ASX Announcement **26th August 2021**

22m of Sulphide Mineralisation Intersected below Rosie South-East

HIGHLIGHTS

Rosie Project (100% DKM)

- Hole DKDD0029 has intersected **22.35m of mineralisation** including **0.45m of massive sulphides, 3.35m of stringer/heavily disseminated sulphides and 18.55m of disseminated sulphides**.
- DKDD0029 was drilled 60m below the deepest drillhole in the south-eastern part of Rosie, 80m to the east of DKDD0028 and below the current indicated resource.
- Mineralisation remains open at depth.
- Both deep holes are cased with PVC for downhole electromagnetic (DHEM) surveying.
- DHEM survey crew expected to arrive on site in the next 10 days
- The diamond drill program is now complete at the Rosie Nickel Project with all eighteen drillholes intersecting mineralisation.
- Assays expected in 8 weeks.

Duketon Mining Ltd (DKM) is pleased to announce the second deep diamond hole drilled at the Rosie Nickel Project has intersected massive sulphides at depth, 60m beyond the extent of previous drilling in the south-eastern part of Rosie and 80m lateral to DKDD0028. DKDD0029 intersected 22.35m of pyrrhotite-pentlandite-chalcopyrite mineralisation including 0.45m of massive sulphides, 3.35m of stringer/heavily disseminated sulphides and 18.55m of disseminated sulphides (see Table 1, and Table 2, Figures 1 - 3). This intersection is beyond the current indicated resource and will add tonnes to the resource when updated. Both deep drillholes are cased with PVC for downhole electromagnetic (DHEM) surveying with the geophysical crew expected on site within 10 days. These sulphide intervals highlight the continuation of the Rosie mineralisation at depth.

Duketon Mining Limited ACN 159 084 107
Level 2 25 Richardson Street West Perth WA 6005 T: +61 8 6315 1490

Table 1: DKDD0029 lithology and mineralisation

From (m)	To (m)	Style of Mineralisation
518	520	**5% disseminated sulphides** (po-pn-py) in ultramafic
520	529	**1% disseminated sulphides** (po-pn) in ultramafic
529	530	**15% heavily disseminated sulphides** (po-pn) in ultramafic
530	533	**5% disseminated sulphides** (po-pn-py) in ultramafic
533	534.75	**25% heavily disseminated sulphides** (po-pn-py) in ultramafic
534.75	535.2	**75% massive sulphides** (po-pn-cp) in ultramafic
535.2	535.8	**25% heavily disseminated and stringer sulphides** (po-pn) in ultramafic
535.8	540.35	**2% disseminated sulphides** (po-pn) in ultramafic
540.35	540.96	mafic schist
540.96	541.8	**20% blebby sulphides** (po-pn-cp) in footwall basalt
541.8	550.33	footwall basalt
550.33	550.57	**40% semi-massive sulphides** (po-pn-py) in footwall basalt

Note: po = pyrrhotite, pn = pentlandite, cp = chalcopyrite and py = pyrite.

