



ASX Announcement

21 November 2016

Multiple Ore Grade Intersections in Diamond Drilling at 100% Owned Davies Bore

HIGHLIGHTS

- Assays from four diamond drill holes at the 100% owned Davies Bore Prospect include;
 - **10m @ 7.7 g/t Au** from 89m, including **3.2m @ 23.3 g/t Au**
 - **19m @ 1.4 g/t Au** from 176m, including **4.3m @ 3.4 g/t Au** and **2.5m @ 3.5 g/t Au**
- Mineralised zone appears to be steeply dipping (~70) to the east
- Highest individual assay is **107 g/t Au** - indicating higher grades in parts
- Mineralisation, structure and geology confirmed to be striking north north-west
- Anomaly remains open to the north-west, south-east and at depth
- Follow-up drilling expected to commence once aircore assays are returned
- Assays for additional 63 aircore holes (6,200m total) expected in the coming weeks

Duketon Mining Limited (ASX: DKM) is pleased to announce that assays have been received for four diamond drill holes from Davies Bore (100% owned) and all have intersected significant gold mineralisation. The diamond holes were drilled to test the area below and along strike from a previous RC hole that intersected **35m @ 2.3 g/t Au** (see ASX announcement 29 September 2016).

Intersections from the four diamond holes include; **10m @ 7.7 g/t Au** from 89m, including **3.2m @ 23.3 g/t Au**, **19m @ 1.4 g/t Au** from 176m, including **4.3m @ 3.4 g/t Au** and **2.5m @ 3.5 g/t Au** (see table 1). Importantly, individual assays are indicating higher grades in parts with a single assay returning 107 g/t Au.

Duketon's Managing Director, Stuart Fogarty, said:

"These diamond drill results, together with the recent RC drill results are highly significant considering that the average reserve grade for all deposits in the Duketon Belt is 1.09 g/t Au. The individual assay of over 107g/t gold is positively surprising and one of the highest I have seen within the Duketon Belt. The early use of diamond drilling has allowed us to gain a clear understanding of the nature and controls of the gold mineralisation. The grade in both the oxide and the fresh rock is highly encouraging."

"Each exploration step that we take with this project keeps giving us increasingly significant results. I wait with a level of anticipation for the completed aircore holes to see if we can extend and even upgrade the near surface footprint of our 100% owned Davies Bore before the next drill phase commences."

The orientation of the mineralisation, structure, quartz veining and associated alteration are confirmed by the diamond drill holes to be steeply dipping (~70) to the east and striking north north-west.

The anomaly as defined by aircore drilling remains open to the north-west and south-east. Assays from additional aircore drill holes are expected in the coming weeks that will further define the extents of this anomaly. Drilling will recommence once the results are received from the aircore drilling.

