



ASX Announcement

1 February 2017

## 16m @ 12.0 g/t including 8m @ 23.8 g/t Gold intersected at Lancefield North (DKM 100%)

### HIGHLIGHTS

- Assays from the first five of ten RC drill holes at the 100% owned Lancefield North Prospect include;
  - **16m @ 12.0 g/t Au**, including **8m @ 23.8 g/t Au**
  - **10m @ 1.3 g/t Au**, including **2m @ 5.7 g/t Au**
  - **4m @ 2.6 g/t Au**,
  - **4m @ 1.7 g/t Au**,
  - **1m @ 2.0 g/t Au** and
  - **1m @ 2.7 g/t Au**
- Individual assays up to **119g/t Au**
- Assays from remaining 5 holes expected within the next two weeks
- Follow-up drilling expected to commence once final assays have been assessed

Duketon Mining Limited (ASX: DKM) is pleased to announce that assays have been received for five of ten RC drill holes from Lancefield North (100% owned) and all have intersected significant gold mineralisation. The RC holes were drilled to test down plunge and along strike from gold mineralisation identified in historical drill holes that include **8m @ 11.01g/t Au**, **8m @ 4.41g/t Au**, **8m @ 4.02g/t Au** & **1m @ 7.03g/t Au**, **4m @ 4.25 g/t Au**, **2m @ 13.18g/t Au**, **1m @ 29.4g/t Au** & **1m @ 7.05g/t Au**, **1m @ 6.35g/t Au** (see ASX announcement 28 July 2016).

Intersections from the five RC drill holes include; **16m @ 12.0 g/t Au** including **8m @ 23.8 g/t Au**, **10m @ 1.3 g/t Au** including **2m @ 5.7 g/t Au**, **4m @ 2.6 g/t Au**, **4m @ 1.7 g/t Au**, **1m @ 2.0 g/t Au**, and **1m @ 2.7 g/t Au** (see Table 1 and Figure 2). Importantly, individual assays are indicating higher grades in parts with a single assay returning **119 g/t Au**.

The Lancefield North Prospect is located approximately 5km north of the historical Lancefield mine (circa. +1Moz) and approximately 12km north of Laverton (see Figure 1). The prospect is located over an extension of the stratigraphy that hosts the mineralisation at Lancefield.

Duketon's Managing Director, Stuart Fogarty, said:

*"These RC drill results, together with the historical drill results are highly significant. They are starting to delineate a series of stacked plunging shoots with wide intersections containing high grades that has characteristics similar to the historic Lancefield mine. It will be fascinating what the remaining 5 holes contain. The assays are highly anticipated."*



These results in conjunction with work planned for Davies Bore, Henry's Bore South and the work that is being delivered on our JV tenements makes for a very exciting start to 2017.

