ASX Announcement **29 September 2016**

35m at 2.3 g/t Au at 100% owned Davies Bore Prospect

HIGHLIGHTS

- Assays from the first round of RC drilling at the 100% owned Davies Bore Prospect include;
  - **35m @ 2.3 g/t Au** from 79m, including **9m @ 7.6 g/t Au**
  - **2m @ 7.4 g/t Au** from 37m, including **1m @ 14.4 g/t Au**
  - **5m @ 1.2 g/t Au** from 67m, including **3m @ 2.0 g/t Au**
  - **41m @ 0.5 g/t Au** from 197m, including **2m @ 2.4 g/t Au** (refer Table 1)
- Orientation and true width is unknown at this stage
- Anomaly remains open to the north-west, south-east and at depth
- Anomalous zone appears to be striking north north-west
- Davies Bore Prospect is on Duketon's 100% owned tenements
- Assays are still to be returned for a number of RC holes
- Diamond drill rig has mobilised to site and is expected to commence in the coming days

Duketon Mining Limited (ASX: DKM) is pleased to announce that the first round of RC drilling at the 100% owned Davies Bore Prospect (within the Kulguddi Project) has intersected significant gold mineralisation.

RC drilling targeted the previously identified 1.2km long gold anomaly, located approximately 5km west of Regis Resources Ltd (ASX: RRL) owned Rosemont Mine (see ASX announcement 25 August 2016). Intersections from this latest drill program include; **35m @ 2.3 g/t Au**, including **9m @ 7.6 g/t Au**; **2m @ 7.4 g/t Au**, including **1m @ 14.4 g/t Au**; **5m @ 1.25 g/t Au**, including **3m @ 2.0 g/t Au and 41m @ 0.5 g/t Au**, including **2m @ 2.4 g/t Au.** The anomalous zone appears to be striking north north-west. Orientation and true width is unknown at this stage.

Assays are still to be returned for a number of RC drill holes that are already completed as part of this initial RC drill campaign. The existing lines of drilling are approximately 200m apart.

Diamond drilling is planned to commence in the coming days and additional aircore and/or RC drilling will focus on the areas immediately north and south.

Duketon's Managing Director, Stuart Fogarty, said:

"Davies Bore continues to deliver good results at each stage of exploration. These are the first assays from RC holes drilled into the +1.2km long gold anomaly at our 100% owned Davies Bore and the initial results are impressive. This gives us the confidence to add to the two drill rigs on

site and commence diamond drilling of several holes to gain an early understanding of some critical geological information to further understand the extent of the gold mineralisation."

