



ASX Release

30 April 2015

## March 2015 Quarterly Report

- **Nickel resources at the 100% owned Duketon Project grow by over 115%**
- **Total mineral resource for the Duketon Project now 71,000t Nickel, 26,000t Copper and 144,000oz Pt and Pd**
- **Comprehensive drilling, geophysical and geological data review over the Nariz nickel discovery completed**
- **Down hole electromagnetics confirmed numerous extensional targets at Nariz**
- **An extensive drilling campaign in the Duketon Belt, focussing on Nariz and other regional targets, has commenced**
- **Cash and liquids as at 31 March 2015 of circa \$7 million**

Duketon Mining Limited (Duketon or the “the Company”) (ASX:DKM) is pleased to present its quarterly report for the period ended 31 March 2015.

Duketon enjoyed a highly successful quarter which has culminated in the drilling program now underway at its high-grade Nariz nickel discovery in WA. This drilling, which is based on the results of a geological and geophysical data review conducted in the March Quarter, will test for extensions of the Nariz mineralisation to the east, west and at depth.

Duketon is an exploration company focused on the discovery of nickel deposits whilst evaluating other opportunities in the Duketon Greenstone Belt of Western Australia. The Company is currently advancing numerous nickel exploration targets including expanding the Nariz nickel discovery, the Rosie nickel deposit, the C2 nickel deposit and assessing future mining and processing options within the 100% owned Duketon Project. In addition, there remains significant potential for new gold and base metals discoveries given the Company’s substantial ground holding adjacent to Regis Resources Limited (ASX:RRL) in the Duketon Belt, where several multi-million ounce gold deposits have been brought into production.

The Company was officially listed on the ASX in August 2014 following its successful \$7M IPO.

### OPERATIONS

#### Nariz Nickel Discovery (Nickel)

The first round of drilling at Nariz was completed in January 2015. Assays from the massive sulphide section of the first hole at its Nariz prospect, within the Duketon Project, returned grades of **7.1% nickel, 0.5% copper and 3.8g/t combined platinum and palladium over 5.7m from 438.4 metres** within a broader zone of massive and stringer mineralisation of **9.2m @ 5% nickel, 0.4% copper and 2.4g/t combined platinum and palladium** (refer ASX Announcement 2 December 2014).



During this quarter the remaining assays for all drilling at Nariz (holes DKMDD007, DKMDD008, DKMDD009, DKMDD010 and DKMDD011 (see Figure 2 and 3)) were received and significant intercepts returned include **2.1% nickel, 0.4% copper and 0.7g/t combined platinum and palladium over 2.0m from 419.0 meters** in DKMDD008 and **1.2% nickel, 0.3% copper and 0.6g/t combined platinum and palladium over 1.2m from 446.2 meters** in DKMDD009 (see Figure 3 and Appendix 2).

DKMDD011 was drilled to the east of the original discovery hole (refer ASX Announcement 2 December 2014) and is interpreted to have been drilled down a shear zone that is offsetting the mineralisation to the east.

Down-hole electro-magnetic surveying (DHEM) has been finalized on all of the holes and re-interpretation of the entire DHEM dataset has been completed. This shows additional DHEM responses in all directions at Nariz, particularly to the east, west and at depth (see Figure 2 and 3). This is being used to inform the next round of drilling at Nariz which commenced mid-April 2015 (refer ASX Announcement 15 April 2015).

The high-grade nickel sulphide discovery at Nariz is a major advancement for the Company's nickel exploration strategy in the Duketon Greenstone Belt, of particular importance is the following:

- The Nariz prospect remains open to the east (towards the bulk of the untested and large Bulge Ultramafic Complex), west and down-dip; and
- The discoveries to date considerably support the fundamental prospectivity of "The Bulge Ultramafic Complex" and highlight the scope to discover and grow nickel resources at the 100% owned Duketon Project.
- The Nariz prospect is located approximately 120 metres from the most southerly intersection of nickel-copper mineralisation at Rosie and approximately 2km from C2;

The Company remains excited at the prospect of drilling more holes directly into and along strike from Nariz and is encouraged by the DHEM interpretation and drilling results that indicate the potential for more significant mineralisation in the system.