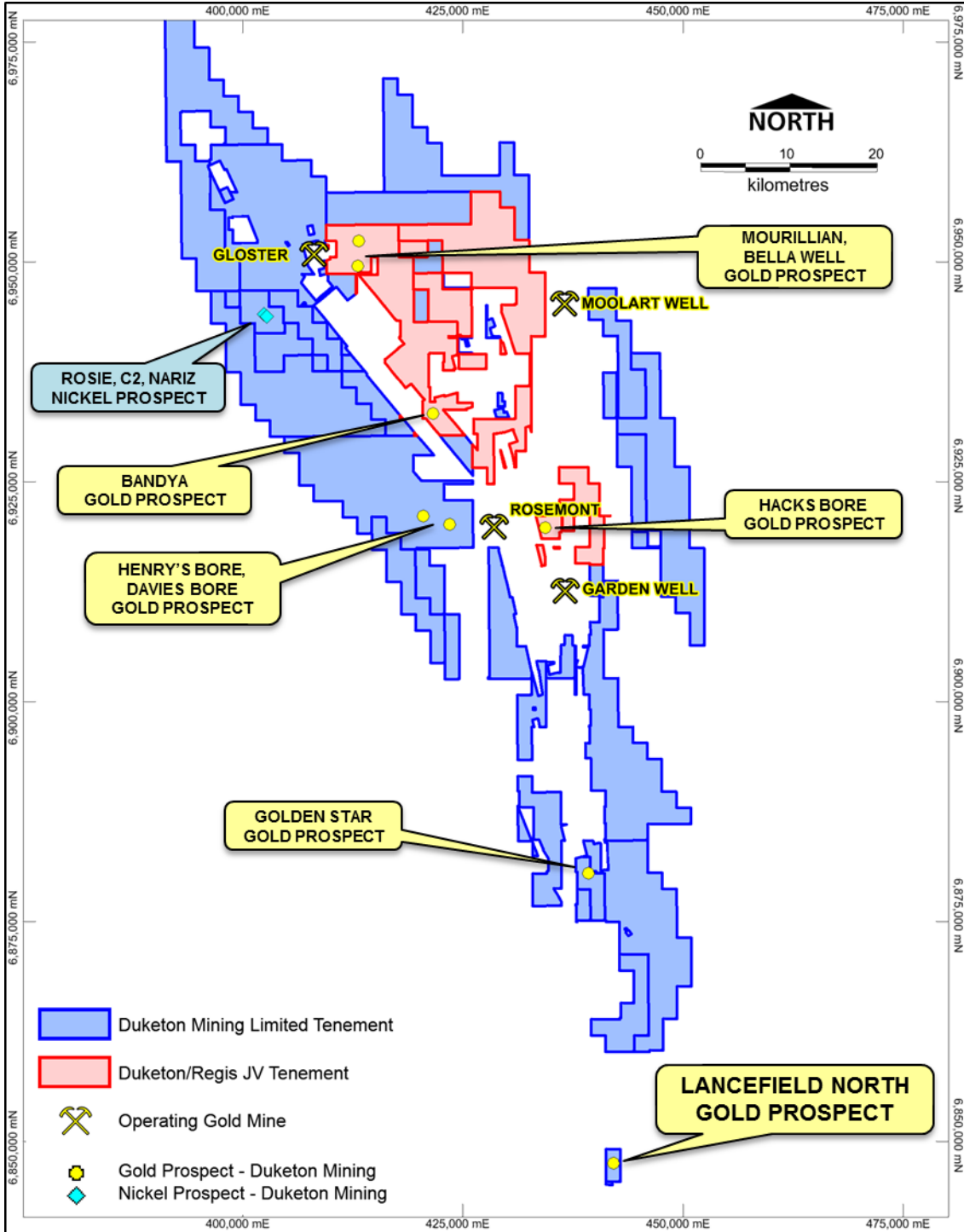


Figure 1. Plan View of the Duketon area showing tenements.

