

Platinum and Palladium confirmed in Oxide Holes above Rosie

HIGHLIGHTS

Rosie Project (100% DKM)

- Platinum and palladium assays received for 3 Rosie oxide drillholes and include:
 - **2.5m @ 4.78 g/t Pt + Pd** from 81.5m
 - inc. **1.7m @ 6.78 g/t Pt + Pd**
 - **7m @ 0.9 g/t Pt and Pd** from 66m
 - inc. **1m @ 2.93 g/t Pt and Pd**
 - **1.6m @ 0.78 g/t Pt + Pd** from 67.4m
- Historic oxide intersections include:
 - **35m @ 1.59 g/t Pt + Pd** from 32m
 - inc. **18m @ 1.82 g/t Pt + Pd**
 - **7m @ 2.41 g/t Pt + Pd** from 65m
 - inc. **5m @ 3.16 g/t Pt + Pd**
 - **5m @ 2.27g/t Pt + Pd** from 60m
- Holes to be submitted for remaining suite of PGE's (Rhodium, Ruthenium, Iridium, Osmium). Rosie typically has an additional 0.5 g/t of these remaining PGE's.
- Waiting on assays from three more oxide holes.
- Additionally, these intersections will be submitted for metallurgical work to determine recoveries of all PGE's within the oxide zone to be used in open pit optimisation.
- The oxide zone above the Rosie Nickel, Copper and PGE resource is approximately 900m long and between 50 and 80m deep and has approximately 10m of transported (barren) cover.
- This oxide zone was identified in the Rosie Scoping Study as a potential opportunity that could provide additional early cash flow to the project.



Duketon Mining Ltd (DKM) is pleased to announce assays have been received for the three diamond holes drilled into the oxide zone above the Rosie Nickel Resource. Results include:

- **2.5m @ 4.78 g/t Pt + Pd** from 81.5m
 - inc. **1.7m @ 6.78 g/t Pt + Pd**
- **7m @ 0.9 g/t Pt and Pd** from 66m
 - inc. **1m @ 2.93 g/t Pt and Pd**
- **1.6m @ 0.78 g/t Pt + Pd** from 67.4m

These results confirm historic intersections of:

- **35m @ 1.59 g/t Pt + Pd** from 32m
 - inc. **18m @ 1.82 g/t Pt + Pd**
- **7m @ 2.41 g/t Pt + Pd** from 65m
 - inc. **5m @ 3.16 g/t Pt + Pd**
- **5m @ 2.27g/t Pt + Pd** from 60m

The intersections have been resubmitted for the remaining suite of PGEs (Rhodium, Ruthenium, Iridium and Osmium) with results expected in 4 weeks' time. There are another 3 holes in this zone which assays are still pending.

The Oxide zone above the Rosie Nickel Sulphide resource is approximately 900m long and between 50 and 80 meters deep (see Figure 1 and Figure 2). None of this material has been considered in the Rosie Scoping Study (see ASX announcement 28 April 2021).

These intersections will also be submitted for metallurgical work to determine recoveries of all PGEs in the oxide zone that will in turn drive a resource drill out and pit optimisation. This was identified as a potential upside opportunity that would positively impact early cash flow in the Rosie Scoping Study.

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

Hole ID	Depth From (m)	Depth To (m)	Intercept Width (m)	Pd (ppb)	Pt (ppb)	Pt + Pd (g/t)	Ni (%)	Cu (%)	Comments
DKDD0014	81.5	84	2.5	3183	1598.8	4.78	0.68	0.44	2.5m @ 4.78g/t Pt + Pd, 0.68% Ni & 0.44% Cu
inc.	82.3	84	1.7	4545.9	2235.9	6.78	0.81	0.51	1.7m @ 6.78g/t Pt + Pd, 0.81% Ni & 0.51% Cu
DKDD0015	67.4	69	1.6	441.7	337.4	0.78	0.46	0.22	1.6m @ 0.78g/t Pt + Pd, 0.46% Ni & 0.22% Cu
DKDD0016	66	73	7	528.3	383.9	0.91	0.53	0.21	7m @ 0.91g/t Pt + Pd, 0.53% Ni & 0.21% Cu
inc.	67	68	1	1550	1380	2.93	0.4	0.53	1m @ 2.93g/t Pt + Pd, 0.4% Ni & 0.53% Cu

