ASX Announcement **30 May 2016**

4m @ 5.2 g/t Au at 100% owned Davies Bore Prospect, Gold Anomaly Extended to >1.2km

HIGHLIGHTS

- Significant gold anomaly extended to over 1.2km at Davies Bore prospect
- Inclined (-60°) aircore drilling returned intersections including;
  - **16m @ 1.5 g/t Au from 104m,** including **4m @ 5.2 g/t Au from 104m**
  - **12m @ 0.6 g/t Au from 96m, including 4m @ 1.4 g/t Au from 96m**
  - **4m @ 1.8 g/t Au from 68m**
  - **8m @ 1.2 g/t Au from 96m**
  - **1m @ 1.0 g/t Au (**Table 1)
- Anomaly remains open to the north-west and to the south-east
- Davies Bore prospect is on Duketon's 100% owned Kulguddi Project (Figures 1 & 2)
- Follow-up drilling to commence in June/July once additional clearances are attained

Duketon Mining Limited (ASX: DKM) is pleased to announce that aircore drilling at the 100% owned Davies Bore prospect (within the Kulguddi Project) has further extended and upgraded the previously identified significant gold anomaly.

The anomaly is now over **1.2km long** and identified across 5 aircore lines spaced between 200m and 500m apart. Intersections from the recent holes include; **16m @ 1.5 g/t Au** including **4m @ 5.2 g/t Au** , **12m @ 0.6 g/t Au** including **4m @ 1.4 g/t Au**, **4m @ 1.8 g/t Au, 8m @ 1.2 g/t Au** and **1m @ 1.0 g/t Au**. The shallowest intersection is approximately 59 meters vertical depth below surface. The gold anomaly remains open to the northwest and to the southeast.

The Davies Bore Prospect is located 5km west of Regis Resources Ltd (ASX: RRL) owned Rosemont Mine and approximately 5km north west of King John Resource (RRL) (Figure 1 & 2) .

The rocks are interpreted to be part of a package of felsic to mafic meta-volcanics and meta-sediments.

Duketon's Managing Director, Stuart Fogarty, said:

"Davies Bore continues to advance nicely. We have achieved two major upgrades in this last drill campaign. Firstly, we have hit higher grades than ever intersected at the prospect before and secondly, we have extended the anomaly by an additional 200m**.** 4m @ 5.2g/t gold within 16m @ 1.5 g/t gold is a significant intersection in any prospect and a 1.2km long anomaly that is still open to the north-west and south-east is substantial. We are excited by these results and look forward to progressing on from aircore drilling to RC drilling to target basement positions"

Follow-up drilling will commence in June/July once further clearances are attained.