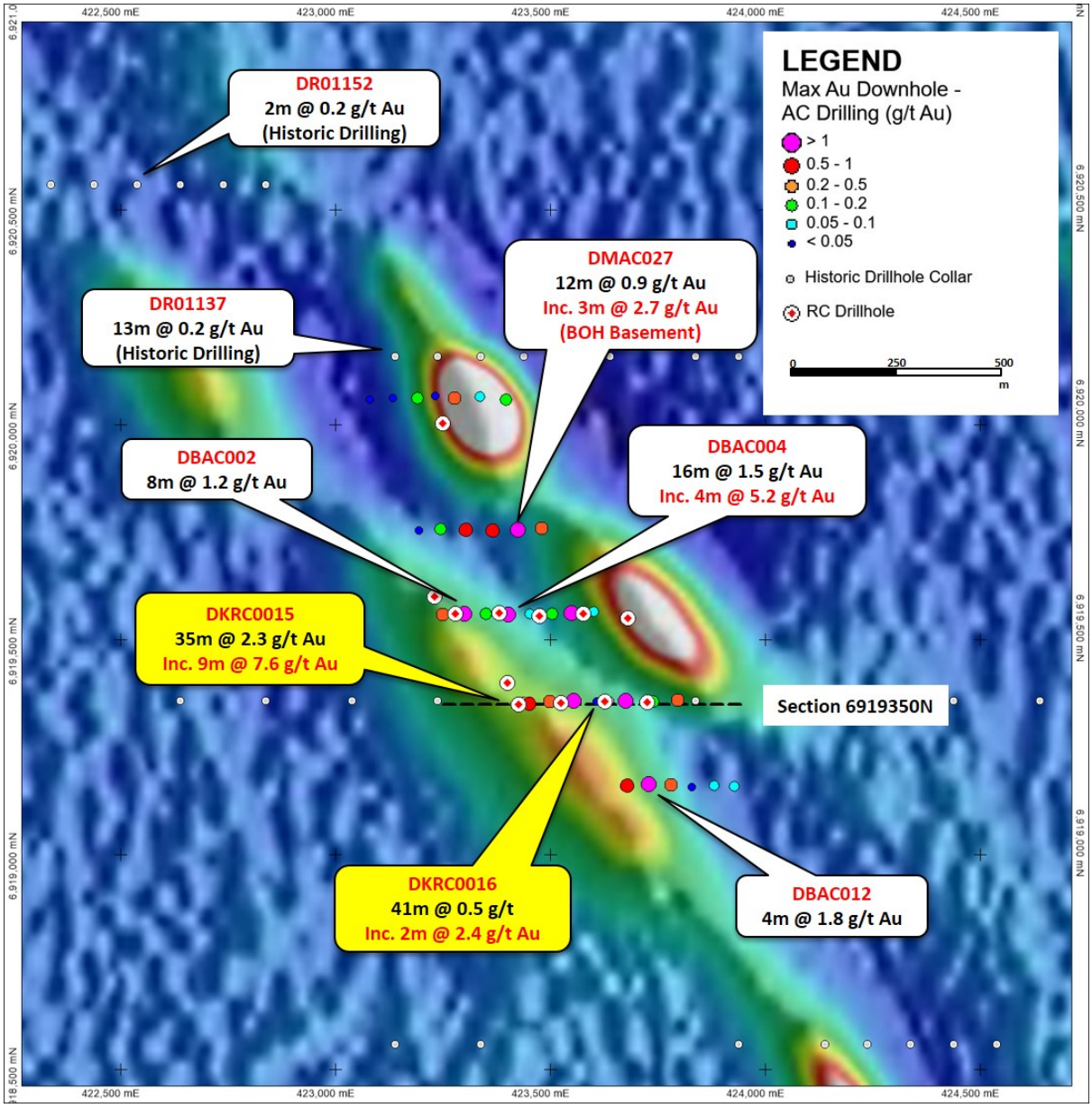

Figure 1. Davies Bore Prospect showing Max Au in aircore holes and RC hole collar locations over magnetics.