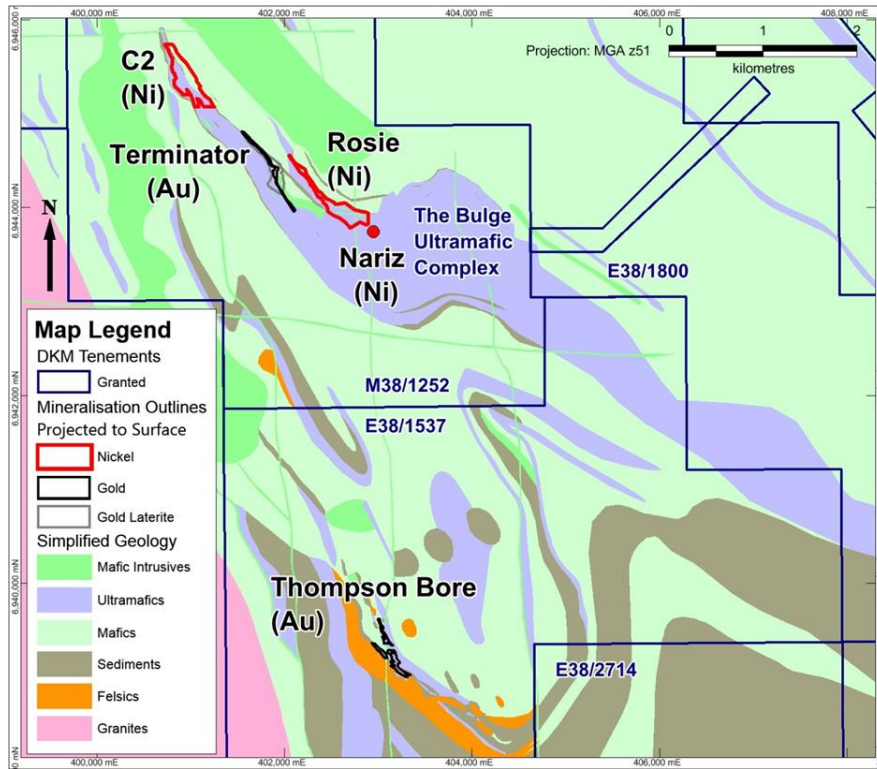


Figure 1: Location Plan of C2, Rosie and Nariz.

