used for variography, domain modelling and grade estimation. Ordinary kriging was used for grade interpolation, based on the variography and validation of the search orientations in Surpac. All grade interpolation was constrained to within the interpreted domain boundaries. • The Contact domain was estimated using a 2D projection method, which simplifies undulating, narrow lode geometry onto a longitudinal plane. Drillhole intercepts for each intersection were represented as a single point composite per drillhole. The horizontal width for each intersection was calculated and composites carried accumulation variables for each element. The accumulation variable for each element was the top-cut grade x horizontal width x density. Also carried was the density thickness accumulation variable (density x horizontal width). Variography was carried out on the accumulation variables for each element in Isatis. No preferred direction of continuity was obtained from the variography therefore omni-directional searches were used for grade estimation. Accumulation variables for Ni, Cu, Co, As, Au, Pt, Pd, S and density were interpolated into a 2D block model, along with the density thickness accumulation variable and the horizontal width. After kriging, the block grades for each element were back-calculated from the kriged accumulation variables to obtain the element grades (accumulation variable / density thickness accumulation variable). • A high grade sub-domain was identified within the Contact domain. The estimation neighbourhood was constrained so that the grade

Criteria	JORC Code explanation	Commentary
		within the high grade domain was not over-represented. Blocks inside the high grade domain were estimated using all intercept composite data and blocks outside the high grade domain were estimated using only the intercept composite data outside the high grade sub-domain. • The block centroids and grades were converted to 3D and imported into a real world block model using nearest neighbour assignment. The orientation, block size and sub-celling regime of the real world block model were designed to provide sufficient volume resolution for accurate surface geometry representation. • Hangingwall and Footwall sub-economic mineralisation was also modelled but does not form part of the resource estimate. Arsenic (As) is a deleterious element and has been estimated into the resource model. • A maiden resource estimate was previously completed for the Rosie Deposit in late December 2011 by Cube Consulting Pty Ltd and released to the ASX by IGO on 25 January 2012. This estimate is an update of that model.
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 currently estimated with natural moisture with laboratory testwork planned in future infill drilling programs to determine actual moisture content. It is expected that the moisture content will be very low (<1%) based on IGO's experience with other Ni sulphide deposits in WA.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Contact domain is a geological domain with no assay cut-off grade. Top-cuts were reviewed by Cube Consulting and applied to the intercept composites in the Contact domain, prior to calculation of the accumulation variables for each composite. Only Co and Pd required top-cutting. Top-cut values assigned were: Co_ppm (1500), and Pd_ppb (3000)). No top-cuts were applied to Ni, Pt or Cu. • For resource reporting, a block cut-off grade of 1.0% Ni was applied to the Contact mineralisation.
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*	• No assumption on mining methodology has been made. However, the geometry of the deposit would make it amenable to mining methods currently employed in many underground operations in similar deposits around the world.

Criteria	JORC Code explanation	Commentary
	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.	
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 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.*	• No assumptions about metallurgical treatment processes and parameters have been made. Various options will be considered in future programs.
Environmen-tal factors or assumptions	• *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.*	• No assumptions regarding environmental factors have been made. Options will be considered in future programs
Bulk density	• *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 Ultra Trace and IGO for the majority of significant interval diamond core samples from the Rosie deposit. Ultra Trace and IGO used the same water displacement method. The samples were weighed in air (DryWt) and then submerged in water and the water displacement measured (WetWT) and the formula Density=DryWT/(DryWT-WetWT) was applied. • For IGO core samples, a single density measurement using one piece of core from the respective sample bag was taken in areas of weak mineralisation (<0.5% Ni). In areas that were interpreted to be well mineralised (+0.5% Ni visual estimate), three pieces of core were measured from the respective sample bag and an average taken of the three pieces to give a more representative density of the mineralisation. Core was not coated prior to weighing – porosity was considered to be extremely low. • For a selection of the holes drilled, IGO used a certified 200g brass weight as a standard. It was weighed both before, and after, the sample run was measured for density. This was primarily to monitor the digital scales for potential drift and accuracy.

Criteria	JORC Code explanation	Commentary
		• 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, 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 applied. 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.
Classification	• *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 data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The data spacing and quality is sufficient to classify the resource as Indicated and Inferred. Indicated classification was assigned to Contact mineralisation where the drilling was at a drillhole spacing of 50 x 50m or less. Inferred classification was assigned where the drillhole spacing was greater than 50 x 50m and within a boundary where geological continuity and confidence was considered reasonable. Search strategy, number of informing composites, average distance of composites from blocks and kriging quality parameters such as slope of regression were also taken into account. • Based on the drilling to date the tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audits or reviews of the Mineral Resource estimate have been conducted as the work was completed by external consultants Cube Consulting Pty Ltd.
Discussion of relative accuracy/ confidence	• *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.* • *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.* • *These statements of relative accuracy and confidence of the estimate*	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC code • The statement relates to global estimates of tonnes and grade • No production data is available.

Criteria	JORC Code explanation	Commentary
	should be compared with production data, where available.	