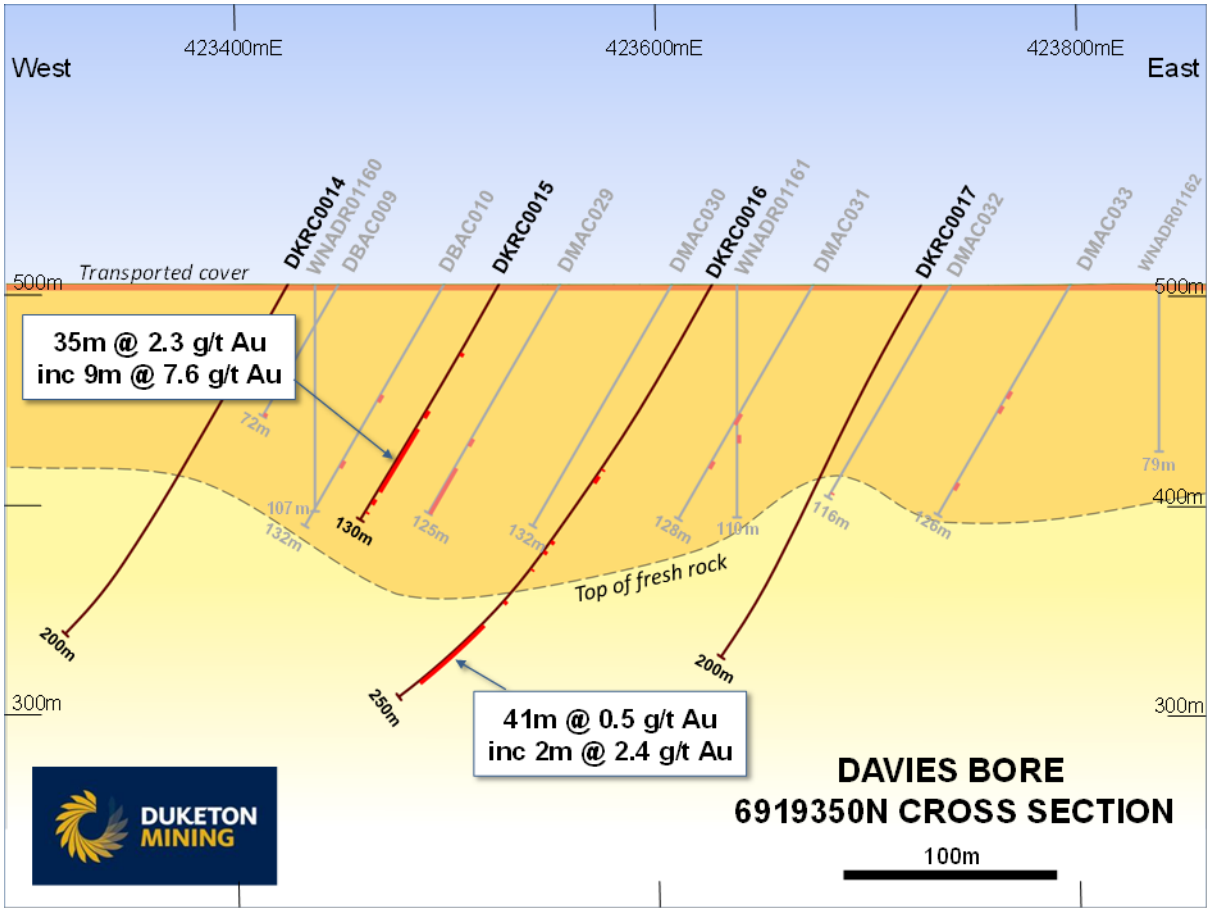

Figure 2. Davies Bore Cross Section 6919350mN

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
DKRC0009	423279	6919560	506	-60	270	200	67	72	5	1246	**5m @ 1.25 g/t Au**
						Incl.	67	70	3	2022	**3m @ 2.02 g/t Au**
And							76	78	2	1600	**2m @ 1.60 g/t Au**
						Incl.	77	78	1	2992	**1m @ 2.99 g/t Au**
And							81	82	1	5593	**1m @ 5.59 g/t Au**
And							88	89	1	116	1m @ 0.12 g/t Au
And							92	95	3	106	3m @ 0.11 g/t Au
DKRC0010	423380	6919562	506	-60	270	148	96	98	2	505	2m @ 0.50 g/t Au
And							129	130	1	194	1m @ 0.19 g/t Au
DKRC0011	423474	6919556	506	-60	270	208	104	106	2	172	2m @ 0.17 g/t Au
And							124	125	1	144	1m @ 0.14 g/t Au
DKRC0012	423576	6919561	506	-60	270	200	92	94	2	753	2m @ 0.75 g/t Au
And							97	98	1	127	1m @ 0.13 g/t Au
DKRC0015	423525	6919353	506	-60	270	130	37	39	2	7437	**2m @ 7.44 g/t Au**
						Incl.	37	38	1	14376	**1m @ 14.38 g/t Au**
And							69	73	4	463	4m @ 0.46 g/t Au
And							79	114	35	2339	**35m @ 2.34 g/t Au**
						Incl.	90	99	9	7616	**9m @ 7.62 g/t Au**
						Incl.	102	104	2	1568	**2m @ 1.57 g/t Au**
						Incl.	110	111	1	1559	**1m @ 1.56 g/t Au**
And							118	121	3	225	3m @ 0.22 g/t Au
And							125	126	1	1243	**1m @ 1.24 g/t Au**
DKRC0016	423626	6919356	506	-60	270	250	102	103	1	289	1m @ 0.29 g/t Au
And							106	110	4	494	4m @ 0.49 g/t Au
And							144	146	2	149	2m @ 0.15 g/t Au
And							150	152	2	286	2m @ 0.29 g/t Au
And							161	162	1	252	1m @ 0.25 g/t Au
And							181	183	2	236	2m @ 0.24 g/t Au
And							197	238	41	459	41m @ 0.46 g/t Au
						Incl.	202	203	1	1199	**1m @ 1.20 g/t Au**
						Incl.	211	212	1	1061	**1m @ 1.06 g/t Au**
						Incl.	224	226	2	2382	**2m @ 2.38 g/t Au**
						Incl.	231	233	2	1370	**2m @ 1.37 g/t Au**