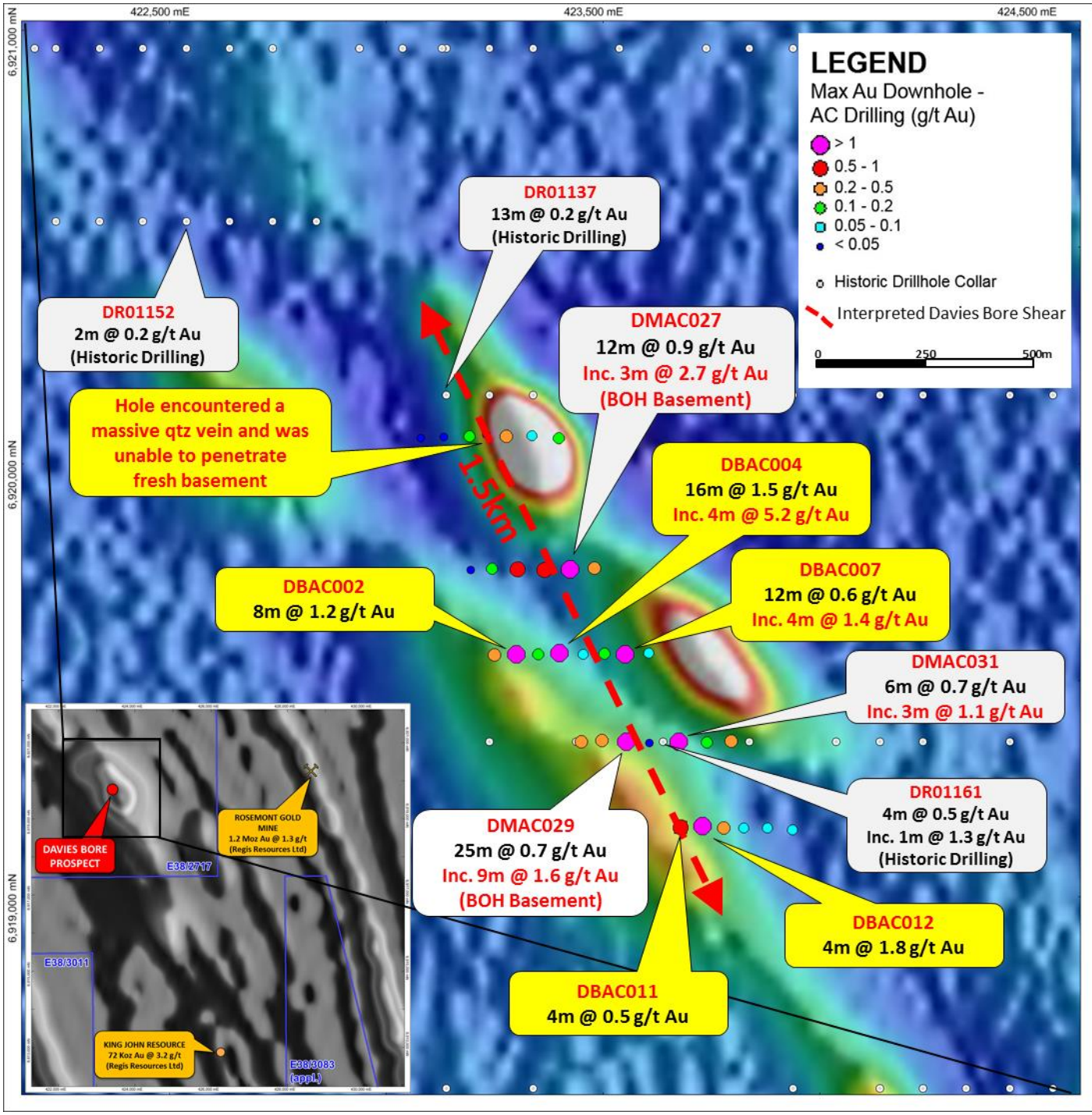

Figure 1. Davies Bore Prospect showing Max Au in aircore holes over magnetics.

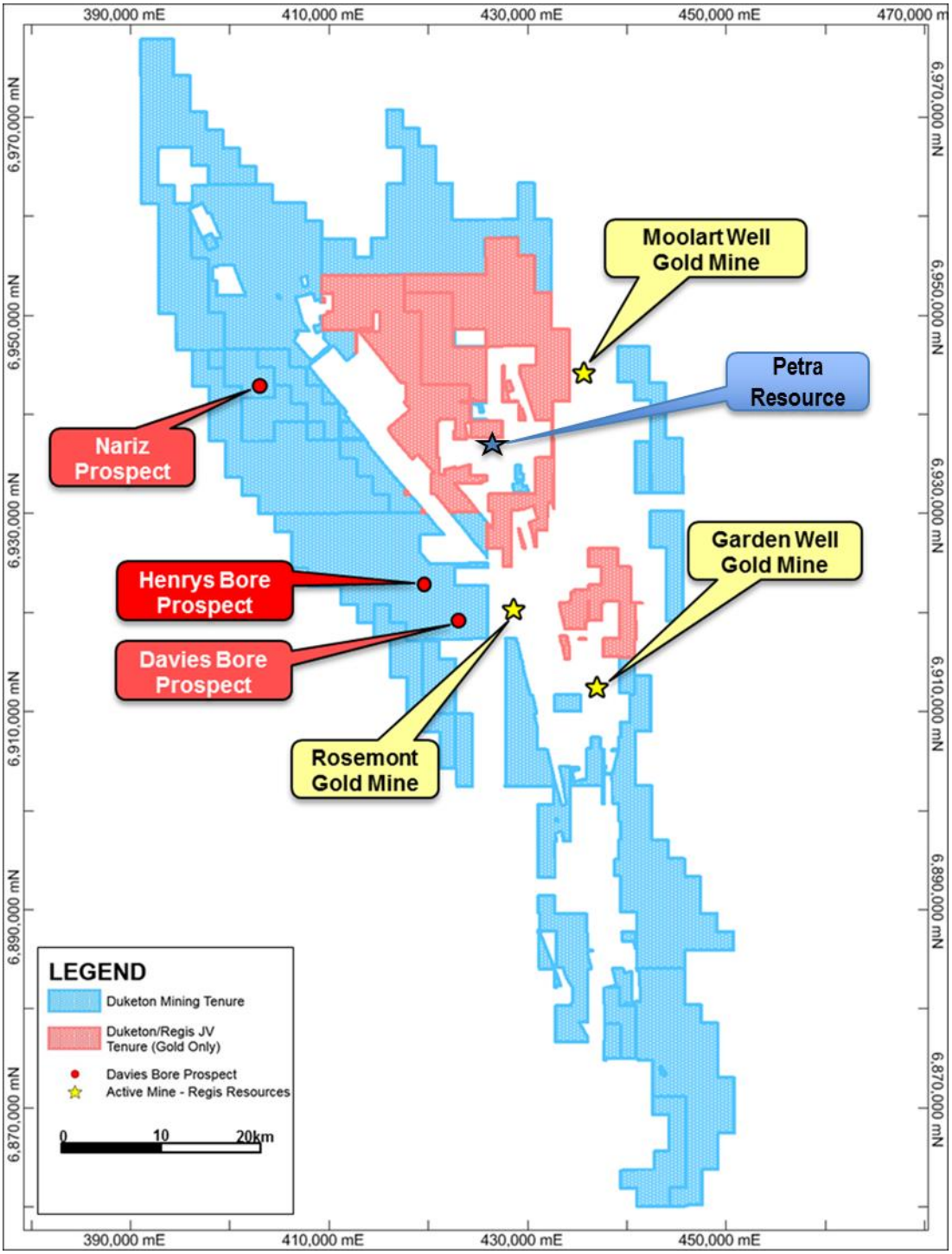

Figure 2. DKM Tenements showing location of Davies Bore Prospect.