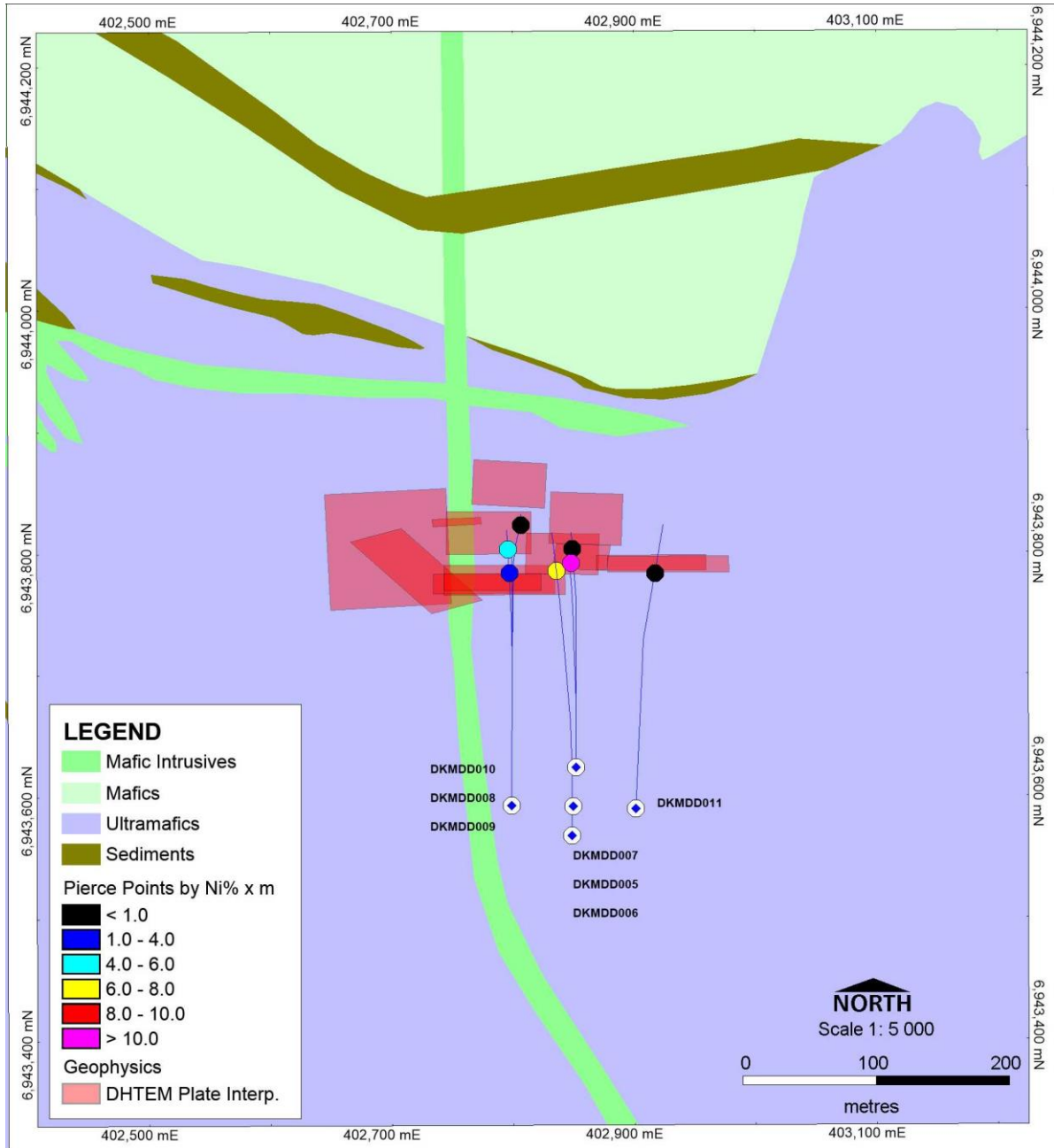


Figure 2: Plan showing collar location and traces of Nariz diamond drilling completed to date by DKM with DHEM plates indicated