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

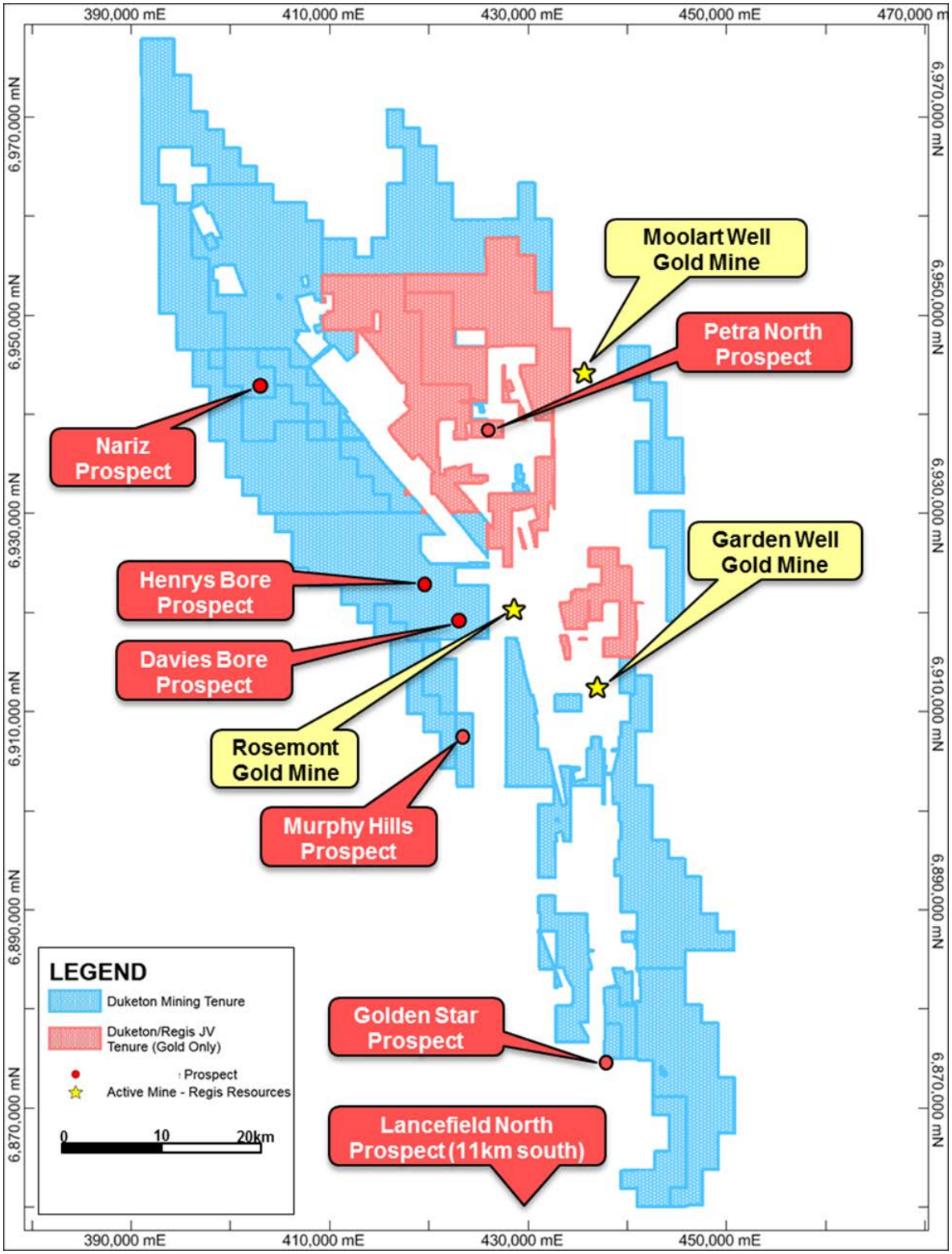

Figure 3. DKM Tenements showing location of Gold Prospects

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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 – Davies Bore RC & AC 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.*	• Davies Bore has been drilled and sampled by both Aircore (AC) and Reverse Circulation (RC) methods. • RC drill chips were obtained by cone splitter (approx. 3kg) on 1 metre intervals. • AC drill chips were collected as composite samples (either 1m, 2m, 3m or 4m samples) from bulk piles laid out next to the drillhole collar using an aluminium scoop. 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. Approximately 2kg of sample was collected as a composite. • Mineralisation determined qualitatively by geological logging and quantitatively through assaying. • 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.
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).*	• RC drilling using a face sampling hammer with a nominal diameter of 140mm. • AC drilling using a 3 ½ inch face sampling blade or where AC hammer method used, a 3 ½ inch face sampling bit.

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 in the DKM database. • The cyclone of the drill rig is cleaned at the end of each rod to ensure sample is not “hung-up” and samples are as clean as possible with as little cross contamination as possible. • No relationship between grade and recovery has yet been established.
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 samples were logged to a level of detail to support future use in a mineral resource calculation should it be required. • Qualitative: Lithology, alteration, mineralisation. • Quantitative: Vein percentage, assaying for gold and other elements. • All holes are logged in their entirety.
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.*	• Reverse circulation (RC) drill chips were collected as 1m samples off the rig cyclone and cone splitter to provide a sample. • Aircore (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. • Sample condition with respect to moisture content is noted on the geological log. • The entire sample (approx. 2-3kg) 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. • Field duplicates are collected at a rate of 1 in 25 for RC samples and a rate of 1 in 50 for AC samples. Pulp duplicates have been taken at the pulverising stage and selective repeats conducted at the

Criteria	JORC Code explanation	Commentary
		laboratories discretion. • Sample sizes are considered appropriate for the grainsize of the material sampled.
Quality of assay data and laboratory tests	• *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, 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.*	• 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. • Assays were returned for the following elements: Au, Ag, As, Cu, Pb, Zn, Ni, Sb, Bi, W, Te, Mo, Pt and Pd. • Certified Reference Material (Standards) was submitted with batches (approximately 1 in every 25 samples for RC and 1 in every 50 samples for AC) and laboratory inserted standards, blanks and duplicates were also reported. Where gold levels are over range for the ICP-MS technique, a separate sample from the pulverised pulp was analysed using a 25g fire assay. The results reported are all within tolerable limits.
