**ASX Announcement** **03 July 2015**

# Drilling Continues to Intersect Nickel Sulphides at Nariz

**HIGHLIGHTS**

- The second drilling campaign at the Nariz prospect has now been completed
- Intercepts of note include:
  - **10.0m @ 0.8% Ni, 0.4% Cu and 0.8g/t Pt and Pd**
  - **9.2m @ 0.7% Ni, 0.1% Cu and 0.8g/t Pt and Pd**
    **Inc 2.3m @ 1.1% Ni, 0.2% Cu and 0.9g/t Pt and Pd**
- Mineralisation remains open to the east, west and down plunge
- Nickel, Copper and PGE's intersected in 6 out of 8 completed holes
- Down hole electromagnetics (DHEM) survey commencing within weeks
- Next drilling to commence Q3 2015, following re-interpretation and DHEM results

Duketon Mining Limited (ASX: DKM) has now finished the second drilling campaign at the Nariz prospect, part of the Company's 100 percent owned Duketon Project in Western Australia.

The program consisted of eight holes (an additional two holes failed to penetrate the basal contact due to ground conditions) using a combination of reverse circulation and diamond core drilling and was designed to test geological and geophysical targets in the area around the original late-2014 Nariz discovery holes (see Figure 1 and 2).

Intersections of note in this drilling campaign include;

- **10.0m @ 0.8% Ni 0.4% Cu and 0.8g/t Pt and Pd;**
- **9.2m @ 0.7% Ni, 0.1% Cu and 0.8g/t Pt and Pd;**
- **7.1m @ 0.7% Ni, 0.1% Cu and 0.6g/t Pt and Pd;**
- **2.1m @ 0.9% Ni, 0.1% Cu and 0.6g/t Pt and Pd.**
  **(refer to Appendix 1 - Table 1 for details)**

Importantly, six out of the eight holes have intersected nickel-copper sulphides with associated elevated platinum and palladium.

A down-hole electromagnetic (DHEM) survey crew is being organised now to survey a number of the holes completed during this program. The DHEM and the results of this program will be used to determine targets for the next round of drilling at Nariz.

Duketon's Managing Director, Stuart Fogarty, said:

"This round of drilling at Nariz has returned positive results that highlight the continuing potential of the immediate area and the greater Duketon Project. The existing resources at Rosie and C2 and the continuing intersections of nickel sulphides further along the corridor at Nariz are positive indicators of the prospectivity of the belt. Now we need to unravel the high grade controls and continue to extend the known mineralisation."

"These results, along with the impending DHEM survey will add to the valuable dataset which continues to improve our drilling effectiveness in and around Nariz and the surrounding target areas."

**Regional Targets**

Ongoing work has continued to further develop the understanding of the regional nickel and gold potential within the broader Duketon Project. This work continues to underline the significant prospectivity of the area.

**Forward Program**

The forthcoming DHEM program will be used with the latest results to inform the subsequent drill program. Drilling is anticipated to commence in Q3 2015.