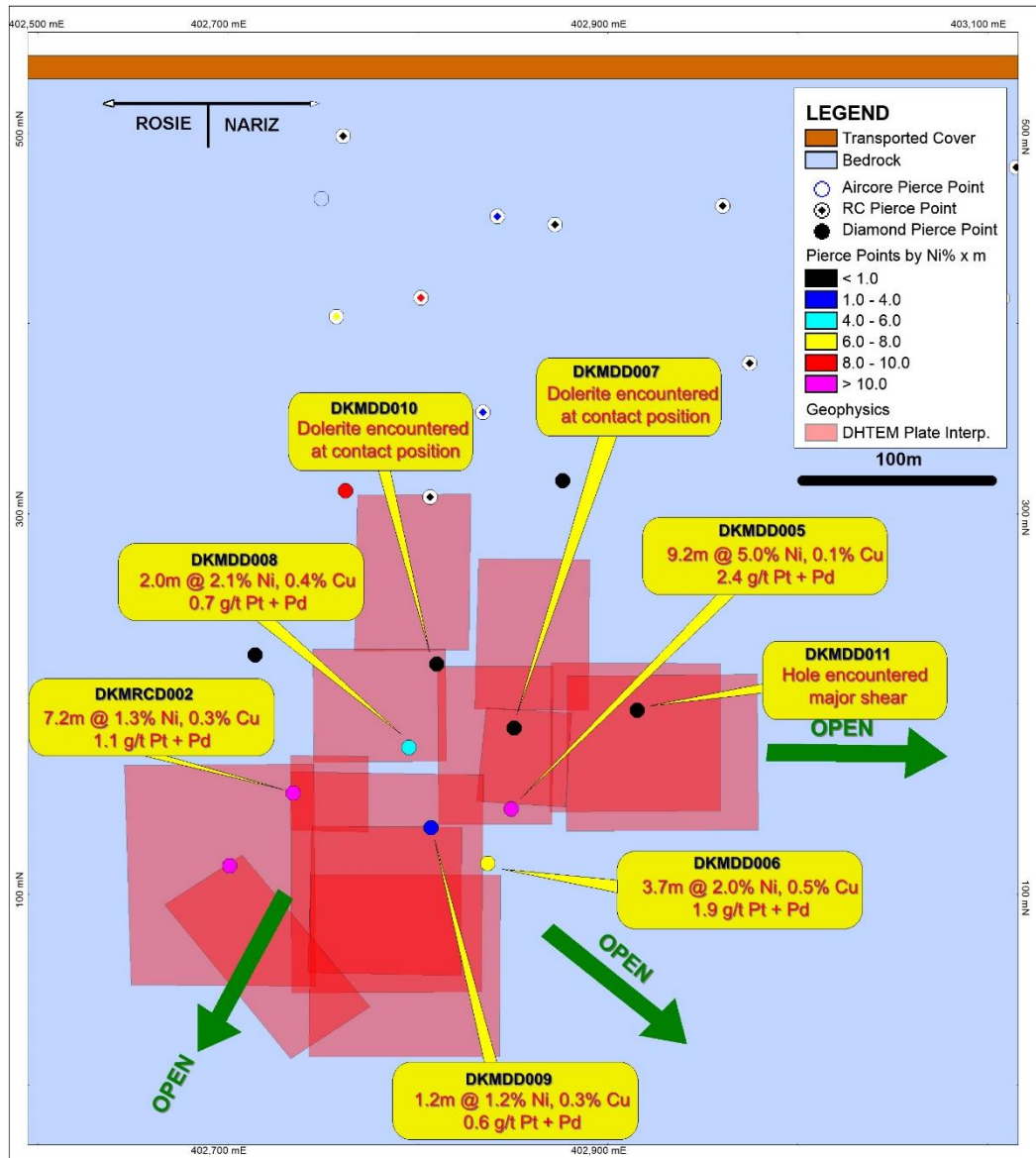


Figure 3: Longsection of Nariz showing reinterpreted DHEM plates and the results from the last round of drilling

### Rosie Mineral Resource (Nickel)

The Rosie deposit within the Duketon Project (Figure 1) already has a JORC-compliant resource of 1.9 million tonnes at 1.7% nickel, 0.4% copper and 1.9g/t PGE for 33,000 tonnes of nickel metal, 8,000 tonnes of copper metal and 118,000oz of platinum and palladium (refer ASX announcement 12 August 2014).

During the quarter, a second hole was collared to test a significant DHEM conductor identified in hole DKMRCD003 following the failure of the original hole testing this target (see Figure 4). The DHEM data has been conservatively modelled as a 70m by 70m body extending to the south-east towards the previous drilling, 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 positive results including 5.2m at 9.2% nickel, 1.1% copper and 7.2gpt PGEs in hole TDBDD098 (drilled by previous workers). Unfortunately this second hole was also abandoned after intersecting what is presumed to be the same shear that interrupted the original drillhole. This DHEM position remains untested.

The Rosie nickel resource remains open to the north-west and the south-east and will continue to be explored to add further nickel and copper tonnes along strike from the current resource limits. The Company's view is that there is significant scope to grow nickel and copper resources at Rosie.