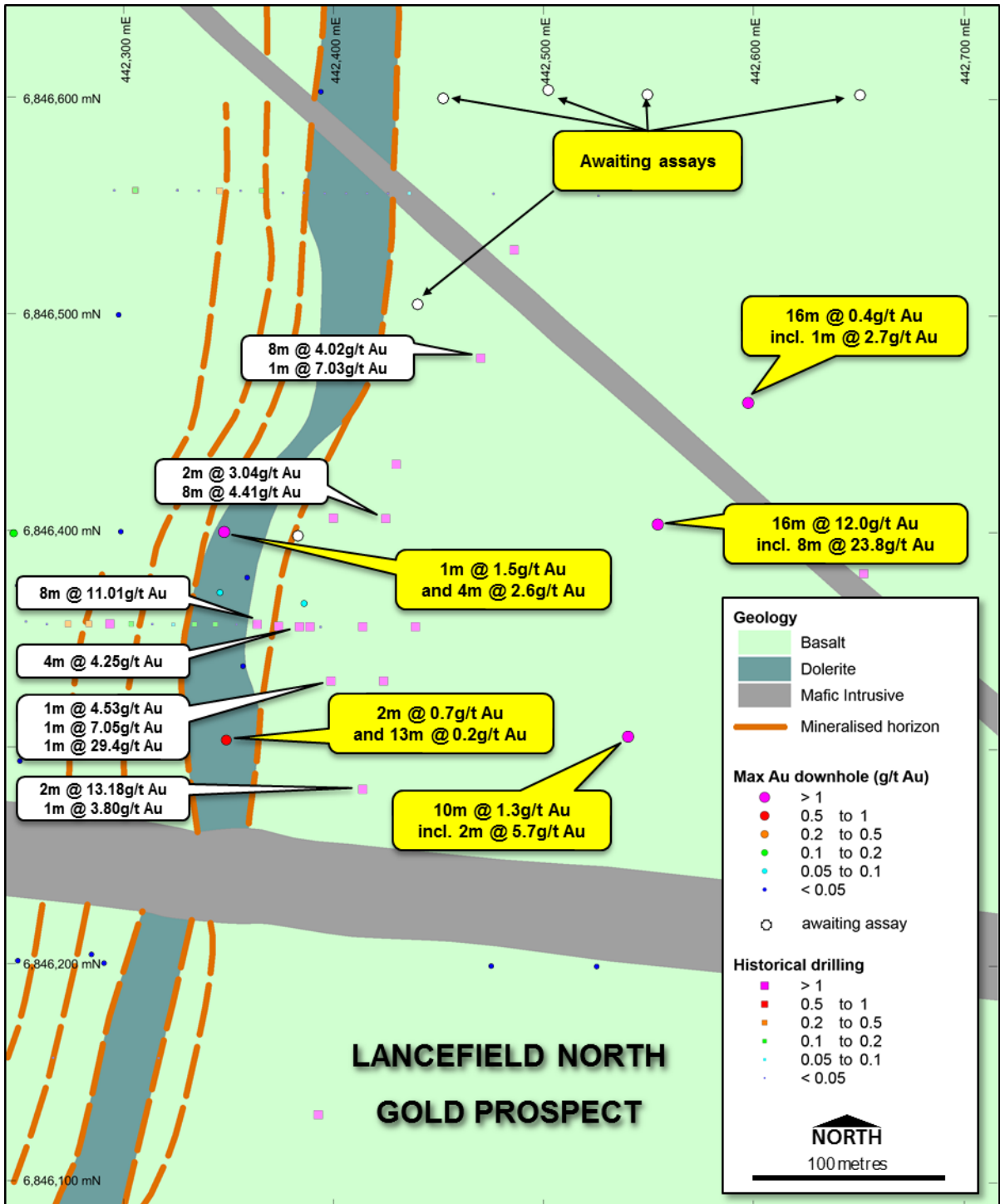


Figure 2. Plan View of the Lancefield North Prospect.



Hole ID	Easting (MGA 94 Z51)	Northing (MGA 94 Z51)	Nominal RL (m)	Dip (°)	Azimuth (mag °)	Total Depth (m)	Depth From (m)	Depth To (m)	Intercept Width (m)	Au (ppb)	Comments	
DKAC0103	442248	6846399	467	-60	270	39	30	34	4	104	4m @ 0.1 g/t Au	
DKRC0050	442540	6846306	470	-60	270	210	90	91	1	111	1m @ 0.1 g/t Au	
								130	132	2	211	2m @ 0.2 g/t Au
								136	144	8	939	8m @ 0.9 g/t Au
								136	140	4	1660	<b>4m @ 1.7 g/t Au</b>
								162	172	10	1332	<b>10m @ 1.3 g/t Au</b>
								162	164	2	5668	<b>2m @ 5.7 g/t Au</b>
								185	186	1	122	1m @ 0.1 g/t Au
								198	199	1	169	1m @ 0.2 g/t Au
DKRC0051	442554	6846404	470	-60	270	210	98	99	1	177	1m @ 0.2 g/t Au	
								131	134	3	966	3m @ 1.0 g/t Au
								131	132	1	2034	<b>1m @ 2.0 g/t Au</b>
								156	172	16	11974	<b>16m @ 12.0 g/t Au</b>
								156	164	8	23826	<b>8m @ 23.8 g/t Au</b>
								190	196	6	271	6m @ 0.3 g/t Au
DKRC0052	442597	6846460	470	-60	270	220	106	107	1	101	1m @ 0.1 g/t Au	
								146	151	5	241	5m @ 0.2 g/t Au
								170	186	16	346	16m @ 0.4 g/t Au
								180	181	1	2701	<b>1m @ 2.7 g/t Au</b>
								206	212	6	105	6m @ 0.1 g/t Au
DKRC0053	442349	6846304	470	-60	270	120	60	62	2	656	2m @ 0.7 g/t Au	
								68	81	13	215	13m @ 0.2 g/t Au
DKRC0054	442348	6846400	470	-60	270	120	80	83	3	812	3m @ 0.8 g/t Au	
								80	81	1	1530	<b>1m @ 1.5 g/t Au</b>
								88	92	4	2601	<b>4m @ 2.6 g/t Au</b>

Table 1. Significant Intercepts. Note: Significant intercepts are >1m @ 0.1g/t Au (maximum internal dilution of 2 meters). Intersections are downhole widths.

For further enquiries, please contact:

**Investors:**

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

*The information in this report that relates to exploration results is based on information compiled by Miss Kirsty Culver, Member of the Australian Institute of Geoscientists (AIG) and an employee of Duketon Mining Limited. Miss 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. Miss Culver consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.*