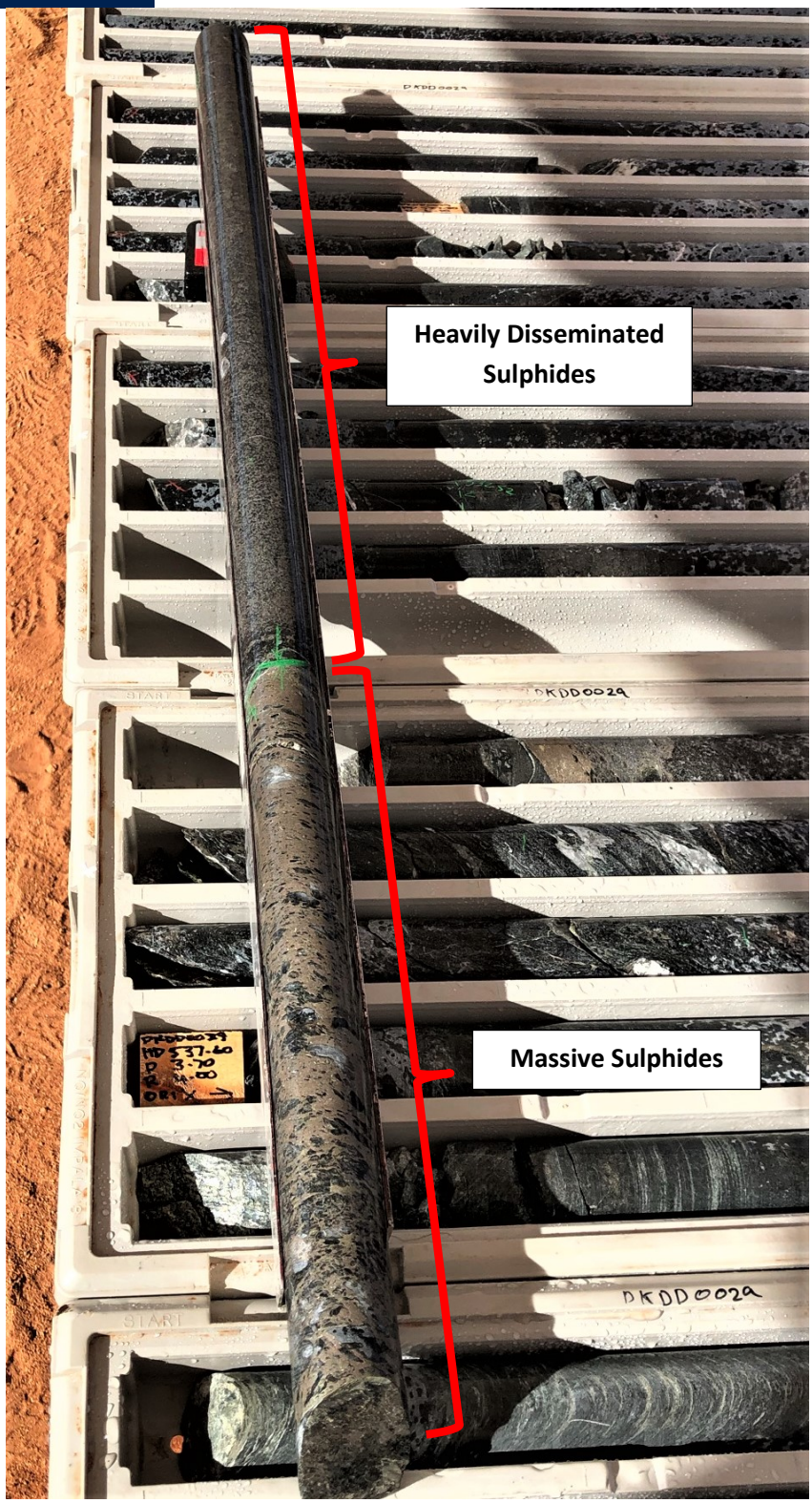

Figure 1: The intersection of heavy disseminated and massive sulphide in DKDD0029.

Figure 2: A close-up of the intersection of massive sulphide in DKDD0029

Figure 3: Heavy disseminated sulphides in drillhole DKDD0029

The drill program at Rosie Nickel Project is designed to increase confidence in mineralisation in the upper north area, test at depth below the south-eastern area and collect PGE rich oxide material from directly above the sulphide deposit for assay and PGE recovery/metallurgical testwork. These three areas have been identified from the Rosie Nickel Sulphide Scoping Study as having potential upside by either impacting early cash flow or extending the life of mine (see ASX announcement 28th April 2021).