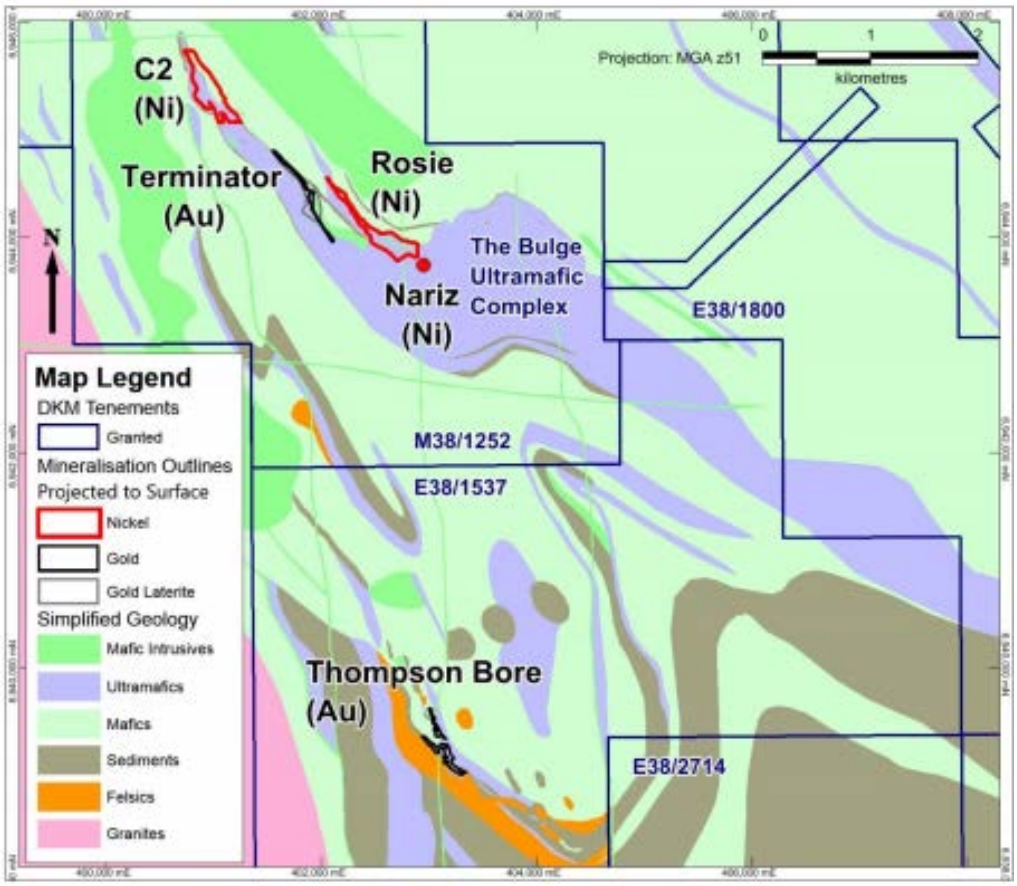


Figure 1. Location of Nariz in the Duketon Project

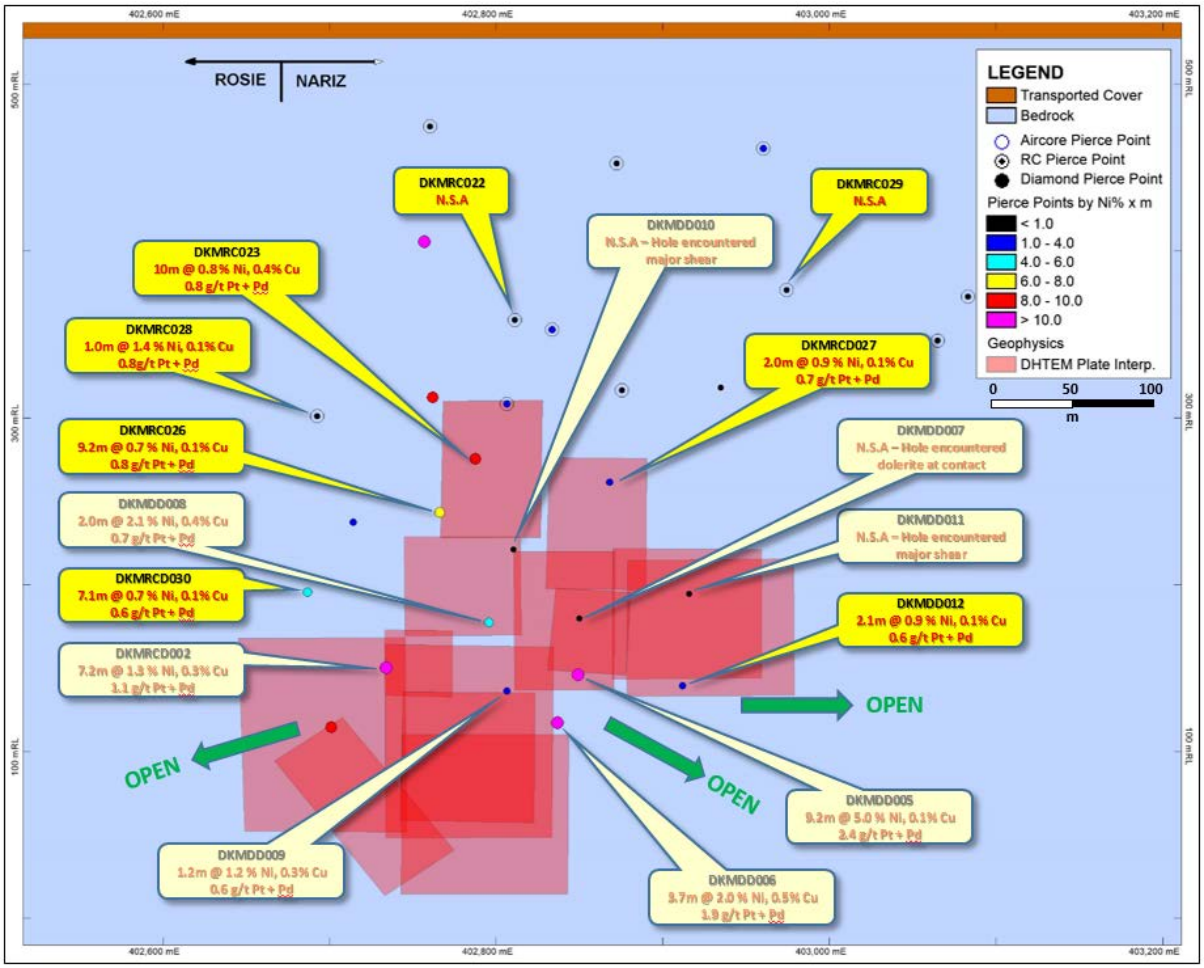


Figure 2. Longsection of Nariz

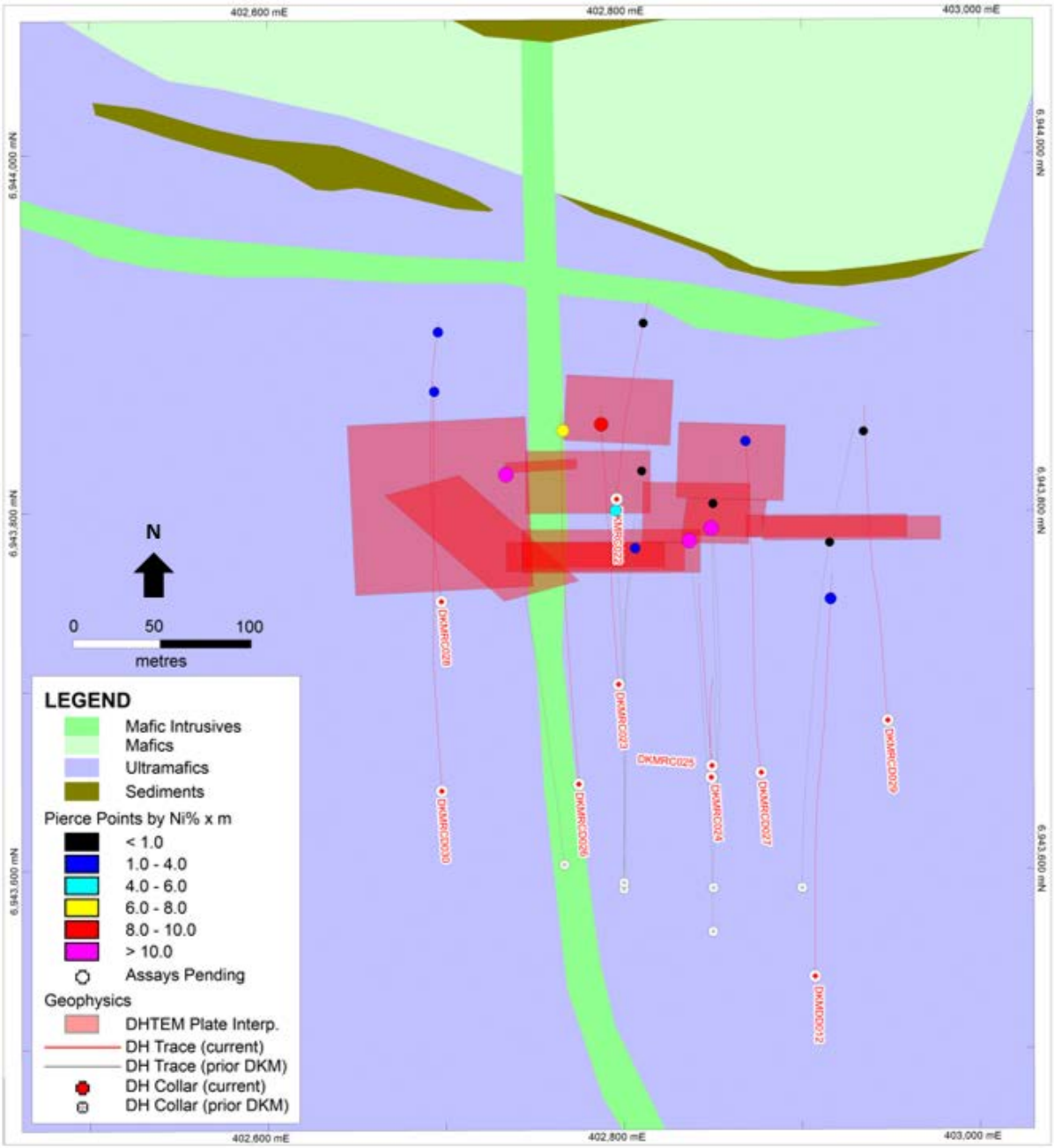


Figure 3. Plan View of Nariz Prospect

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*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.*

**Appendix 1 - Table 1: Significant Intercepts Table**

| 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) |
| DKMRC022 | 402796 | 6943807 | 540 | -60 | 000 | 238 | No significant interval | | | | | | |
| DKMRC023 | 402797 | 6943704 | 540 | -60 | 000 | 328 | 296 | 306 | 10.0 | 0.8 | 0.4 | 0.2 | 0.8 |