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 have been checked internally for correctness by senior DKM geological and corporate staff. • All data is collected digitally and uploaded into the DKM Database following validation. • No adjustments have been 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 were collected using handheld GPS in MGA 94 – Zone 51 • A topographic surface has been created from airborne geophysical data. Drillholes have been corrected to this surface. • Downhole surveying (magnetic azimuth and dip of the drillhole) of RC

Criteria	JORC Code explanation	Commentary
		drillholes was measured by the drilling contractors using a digital downhole camera.
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 were drilled at various spacing depending upon the holes drilled previously in the area of interest. • Hole spacing is appropriate for drilling at this early stage in the exploration process. • Sample compositing has been applied.
Orientation of data in relation to geological structure	• *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 sampling bias, this should be assessed and reported if material.*	• The orientation of structures is not known with certainty but drilling was conducted using appropriate orientations for interpreted structures. • Bias introduced by drill orientation with respect to structures is not known.
Sample security	• *The measures taken to ensure sample security.*	• Chain of custody was 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 bulka 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.
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 (E38/2717) 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.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous drilling in this area was completed by Wiluna Mines. 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 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.
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth*	• Significant intercepts are provided in a table within the text of this announcement.

Criteria	JORC Code explanation	Commentary
	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.* • *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. Au1) • Aggregate sample assays calculated using a length weighted average • Significant grade intervals based on intercepts > 100ppb gold. • 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.* • *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').*	• Mineralisation orientations have not been determined.
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,*	• Refer to document.

Criteria	JORC Code explanation	Commentary
	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).* • *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 may involve drilling of diamond drill holes around the significant intervals presented and aircore drilling along strike and in surrounding areas.