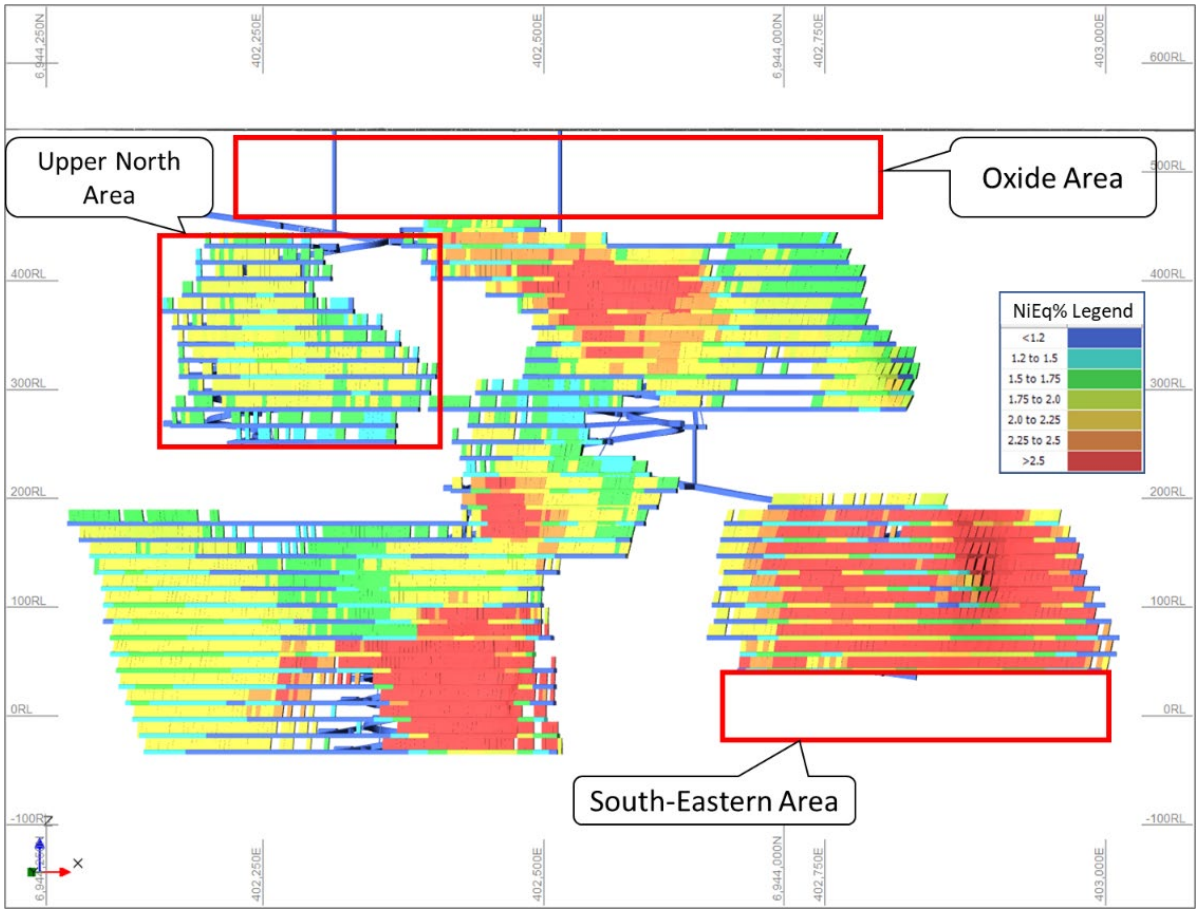

Figure 4: Stope grade heat map with areas of drilling

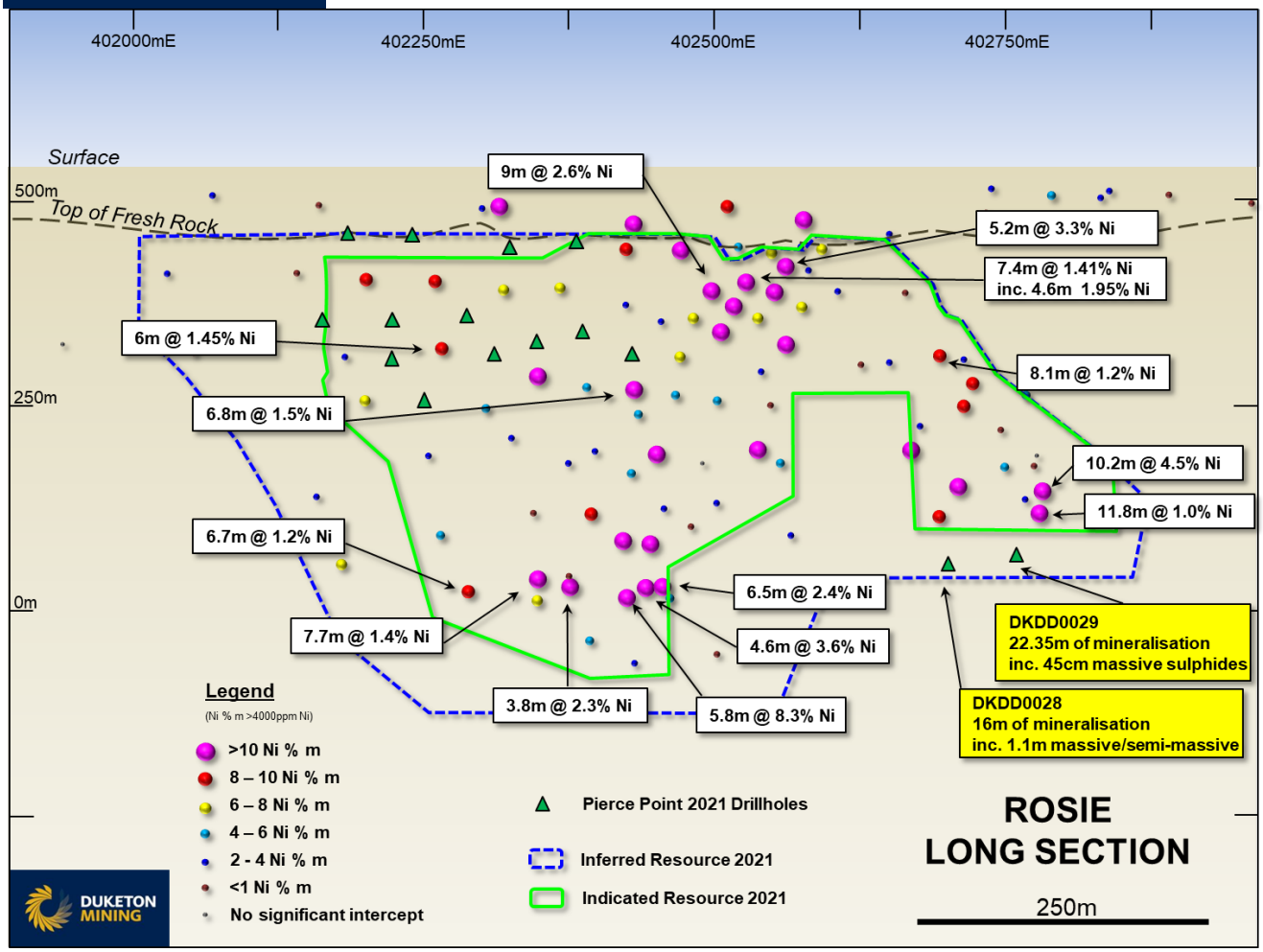