| Incl. | | | | | | | 296 | 297 | 1.0 | 1.7 | 0.4 | 0.3 | 0.4 |
| And | | | | | | | 305 | 306 | 1.0 | 1.7 | 0.2 | 0.5 | 1.3 |
| DKMRC024 | 402849 | 6943651 | 540 | -55 | 000 | 100 | No significant interval (hole abandoned due to ground conditions) | | | | | | |
| DKMRC025 | 402849 | 6943658 | 540 | -55 | 000 | 202 | No significant interval (hole abandoned due to ground conditions) | | | | | | |
| DKMRCD026 | 402775 | 6943648 | 540 | -55 | 000 | 375.4 | 350 | 359.2 | 9.2 | 0.7 | 0.1 | <0.1 | 0.8 |
| Incl. | | | | | | | 356.9 | 359.2 | 2.3 | 1.1 | 0.2 | <0.1 | 0.9 |
| DKMRCD027 | 402877 | 6943654 | 540 | -55 | 000 | 348.4 | 334.5 | 336.5 | 2.0 | 0.9 | 0.1 | <0.1 | 0.7 |
| DKMRC028 | 402698 | 6943750 | 540 | -60 | 000 | 298 | 282 | 283 | 1.0 | 1.4 | 0.1 | <0.1 | 1.1 |
| DKMRCD029 | 402948 | 6943683 | 540 | -55 | 000 | 300.8 | No significant interval | | | | | | |
| DKMRCD030 | 402698 | 6943644 | 540 | -55 | 000 | 426.5 | 410 | 417.1 | 7.1 | 0.7 | 0.1 | <0.1 | 0.6 |
| Incl. | | | | | | | 414.7 | 417.1 | 2.4 | 0.9 | 0.1 | <0.1 | 0.7 |
| DKMDD012 | 402907 | 6943542 | 540 | -60 | 000 | 474.2 | 421 | 423.1 | 2.1 | 0.9 | 0.1 | <0.1 | 0.6 |

Note: Intervals reported are > 0.7% Ni over a minimum width of 1m with maximum internal dilution of two samples. All samples are taken at geological contacts and not at regular intervals in diamond drillholes and at single metre intervals in RC drillholes.