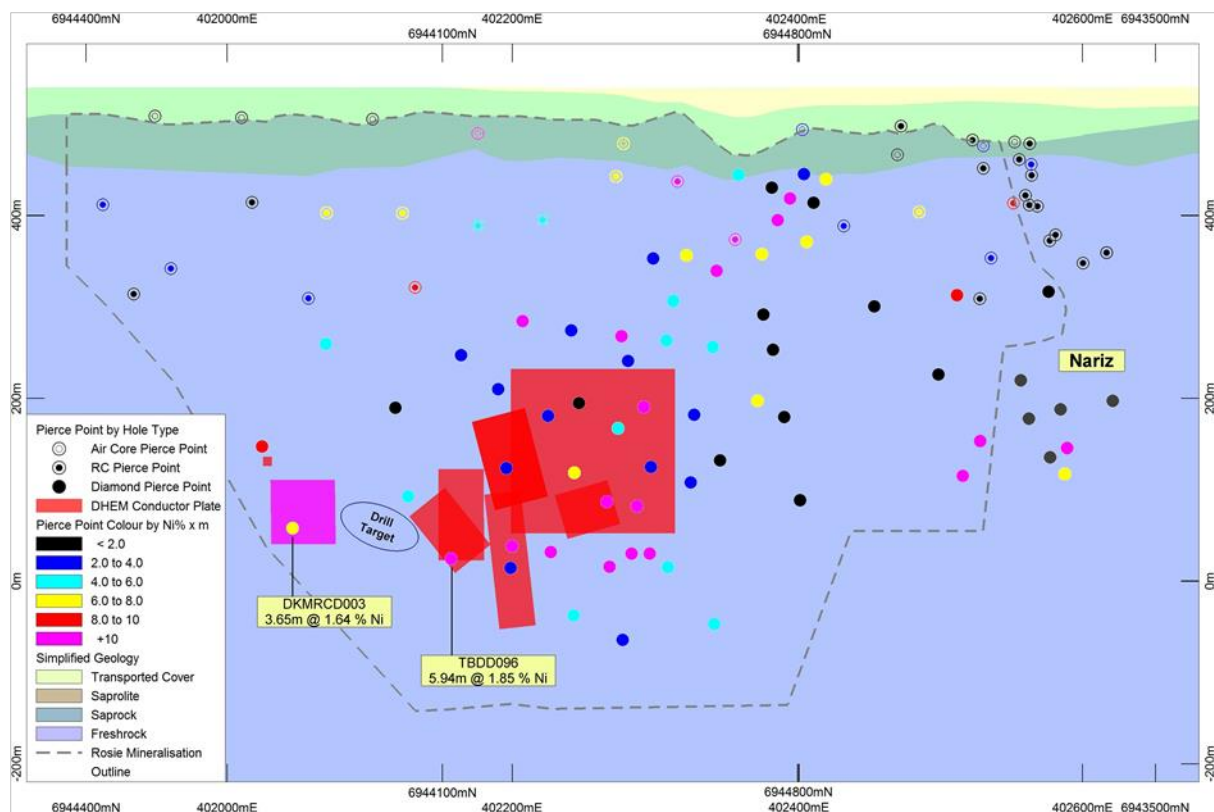


Figure 4. Longsection of the Rosie Nickel Resource looking to the East Showing the current drill target.

## C2 Mineral Resource (Nickel)

No work was completed at C2 this quarter, however it remains one of the company's key resources and when combined with the resource at Rosie, the combined total for the Duketon Project is **71,000 Ni tonnes, 26,000 Cu tonnes and 144,000 oz of Pt and Pd**. The Company's view is that there is significant scope to grow nickel and copper resources at C2.



## Regional Exploration

Regional exploration has been ongoing throughout the quarter. A detailed review of both the nickel and gold potential has been completed. Multiple new targets in both nickel and gold have been generated creating a significant and robust pipeline of organic opportunities.

## CORPORATE

At 31 March 2015 Duketon had approximately A\$7M available from cash reserves of A\$5.9M and a liquids position of circa A\$1.1 million.