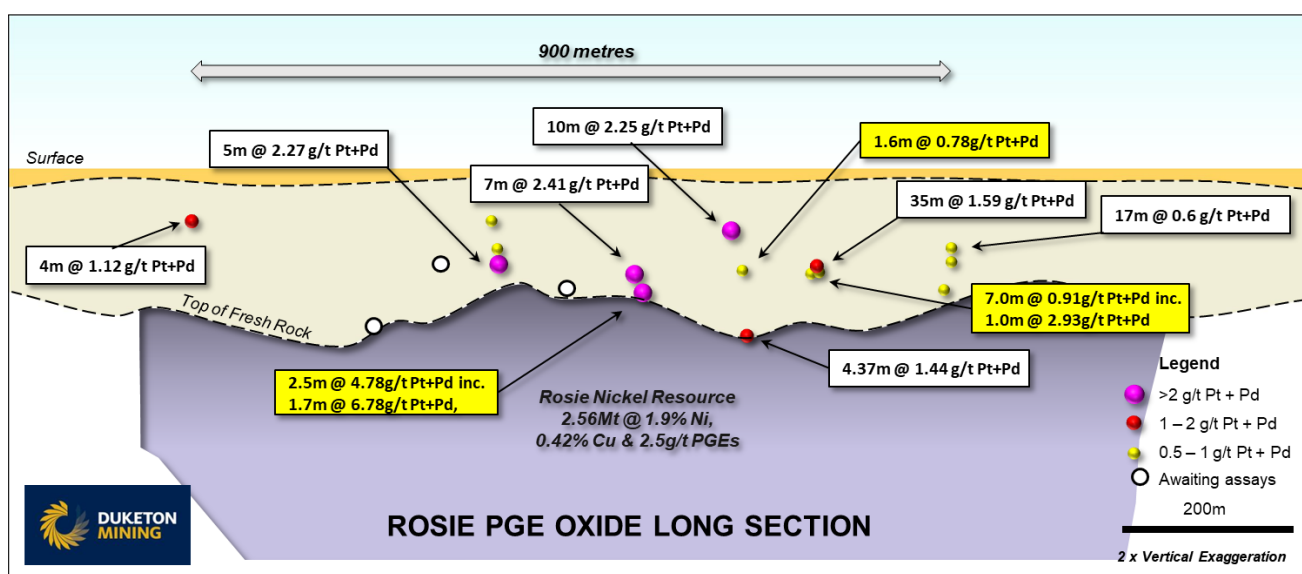


Figure 1: Long Section of Rosie Oxide

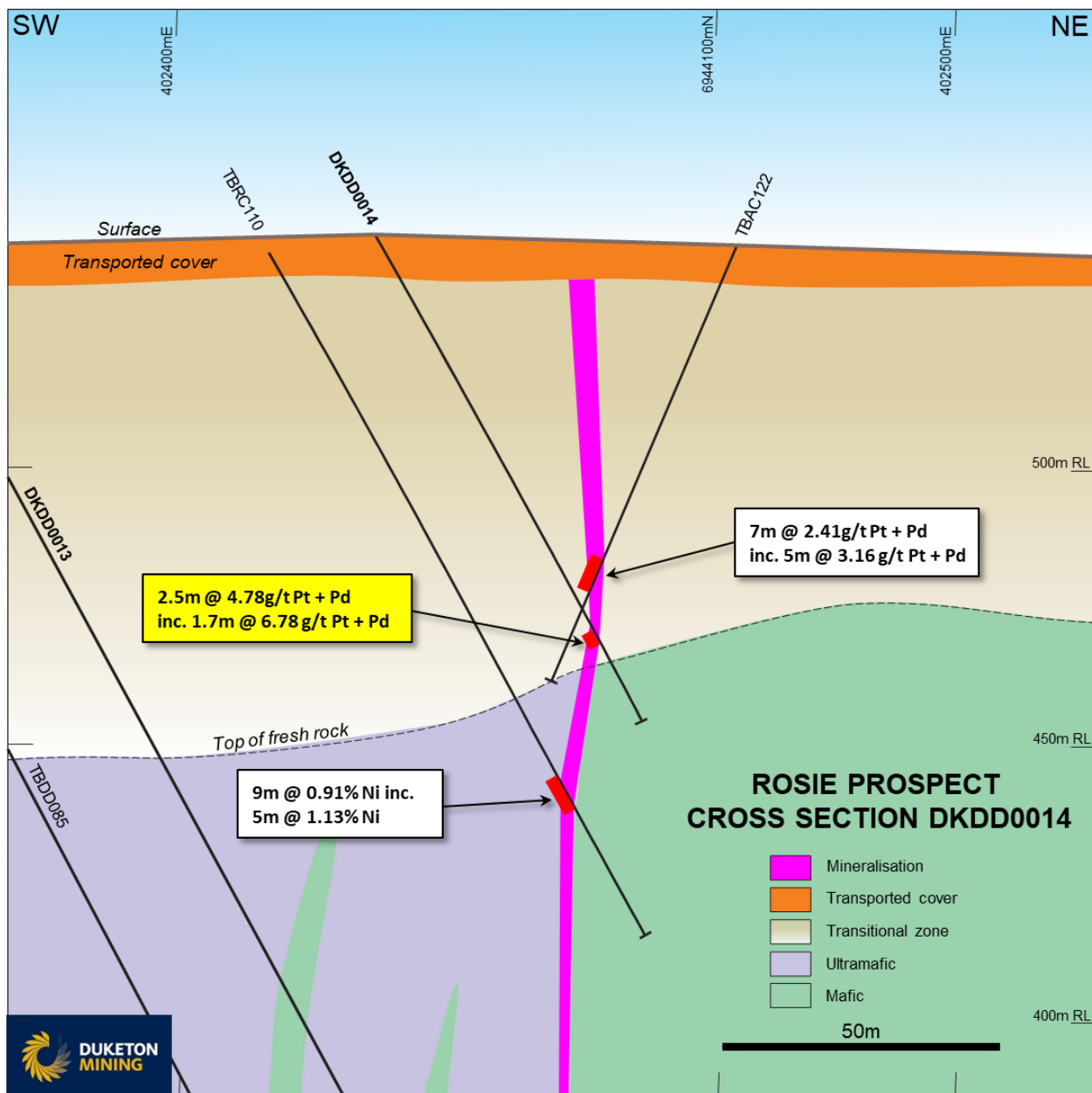


Figure 2: Cross Section of DKDD0014

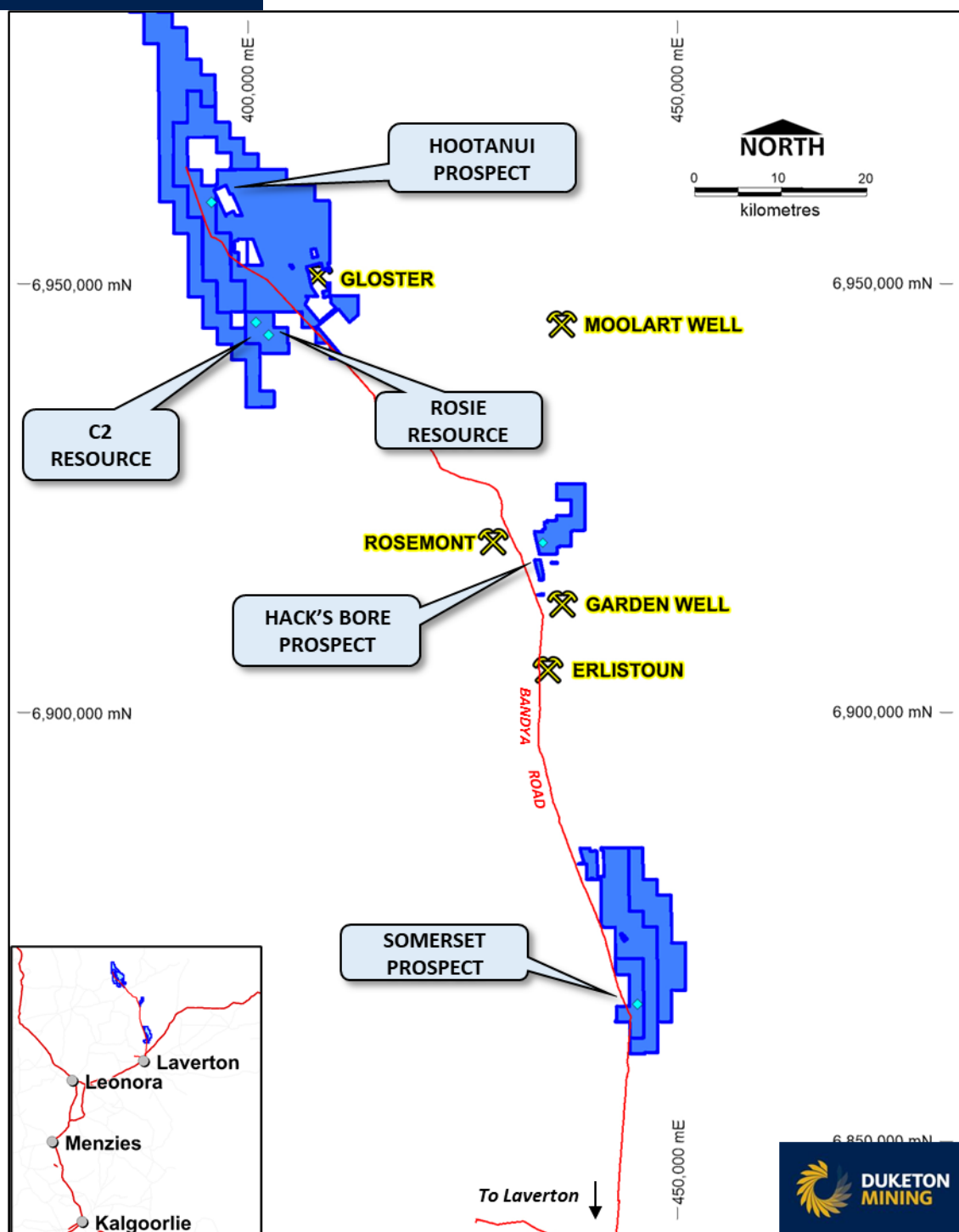


Figure 3: Plan of DKM Tenements showing Ultramafic, Nickel Resources and Prospects



Table 2: Drillhole collar details

Hole ID	Easting (MGA 94 Z51)	Northing (MGA 94 Z51)	Nominal RL (m)	Dip (°)	Azimuth (mag °)	Total Depth (m)
DKDD0014	402426	6944056	540	-60	45	100.4
DKDD0015	402532	6944000	540	-60	45	82.9
DKDD0016	402640	6943960	540	-60	0	85.1

Table 3: Significant Intercept Table of PGEs (Significant intercepts are 0.5m >500 ppb Pt + Pd, maximum internal dilution of 2 metres, intersections are downhole widths)