Figure 5: Long Section of Rosie showing pierce points of 2021 drillholes

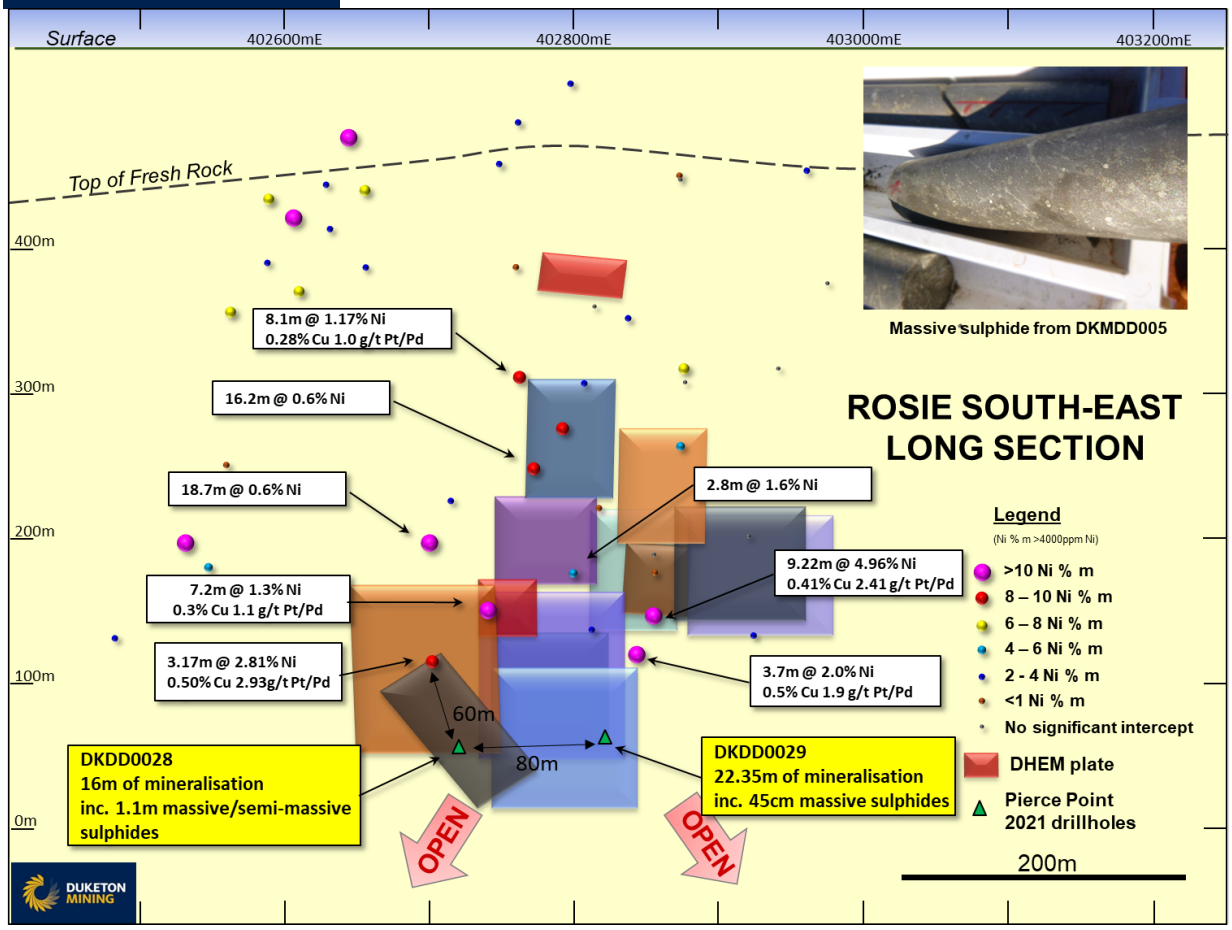

Figure 6: Long Section of South-East Rosie