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## Competent Persons

*The information in this report that relates to exploration results is based on information compiled by Mr Brad Drabsch, Member of the Australian Institute of Geoscientists ("AIG") and an employee of Duketon Mining Limited. Mr Drabsch 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 Drabsch 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 the announcement that relates to Mineral Resources for Rosie is extracted from the report entitled "Duketon Mining Prospectus" dated 19 June 2014 and is available to view on the Company's website ([www.duketonmining.com.au](http://www.duketonmining.com.au)). The information in the announcement that relates to Mineral Resources for C2 is extracted from ASX announcement 29 January 2015. 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 and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements 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.*



## Appendix 1. Summary of Mining Tenements

As at 31 March 2015 the Company had an interest in the following tenements:

Project Name	Tenement Number	Status	Interest
Duketon	E38/1535	Granted	100%
Duketon	E38/1537	Granted	100%
Duketon	E38/1800	Granted	100%
Duketon	E38/2231	Granted	100%
Duketon	E38/2661	Granted	100%
Duketon	E38/2666	Granted	100%
Duketon	E38/2699	Granted	100%
Duketon	E38/2714	Granted	100%
Duketon	E38/2717	Granted	100%
Duketon	E38/2737	Granted	100%
Duketon	E38/2738	Granted	100%
Duketon	E38/2781	Granted	100%
Duketon	E38/2805	Granted	100%
Duketon	E38/2811	Granted	100%
Duketon	E38/2812	Granted	100%
Duketon	E38/2819	Granted	100%
Duketon	E38/2834	Granted	100%
Duketon	E38/2866	Granted	100%
Duketon	E38/2892	Granted	100%
Duketon	E38/2898	Granted	100%
Duketon	E38/2916	Granted	100%
Duketon	E382919	Granted	100%
Duketon	E38/2960	Pending	100%
Duketon	E38/2976	Pending	100%
Duketon	E38/2983	Pending	100%
Duketon	E38/3002	Pending	100%
Duketon	E38/3004	Pending	100%
Duketon	E38/3011	Pending	100%
Duketon	E38/3012	Pending	100%
Duketon	E38/3017	Pending	100%
Duketon	E38/3022	Pending	100%
Duketon	E38/3026	Pending	100%
Duketon	L38/174	Granted	100%
Duketon	M38/330	Granted	100%
Duketon	M38/1252	Granted	100%
Duketon	P38/3893	Granted	100%
Duketon	P38/3984	Granted	100%
Duketon	P38/4028	Granted	100%



<b>Project Name</b>	<b>Tenement Number</b>	<b>Status</b>	<b>Interest</b>
Duketon	P38/4033	Granted	100%
Duketon	P38/4034	Granted	100%
Duketon	P38/4092	Granted	100%
Diorite Hill Western Shaw	E38/2891	Granted	100%
	E45/2768	Granted	100% Tin Only
Pilgangoora	E45/2375	Disposed	Nil
Duketon	E38/2812	Disposed	Nil
Duketon	E38/3015	Disposed	Nil
Duketon	E38/3033	Disposed	Nil
Duketon	P38/3897	Disposed	Nil



## Appendix 2. Significant Intercepts for the Quarter ending 31 March 2015

Collar Information							Intercept Details						
Hole No	Easting (MGA 94 Z51)	Northing (MGA 94 Z51)	RL (m)	Dip (degr)	Azi (degr)	Total Depth (m)	Depth From (m)	Depth To (m)	Intercept Width (m)	Ni (%)	Cu (%)	Co (%)	Pt + Pd (g/t)
DKMDD007	402853	6943621	540	-60	000	462.2	No Significant Intercept						
DKMDD008	402800	6943590	540	-58	000	462.0	411.2	411.6	0.5	2.1	0.4	0.05	1.4
							419.0	421.0	2.0	2.1	0.4	0.05	0.7
DKMDD009	402800	6943590	540	-63	000	483.2	446.2	447.4	1.2	1.2	0.3	0.03	0.6
DKMDD010	402800	6943593	540	-53	000	432.0	No Significant Intercept						
DKMDD011	402900	6943590	540	-60	000	524.7	No Significant Intercept						