**Appendix 2 - JORC Table 1**

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

## Section 1 Sampling Techniques and Data – Nariz

(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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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 primary method of drilling for the Nariz prospect has been oriented diamond core (NQ2) along with RC Drilling.<br>• RC drillholes are sampled as either 4m composites (collected via a scoop from sample reject bags or as 1m samples directly from the rig via a cone splitter. Any subsequent 1m sample collection from initial 4m composites involves splitting the single metre sample reject through a 3 tiered riffle splitter.<br>• Diamond core (NQ2) has been sampled as half core. The samples are either 1m intervals through broad zones or sampling conducted on geological boundaries where appropriate with a minimum sample interval of 0.2m downhole.<br>• DHTEM has been conducted 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.<br>• DHTEM involved the use of:<br>• Receiver: SMARTem 24<br>• Transmitter: GAP GEOPAC MLTX-200<br>• 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* | • The Nariz Prospect has been drilled with a combination of RC and Diamond drilling (NQ2). RC only drillholes are present and designated a prefix DKMRC… with RC drillholes having a diamond |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *type, whether core is oriented and if so, by what method, etc).* | tail designated DKMRCD… and diamond only drillholes designated DKMDD… |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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 drilling to date has been diamond core and sample quality on the whole is excellent. Wet samples have been recorded for RC drilling.<br>• The relationship between sample recovery and grade has not yet been 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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *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 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.<br>• RC chip samples have been logged with a detailed geological description. All logging is of a level sufficient in detail to support resource estimation.<br>• All diamond holes are logged on paper using the company geological codes library and a detailed written description is recorded for each interval. The logs are then digitised into an excel spreadsheet before being uploaded to the Duketon Database. All original paper logs are stored in the Perth Office in lever-arch folders and digital records are stored on the server.<br>• Core photography has been completed both wet and dry for the diamond drilling over the entire length of the hole. The photographs are labelled and stored on the Perth server.<br>• 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 |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | 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. |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • 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 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.<br>• 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. |
| ***Quality of assay data and laboratory*** | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc,* | • 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.<br>• Duplicates have been taken for RC drilling using conventional cone |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***tests*** | *the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *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.* | and riffle splitters and for diamond drilling, using ¼ NQ2 core.<br>• Blanks and duplicates have been inserted approximately every 50 samples and standards approximately every 25 samples (in mineralised areas) |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • Duketon Mining has visually verified the significant intersections in diamond core<br>• There have been no twinned holes drilled at this point<br>• 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.<br>• No adjustments or calibrations were made to any assay data<br>• 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. |
| ***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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Drillhole collars at Nariz were surveyed using handheld GPS to approximately 5m accuracy. Co-ordinates were surveyed in the MGA94z51 grid system. .<br>• Both diamond and RC drillholes have been surveyed downhole using the Reflex EZtrac Multishot orientation tools<br>• No local grid has been established as yet. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • Drillholes at Nariz are spaced such that pierce points along the basal contact are spread at approximately 50m x 50m density.<br>• No sample compositing has been applied. |
| ***Orientation*** | • *Whether the orientation of sampling achieves unbiased sampling of* | • The contact mineralisation intersected to date is at a very high angle |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***of data in relation to geological structure*** | *possible structures and the extent to which this is known, considering the deposit type.*<br>• *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.* | to sub-vertical in orientation and forms a semi-continuous sheet of mineralisation approximately 1m true width, with thicker accumulations in places. The mineralisation is syn-genetic and as such is not primarily structurally-controlled, however structural modification is apparent. 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 do not introduce significant sampling bias. |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • Chain of custody was managed by company representatives and is considered appropriate |
| ***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.<br>• All geophysical data collected were reviewed by independent geophysical consultants Southern Geoscience Consultants.<br>• Several sources of conductors in the bedrock are possible, including but not limited to: concentrations of massive sulphide, graphite, conductive clays, saline groundwater etc.<br>• 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.*<br>• *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.* | • M38/1252 is 100% owned by Duketon Mining Limited and is in good standing and there are no known impediments to maintaining the 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 Nariz deposit is interpreted as 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. |
| ***Drill hole Information*** | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* | • Significant intercepts are provided in a table within the text of this announcement. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | o *easting and northing of the drill hole collar*<br>o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>o *dip and azimuth of the hole*<br>o *down hole length and interception depth*<br>o *hole length.* | |
| ***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.*<br>• *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.*<br>• *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.<br>• Not applicable for the sampling method used<br>• 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.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | • Mineralization is very steep to sub-vertical and strikes approximately east-west.<br>• 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. |
| ***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*** | • *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,* | • Refer to document. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***data*** | *groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *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 at Nariz will be focused on expanding the known extents and nature of mineralisation.<br>• Refer to figures within this announcement |