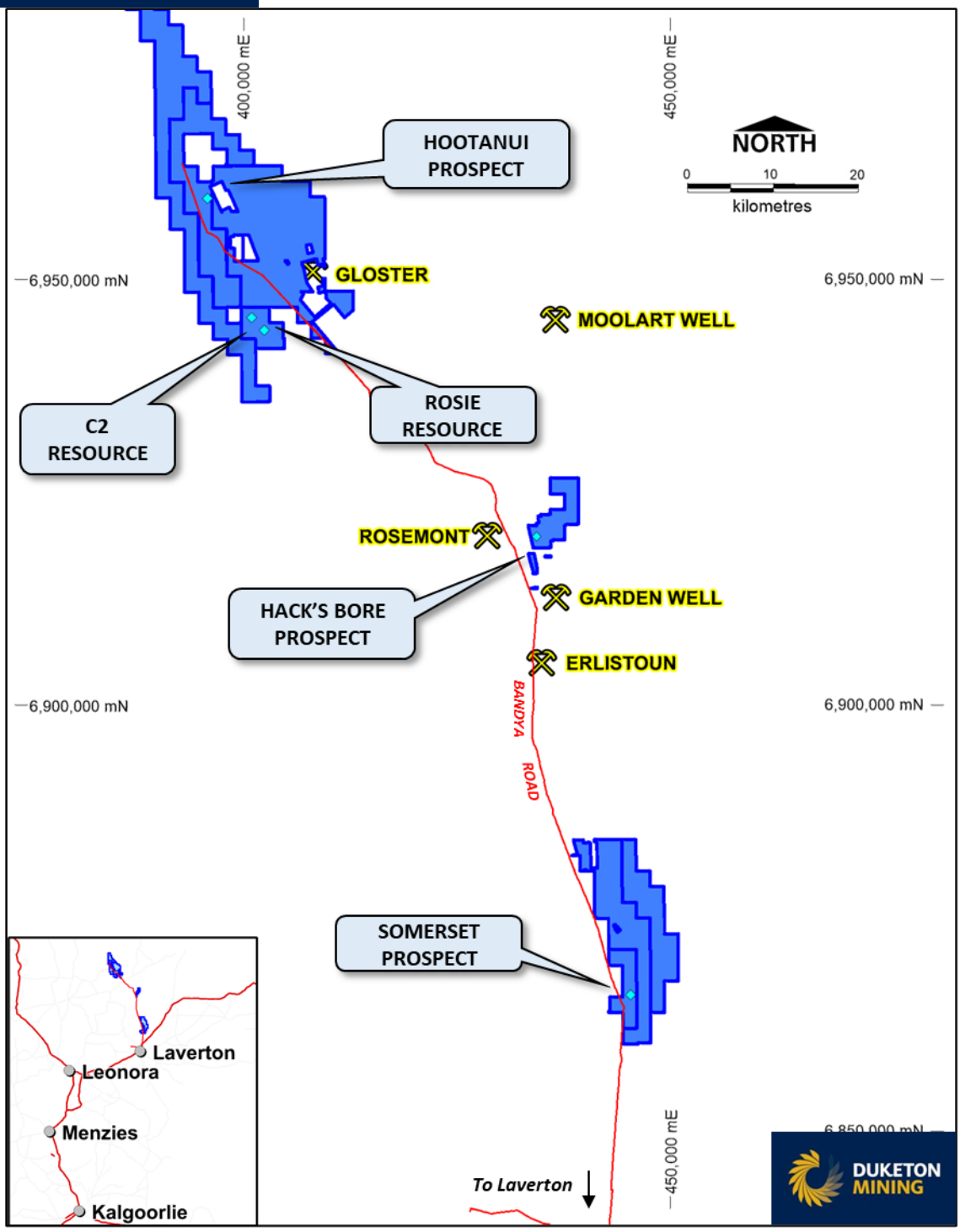

Figure 7: Plan of DKM Tenements showing Ultramafic, Nickel Resources and Prospects