Note: Intervals reported are > 1% Ni over a minimum width of 0.2m with maximum internal dilution of one sample. All samples are taken at geological contacts and not at regular intervals



### Appendix 3. Duketon Project Resources (refer 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
<b>Total</b>		<b>5,700,000</b>	<b>0.7</b>	<b>38,000</b>

#### C2 Nickel Resource > 0.5% Ni

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
<b>Total</b>		<b>5,700,000</b>	<b>0.7</b>	<b>0.04</b>	<b>61</b>	<b>82</b>	<b>3.1</b>

#### C2 Resource > 0.5% Ni with Auxiliary Attributes

Rosie Nickel Resource >1.0%Ni				
Classification	Oxidation	Tonnes	Ni (%)	Ni (t)
Inferred	Fresh	1,380,000	1.7	23,700
	Transitional	30,000	1.2	400
	<b>Sub-Total</b>	<b>1,410,000</b>	<b>1.7</b>	<b>24,100</b>
Indicated	Fresh	520,000	1.6	8,400
	Transitional	10,000	1.3	200
	<b>Sub-Total</b>	<b>530,000</b>	<b>1.6</b>	<b>8,600</b>
<b>Total</b>		<b>1,940,000</b>	<b>1.7</b>	<b>32,700</b>

#### Rosie Nickel Resource > 1.0% Ni

Rosie Nickel Resource >1.0%Ni								
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
	<b>Sub-Total</b>	<b>1,410,000</b>	<b>1.7</b>	<b>24,100</b>	<b>0.4</b>	<b>0.8</b>	<b>1.0</b>	<b>1.8</b>
Inferred	Fresh	520,000	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
	<b>Sub-Total</b>	<b>530,000</b>	<b>1.6</b>	<b>8,600</b>	<b>0.4</b>	<b>0.9</b>	<b>1.3</b>	<b>2.2</b>
<b>Total</b>		<b>1,940,000</b>	<b>1.7</b>	<b>32,700</b>	<b>0.4</b>	<b>0.8</b>	<b>1.1</b>	<b>1.9</b>