## JORC Table 1

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

## Section 1 Sampling Techniques and Data – Lancefield North RC & AC Drilling

(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>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Lancefield North has been drilled and sampled by both Aircore (AC) and Reverse Circulation (RC) methods.</li> <li>RC and AC drill chips were collected as composite samples (either 1m, 2m, 3m or 4m samples, approx. 2kg). RC drill chips were sampled by riffle splitting 1 metre calico bag samples off the rig. AC drill chips were collected from bulk piles laid out next to the drillhole collar using an aluminium scoop.</li> <li>Aircore samples were scooped in such a manner as to ensure portions of the whole pile were sampled. This is standard industry practice for this type of early phase drilling.</li> <li>Certified samples and field duplicates are inserted every 25<sup>th</sup> sample for both the RC and AC drilling,</li> <li>Mineralisation determined qualitatively by geological logging and quantitatively through assaying.</li> <li>The sample was pulverised to 85% passing 75µm then a 10g sub-sample digested via aqua-regia followed with assay by ICP-OES or ICP-MS methods.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>RC drilling using a face sampling hammer with a nominal diameter of 140mm.</li> <li>AC drilling using a 3 ½ inch face sampling blade or where AC hammer method used, a 3 ½ inch face sampling bit.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>Recoveries qualitatively noted at the time of drilling and recorded in the DKM database.</li> <li>The cyclone of the drill rig is cleaned at the end of each 3m rod to ensure sample is not “hung-up” and samples are as clean as possible</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>with as little cross contamination as possible.</li> <li>No relationship between grade and recovery has yet been established.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All samples were logged to a level of detail to support future use in a mineral resource calculation should it be required.</li> <li>Qualitative: Lithology, alteration, mineralisation.</li> <li>Quantitative: Vein percentage, assaying for gold and other elements.</li> <li>All holes for their entire length are logged.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>RC drill chips were collect as 1 metre samples from the rig cyclone and cone splitter to provide a 1 metre sample. Composite samples were collected using a riffle splitter.</li> <li>AC drill chips were collected as 1m, 2m 3m or 4m composite samples from bulk piles laid out next to the drillhole collar using a hand held aluminium scoop.</li> <li>Sample condition with respect to moisture content is noted on the geological log.</li> <li>The entire composite sample (approx. 2kg) has been dried, pulverised to 85% passing 75µm, a 10g sub-sample split then digested by aqua-regia followed by assay with ICP-MS or ICP-OES for gold and a suite of pathfinder elements.</li> <li>Field duplicates are collected at a rate of 1 in 25. Pulp duplicates have been taken at the pulverising stage and selective repeats conducted at the laboratories discretion.</li> <li>Sample sizes are considered appropriate for the grainsize of the material sampled.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Samples were assayed using an ICP-MS or ICP-OES finish after being digested with aqua-regia (industry standard technique for low level Au in surface samples). This is considered a partial digest technique however in weathered samples it is considered to approximate a total digest assay.</li> <li>Assays were returned for the following elements: Au, Ag, As, Cu, Pb,</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>derivation, etc.</i></p> <ul style="list-style-type: none"> <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>	<p>Zn, Ni, Sb, Bi, W, Te and Mo.</p> <ul style="list-style-type: none"> <li>Certified Reference Material (Standards) was submitted with batches (approximately 1 in every 25 samples) and laboratory inserted standards, blanks and duplicates were also reported.</li> <li>Where gold levels were over range for the ICP-MS technique, a separate sample from the pulverised pulp was analysed using a 50g fire assay. The results reported for are all within tolerable limits.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <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>All data has been checked internally for correctness by senior DKM geological and corporate staff.</li> <li>All data is collected via Ocris software and uploaded into the DKM Dashed Database following validation.</li> <li>No adjustments have been made to assay data.</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>All location points were collected using a handheld GPS in MGA 94 – Zone 51</li> <li>Downhole surveying (magnetic azimuth and dip of the drillhole) of RC drillholes was measured by the drilling contractors using a digital downhole camera.</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>Holes were drilled at various spacing depending upon the holes drilled previously in the area of interest.</li> <li>Hole spacing is appropriate for drilling at this early stage in the exploration process.</li> <li>Sample compositing has been applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>The orientation of structures is not known with certainty but drilling was conducted using appropriate orientations for interpreted structures.</li> <li>Bias introduced by drill orientation with respect to structures is not known.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody was managed by company representatives and is considered appropriate. All samples are bagged in a tied numbered</li> </ul>

Criteria	JORC Code explanation	Commentary
		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 MinAnalytical in Canning Vale, WA who are NATA accredited for compliance with ISO/IEC17025:2005.
<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> </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 tenement (E38/3002) 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.</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>Previous drilling in this area was completed by Teck Exploration/Nord Australalex and Hill Minerals. 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.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The anomalies presented in the historic data are sourced from typical Archaean Greenstone rocks of the Yilgarn Craton. The recent drilling completed by Duketon Mining has confirmed this interpretation.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• 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"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Significant intercepts are provided in a table within the text of this announcement.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• No top-cuts have been applied when reporting results.</li> <li>• First assay from the interval in question is reported (i.e. Au1)</li> <li>• Aggregate sample assays calculated using a length weighted average</li> <li>• Significant grade intervals based on intercepts &gt; 100ppb gold.</li> <li>• No metal equivalent values have been used for reporting of results.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• 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').</li> </ul>	<ul style="list-style-type: none"> <li>• Mineralisation orientations have not been determined.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</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>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• All drillhole locations are reported and a table of significant intervals is provided in the release text.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>Exploration Results.</i>	
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</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>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further work may involve drilling of holes deeper into fresh rock around the significant intervals presented and may also include testing along strike and in surrounding areas.</li> </ul>