Table 2: Drillhole collar details

Hole ID	Easting	Northing	RL	Depth	Azimuth	Dip	Area of Drilling
DKDD0012	402230	6944161	540	231.9	45	-60	Upper North
DKDD0013	402355	6943992	540	282.2	45	-60	Upper North
DKDD0014	402426	6944056	540	85.4	45	-60	Oxide
DKDD0015	402532	6944000	540	82.9	45	-60	Oxide
DKDD0016	402640	6943960	540	85.1	0	-60	Oxide
DKDD0017	402341	6944039	540	227.5	45	-60	Upper North
DKDD0018	402292	6944057	541	253.8	45	-60	Upper North
DKDD0019	402360	6944110	540	105.8	45	-60	Upper North
DKDD0020	402301	6944153	540	130.5	45	-60	Upper North
DKDD0021	402247	6944106	540	255.5	45	-60	Upper North
DKDD0022	402171	6944146	540	395.8	45	-60	Upper North
DKDD0023	402261	6944222	540	99.3	45	-60	Upper North
DKDD0024	402181	6944226	540	279.3	45	-60	Upper North
DKDD0025	402157	6944208	540	332.8	45	-60	Upper North
DKDD0026	402213	6944277	540	161.9	45	-60	Upper North
DKDD0027	402125	6944284	540	225.1	45	-60	Upper North
DKDD0028	402703	6943510	542	579	0	-60	South-Eastern
DKDD0029	402799	6943491	549	576	0	-60	South-Eastern

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.

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	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Diamond core was drilled triple tube HQ to competent rock and then NQ2 to end of hole. • The sample interval is cut in half using a diamond core saw and half core sampled for assay. Each sample provides between 2.0-3.0kg of material. The core is cut to the left of the orientation line, with the same half sampled to ensure sample is representative. • 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.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Rock roll or rough core to refusal then diamond drilling using HQ3 (61.1mm) sized core to competent rock and then NQ2 (50.6mm) to end of hole. • Core is oriented using a Boart Longyear TruCore UPIX orientation tool.

Duketon Mining Limited ACN 159 084 107
Level 2 25 Richardson Street West Perth WA 6005 T: +61 8 6315 1490

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Recoveries qualitatively noted at the time of drilling and recorded. • Core is metre marked and orientated. Run recoveries are recorded. • Triple tube HQ is used to maximise recovery through the weathered zone and ensure a representative sample.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All core 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	• *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.*	• The core is cut using an automatic core saw, half 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.
Quality of assay data and	• *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,*	• 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	*the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	appropriate. • 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 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).
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• 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.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• 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.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• 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. • Sample compositing has been applied.
Orientation of data in relation to	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a*	• The orientation of the geology and mineralization at Rosie is steeply dipping to the south to south-west and striking NNW to W.

Criteria	JORC Code explanation	Commentary
geological structure	*sampling bias, this should be assessed and reported if material.*	
Sample security	• *The measures taken to ensure sample security.*	• 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	• *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.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The tenement (M38/1252) is 100% owned by Duketon Mining Limited and is in good standing and there are no known impediments to obtaining a licence to operate in the area.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 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	• *Deposit type, geological setting and style of mineralisation.*	• 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	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	• Significant intercepts are provided in a table within the text of this announcement.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No top-cuts have been applied when reporting results. • First assay from the interval in question is reported (i.e. Ni1). • Aggregate sample assays calculated using a length weighted average. • Significant grade intervals are based on intercepts > 4000ppm nickel. • No metal equivalent values have been used for reporting of results.
Relationship between mineralisatio	• *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*	• Downhole length is reported for the drillholes.

Criteria	JORC Code explanation	Commentary
n widths and intercept lengths	*should be a clear statement to this effect (eg 'down hole length, true width not known').*	
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 drillhole locations are reported and a table of significant intervals is provided in the release text.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Refer to document.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• A discussion of further work underway is contained within the body to this ASX release.