Hole ID	Depth From (m)	Depth To (m)	Intercept Width (m)	Pd (ppb)	Pt (ppb)	Pt + Pd (g/t)	Ni (%)	Cu (%)	Comments
TBAC122	65	72	7	1499.3	915.7	2.41	0.64	0.31	7m @ 2.41 g/t Pt + Pd
inc.	66	71	5	1931	1227	3.16	0.66	0.4	5m @ 3.16 g/t Pt + Pd
TBAC124	32	42	10	1120.5	1130	2.25	0.4	0.49	10m @ 2.25 g/t Pt + Pd
TBAC126	32	67	35	725.4	868.9	1.59	0.4	0.27	35m @ 1.59 g/t Pt + Pd
Inc.	36	54	18	732.2	1088.9	1.82	0.44	0.3	18m @ 1.82 g/t Pt + Pd
TBAC201	31	36	5	409	114	0.52	0.26	0.04	5m @ 0.52 g/t Pt + Pd
and	52	55	3	541.7	250	0.79	0.85	0.7	3m @ 0.79 g/t Pt + Pd
inc.	52	53	1	980	325	1.31	0.67	0.06	1m @ 1.31 g/t Pt + Pd
TBAC201	60	65	5	1591	682	2.27	0.93	0.54	5m @ 2.27 g/t Pt + Pd
TBAC206	32	36	4	507.5	617.5	1.12	0.53	0.31	4m @ 1.12 g/t Pt + Pd
inc.	34	35	1	780	1460	2.24	0.66	0.35	1m @ 2.24 g/t Pt + Pd
TBDD111	108.1	112.47	4.37	928.6	516.2	1.44	0.85	0.25	4.37m @ 1.44 g/t Pt + Pd
inc.	109	111.5	2.5	1314.9	629.9	1.95	0.93	0.19	2.5m @ 1.95 g/t Pt + Pd

Table 4: Historic drillhole collar details

Hole ID	Easting (MGA 94 Z51)	Northing (MGA 94 Z51)	Nominal RL (m)	Dip (°)	Azimuth (mag °)	Total Depth (m)
TBAC122	402449	6944125	540	-60	180	91
TBAC124	402545	6944050	540	-60	180	60
TBAC126	402645	6944024	540	-60	180	81
TBAC201	402302	6944200	540	-60	90	68
TBAC206	402075	6944462	540	-60	90	55
TBDD111	402513	6943974	540	-60	45	150.5



Authorised for release by:

Stuart Fogarty

Duketon Mining Limited - Managing Director

+61 8 6315 1490

Competent Person Statement:

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

This announcement includes information extracted from the Company's previous ASX announcements, which are available to view on the Company's website (www.duketonmining.com.au) as follows:

Rosie Scoping Study – ASX announcement dated 28 April 2021.

In the case of the Rosie Scoping Study, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions underpinning the production target, or the financial information derived from the production target in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context that the Competent Person's findings are represented have not been materially modified from the original market announcement.

Duketon Mining Limited ACN 159 084 107

Level 2 25 Richardson Street West Perth WA 6005 T: +61 8 6315 1490

JORC Table 1

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

Section 1 Sampling Techniques and Data – Rosie Diamond Drilling

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <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> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <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> 	<ul style="list-style-type: none"> Diamond core was drilled triple tube HQ to end of hole. The sample interval is cut in half and then half again using a diamond core saw to provide ¼ core for assay. Each sample provides approximately 2.0kg of material. Diamond core is sampled to geological boundaries, no greater than 1m and no less than 20cm per sample. Certified samples and blanks are inserted every 25th sample for diamond drilling. Mineralisation is determined qualitatively by geological logging and quantitatively through assaying. Historic diamond core was sampled as half core over mineralisation with a 5m buffer, samples were generally 1m but could be less than 20cm. Historic aircore sampling techniques are unknown.
Drilling techniques	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Rock roll or rough core to refusal then diamond drilling using HQ3 (61.1mm) sized core to end of hole. Core is oriented using a Boart Longyear TruCore UPIX orientation tool. Historic holes drilled by diamond or aircore drilling.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Recoveries qualitatively noted at the time of drilling and recorded. Core is metre marked and orientated. Triple tube HQ is used to maximise recovery through the weathered zone and ensure a representative sample. Sample recoveries were recorded for historic drilling.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All core (including historic) is logged to a level of detail to support future use in a mineral resource calculation. Qualitative: Lithology, alteration, mineralisation. Quantitative: Vein percentage, sulphide percentage. All holes for their entire length are logged. All core is photographed.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The core is cut using an automatic core saw, quarter core is sampled. The entire sample (approx. 2kg) is dried, pulverised to 85% passing 75µm. Pulp duplicates are taken at the pulverising stage and selective repeats conducted at the laboratory's discretion. Sample sizes are considered appropriate for the grainsize of the material sampled. Historic core was cut using a core saw as half core samples. Historic aircore sampling techniques unknown.
Quality of assay data and	<ul style="list-style-type: none"> 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, 	<ul style="list-style-type: none"> Samples are analysed using a Fire Assay 40g charge with MS finish for Au, Pt & Pd and a multi-acid digest with ICP-AES finish for 17 elements. This technique is industry standard for nickel and considered