Hole ID	Easting (MGA 94 Z51)	Northing (MGA 94 Z51)	Nominal RL (m)	Dip (^{0})	Az. (mag ^{0})	Total Depth (m)	Depth From (m)	Depth To (m)	Intercept Width (m)	Au (g/t)
DBAC001	423249	6919558	507	-60	270	116	64	68	4	290
DBAC002	423300	6919560	507	-60	270	151	96	104	8	**1220 (1.2 g/t Au)**
And							128	136	8	202
And							130	131	1	**1015 (1.0 g/t Au)**
DBAC003	423350	6919560	507	-60	270	150	76	88	12	147
And							112	116	4	126
And							132	144	12	117
DBAC004	423401	6919559	507	-60	270	133	104	120	16	1547
						Incl.	104	108	**4**	**5233 (5.2 g/t Au)**
DBAC005	423451	6919561	507	-60	270	87	No Significant Interval			
DBAC006	423503	6919561	507	-60	270	150	96	100	4	174
DBAC007	423549	6919562	507	-60	270	147	96	108	12	590
						Incl.	96	100	**4**	**1368 (1.4 g/t Au)**
DBAC008	423600	6919566	507	-60	270	150	No Significant Interval			
DBAC009	423449	6919351	507	-60	270	72	68	72	4	387
DBAC010	423499	6919356	507	-60	270	132	60	64	4	181
And							96	100	4	307
DBAC011	423679	6919161	507	-60	270	132	52	56	4	507
And							68	72	4	160
DBAC012	423729	6919164	507	-60	270	129	68	72	**4**	**1804 (1.8 g/t Au)**
And							88	92	4	499
DBAC013	423780	6919163	507	-60	270	112	68	76	8	266
DBAC014	423828	6919158	507	-60	270	132	No Significant Interval			
DBAC015	423880	6919160	507	-60	270	87	No Significant Interval			
DBAC016	423928	6919159	507	-60	270	70	No Significant Interval			

Table 1. Significant Intercepts (Note: Significant intercepts are >1m @ 0.1g/t Au (maximum internal dilution of 2 samples). 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 Mr Stuart Fogarty, Member of the Australian Institute of Mining and Metallurgists ("AusIMM") and an employee for Duketon Mining Limited. Mr Fogarty 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 Fogarty 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 and Henry's Bore 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.*	• Aircore (AC) drill chips were collected as composite samples (either 2m, 3m or 4m samples) or as 1m interval from bulk piles laid out next to the drillhole collar using a hand held scoop. • 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. • Mineralisation determined qualitatively by geological logging and quantitatively through assaying. • Approximately 2-3kg of sample was collected as a composite. This 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).*	• AC drilling using a face sampling blade or where AC hammer method used, a face sampling bit.
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.*	• Recoveries, for each one metre sample, 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 3m rod to ensure sample is not "hung-up" and samples are as clean as possible

Criteria	JORC Code explanation	Commentary
	• *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.*	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 for their entire length are logged.
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.*	• Aircore (AC) drill chips were collected as composite samples (either 2m, 3m or 4m samples) or as 1m interval from bulk piles laid out next to the drillhole collar using a hand held scoop. • Sample condition with respect to moisture content, for each one metre interval, was recorded. • 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 were collected. Pulp duplicates have been taken at the pulverising stage and selective repeats conducted at the 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*	• 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) and laboratory inserted

Criteria	JORC Code explanation	Commentary
	of accuracy (ie lack of bias) and precision have been established.	standards, blanks and duplicates were also reported. Where gold levels were over range for the ICP-MS technique, a separate sample from the pulverised pulp was analysed using a 25g fire assay. The results reported for 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 was recorded via Excel software on a Toughbook laptop and uploaded into the DKM Geobank Database following validation. • No adjustments have been made to assay data.
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
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 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

Criteria	JORC Code explanation	Commentary
		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:*	• Significant intercepts are provided in a table within the text of this announcement.

Criteria	JORC Code explanation	Commentary
	○ *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.*	
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	• *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*	• Refer to document.

Criteria	JORC Code explanation	Commentary
exploration data	*method of treatment; metallurgical test results; bulk density, 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 holes deeper into fresh rock around the significant intervals presented and may also include testing the structure between significant intervals along strike and in surrounding areas.