#### Rosie Nickel Resource > 1.0% Ni with Auxiliary Attributes



## Appendix 4 JORC Table 1

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

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

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>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 and the Nariz prospect has been oriented diamond core (NQ2) using the Ace and EziMark orientation tools.</li> <li>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 MGA94z51 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.</li> <li>Diamond holes at Rosie and C2 have also been systematically analysed on 1m intervals using a handheld XRF machine (Innov-X</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Systems) where no physical sampling has taken place. Also, the XRF machine is used to analyse the mineralisation prior to core-cutting and 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.</p> <ul style="list-style-type: none"> <li>• 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 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.</li> <li>• Drillhole collars were surveyed to an accuracy of +/- 5m although some drill holes are historical and the survey methods cannot be confirmed. MGA94z51. Co-ordinates were used for all grids and no local grids were established.</li> <li>• 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 each station to ensure data repeatability. Quality assurance and quality control of the DHTeM data was independently verified by Southern Geoscience consultants in Perth.</li> <li>• DHTeM used a: Receiver: SMARTem 24 Transmitter: GAP GEOPAC MLTX-200 Sensor: DigiAtlantis Probe</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Rosie deposit and the C2, Nariz, 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 and Nariz prospect 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,</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <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></li> </ul>	<p>however at Rosie mineralisation has been intersected over a strike length of ~1km and is still open to the east and down-dip. .</p> <ul style="list-style-type: none"> <li>• The majority of the 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 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.</li> <li>• The drilling at Nariz, C2, Terminator and Thompson Bore prospects do not have historical sample weights and therefore any potential bias cannot be determined</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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 most 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.</li> <li>• All diamond holes are logged on paper logs using the company geological codes library and a detailed written description is recorded</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>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.</p> <ul style="list-style-type: none"> <li>• Field Marshall software was used for historical RC logging and the files were loaded directly into the SQL database.</li> <li>• 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.</li> <li>• 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 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.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to</i></li> </ul>	<ul style="list-style-type: none"> <li>• For the diamond drill holes 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</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>maximise representivity of samples.</i></p> <ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <li>• 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 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/Bureau Veritas 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</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>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/Bureau Veritas (detailed above).</p>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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 1.128% Ni, mean value obtained 1.029% Ni, and mean bias -8.80%.</li> <li>• In discussion with various laboratories to ascertain the reason for</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>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.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Duplicates have been taken for RC drilling using conventional cone and riffle splitters and for diamond drilling, using ¼ NQ2 core.</li> <li>• External laboratory (umpire) checks for 2012 have been completed on 4.8% of the total sample count. IGO protocol minimum (5%).</li> <li>• Total Blank count for the 2012 resource drilling is 4.0% of samples. IGO protocol minimum (5%).</li> <li>• Total Standard count for the 2012 resource drilling is 6.3% of samples. IGO protocol minimum (5%).</li> <li>• Total Field Duplicates for the 2012 resource drilling is 2.6%. IGO protocol minimum (2%).</li> <li>• Laboratory results for 2012 have been reasonably high quality, with good accuracy and minimal bias.</li> <li>• Since 2013 blanks and duplicates have been inserted approximately every 50 samples and standards approximately every 25 samples (in mineralised areas)</li> </ul>
<b>Verification of sampling</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Duketon Mining has visually verified the significant intersections in diamond core</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>and assaying</b>	<ul style="list-style-type: none"> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>There have been no twinned holes drilled at this point</li> <li>All drill 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. All original paper logs are stored in the Perth Office in lever-arch folders and digital records are stored on the server.</li> <li>No adjustments or calibrations were made to any assay data used in this estimate</li> <li>All primary electromagnetic digital data were recorded with a SmarTEM24 receiver by GAP Geophysics.. Data were electronically transferred by email to Southern Geoscience Consultants for independent evaluation and have been securely archived.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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 &lt;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.</li> <li>No local grid has been established as yet.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>procedure and classification applied.</p> <ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody was managed by company representatives</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No external audits or reviews have been conducted apart from internal company review.</li> <li>All geophysical data collected were reviewed by independent geophysical consultants Southern Geoscience Consultants.</li> <li>Several sources of conductors in the bedrock are possible, including but not limited to: concentrations of massive sulphide, graphite, conductive clays, saline groundwater etc.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>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.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The reporting of historical exploration results have been limited to what is considered significant intercepts for the Nariz (Ni), 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</li> <li>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.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Rosie and Nariz deposits are 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.</li> <li>• 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 felsic contacts.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• All significant intersections for Rosie, C2, Nariz, Terminator and Thompson Bore have been previously released in ASX announcements. For Terminator and Thompson 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 and Nariz 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.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No length weighting has been applied due to the nature of the sampling technique. No top-cuts have been applied.</li> <li>• Not applicable for the sampling method used</li> <li>• No metal equivalent values have been used for reporting of results</li> </ul>
<b>Relationship between mineralisation widths and</b>	<ul style="list-style-type: none"> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Nariz appears to be steeply dipping to the south and strikes east-</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>intercept lengths</b>	<i>width not known</i> ).	<p>west. All significant intercepts are down hole and true widths are not calculated.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Thompson Bore mineralization is sub vertical. All significant intercepts are down hole lengths and true width are not calculated.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <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 drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Refer to figures in document.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All significant results above the stated reporting criteria have been reported regardless of the width or grade.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Refer to document.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Further work for Rosie will be focused on the metallurgical components and defining possible mineralisation along strike.</li> <li>• RC drilling will be completed to further delineate the nature and extent of the Terminator and Thompson Bore prospects.</li> <li>• Further work at Nariz will be focused on expanding the known extents and nature of mineralisation.</li> </ul>