Criteria	JORC Code explanation	Commentary
laboratory tests	<p><i>the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> <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> 	<p>appropriate.</p> <ul style="list-style-type: none"> Samples are analysed for the following elements: Al, As, Au, Ca, Co, Cr, Cu, Fe, K, Mg, Na, Ni, Pd, Pt, S, Sc, Ti, V, Zn, Zr Selected samples are also analysed the full suite of PGEs using a Fire Assay 25g charge with MS finish for Au, Pt, Pd, Rh, Ru, Os, Ir to a 1ppb detection limit. Certified Reference Material (Standards) and blanks were submitted with batches (1 in every 25 samples). Historic assaying was completed by Ultra Trace Pty Ltd (now Bureau Veritas) using the same techniques as current sample assaying.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> All data is checked internally for correctness by senior DKM geological and corporate staff. All data is collected via Ocris software and uploaded into the DKM Datashed Database following validation. No adjustments are made to assay data. No twinned holes have been drilled to date. Historic data was logged on paper then entered into an excel spreadsheet then uploaded into the SQL database.
Location of data points	<ul style="list-style-type: none"> <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> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> All location points are collected using a handheld GPS in MGA 94 – Zone 51 Downhole surveying (azimuth and dip of the drillhole) of diamond drillholes was measured by the drilling contractors using an Axis Champ Gyro. A topographic surface has been created from airborne geophysical data. Drillholes are corrected to this surface. Historic collars located using a DGPS, downhole surveys using a north seeking gyro for all diamond drillholes.
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <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</i> 	<ul style="list-style-type: none"> Holes are drilled at various spacing depending upon the holes drilled previously in the area of interest. Hole spacing is appropriate for drilling at this stage in the exploration process.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>classifications applied.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> Sample compositing has been applied.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i> 	<ul style="list-style-type: none"> The orientation of the geology and mineralization at Rosie is steeply dipping to the south to south-west and striking NNW to W.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Chain of custody is managed by company representatives and is considered appropriate. All samples are bagged in a tied numbered calico bag, grouped into larger polyweave bags and cable tied. Polyweave bags are placed into larger bulky bags with a sample submission sheet and tied shut. Consignment note and delivery address details are written on the side of the bag and delivered to Toll in Laverton. The bags are delivered directly to Bureau Veritas in Canning Vale, WA who are NATA accredited for compliance with ISO/IEC17025:2005.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No external audits or reviews have been conducted apart from internal company review.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement	<ul style="list-style-type: none"> <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint</i> 	<ul style="list-style-type: none"> The tenement (M38/1252) is 100% owned by Duketon Mining Limited and is in good standing and there are no known impediments to

Criteria	JORC Code explanation	Commentary
and land tenure status	<p>ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</p> <ul style="list-style-type: none"> 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. 	obtaining a licence to operate in the area.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Previous drilling at The Bulge Complex was completed by Independence Group (IGO) and South Boulder Mines Ltd. This work has been checked for quality as far as possible and formed the basis of the follow-up conducted as part of the drilling programme presented.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Rosie Nickel Deposit is a komatiite-hosted nickel sulphide deposit. The mineralisation is characterised by accumulations of massive, matrix, breccia and disseminated sulphides at the basal contact overlying a basalt footwall.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Significant intercepts are provided in a table within the text of this announcement.
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No top-cuts have been applied when reporting results. First assay from the interval in question is reported (i.e. Pt1). Aggregate sample assays calculated using a length weighted average. Significant grade intervals are based on intercepts > 500ppb combined platinum and palladium. No metal equivalent values have been used for reporting of results.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> Downhole length is reported for the drillholes.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to figures in document.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All drillhole locations are reported and a table of significant intervals is provided in the release text.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to document.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A discussion of further work underway is contained within the body to this ASX release.