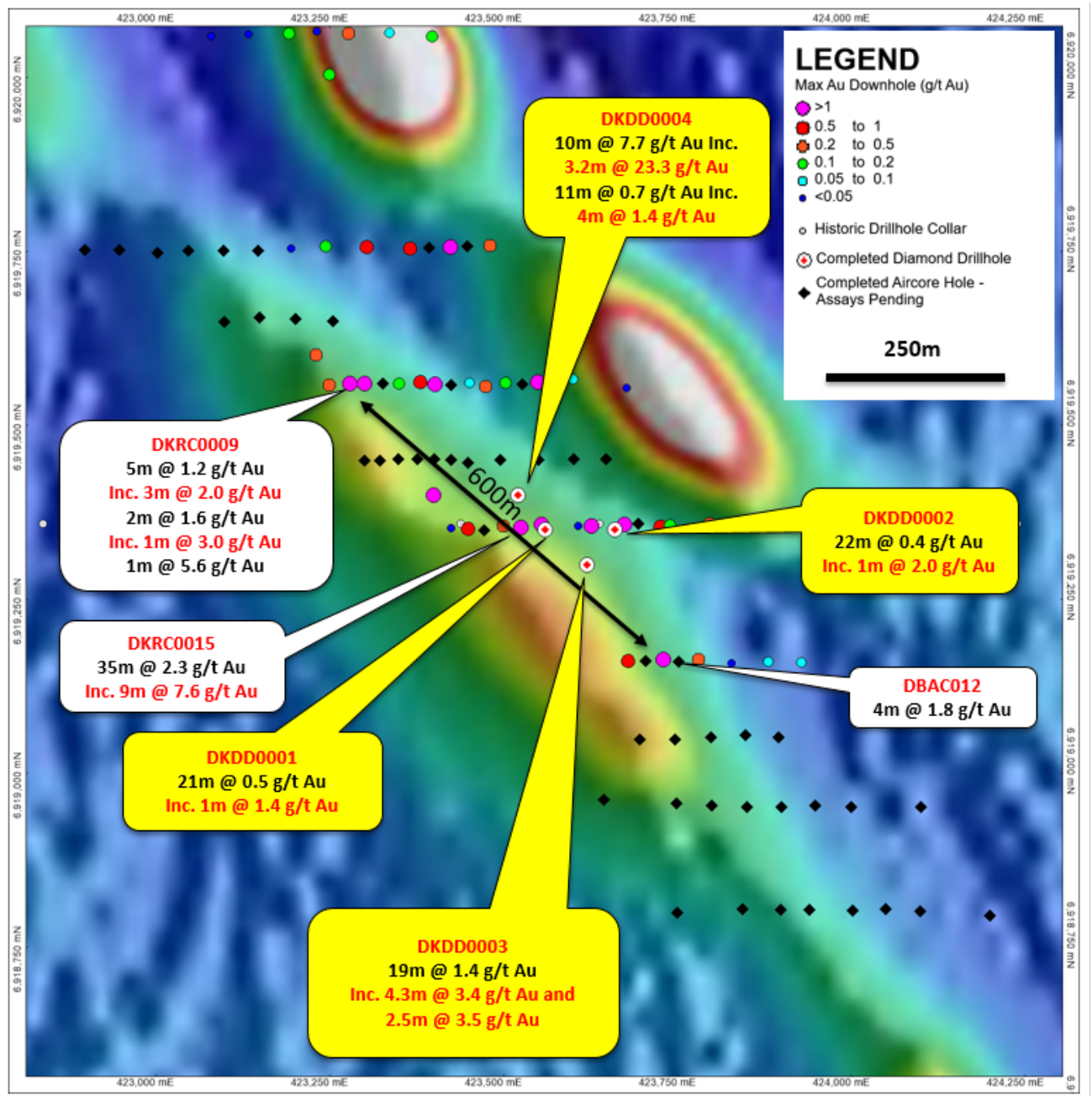


Figure 1. Davies Bore Prospect showing Max Au in hole and collar locations of over magnetics.

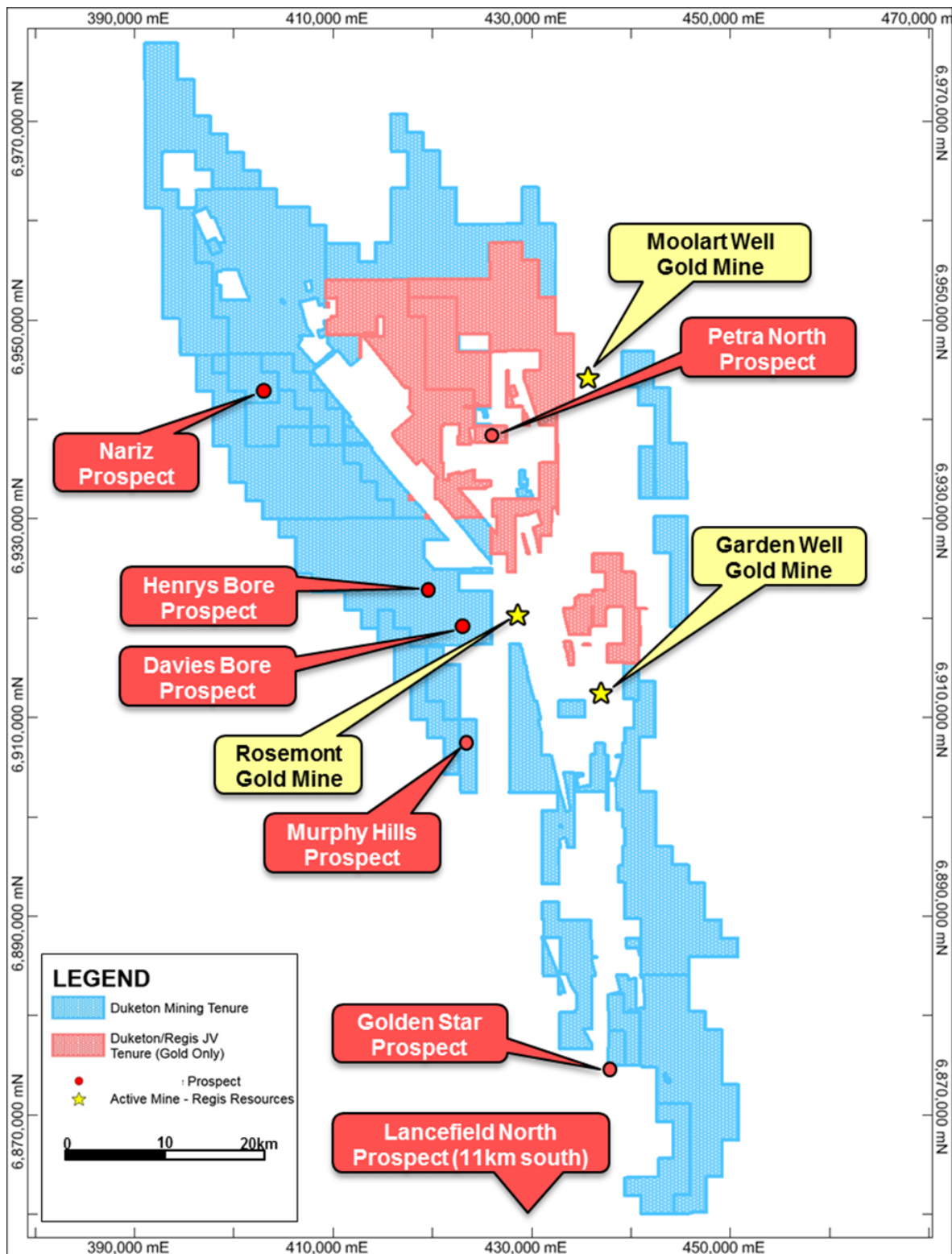


Figure 2. DKM Tenements showing location of Gold Prospects



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
DKDD0001	423558	6919354	506	-60	270	197.9	88	93	5	512	5m @ 0.50 g/t Au
			inc.				88	90	2	1032	2m @ 1.03 g/t Au
			and				113	114	1	110	1m @ 0.11 g/t Au
			and				122	123	1	247	1m @ 0.25 g/t Au
			and				131.7	134.3	2.6	582	2.6m @ 0.58 g/t Au
			and				141	162	21	455	21m @ 0.46 g/t Au
			inc.				148	149	1	1370	1m @ 1.37 g/t Au
DKDD0002	423659	6919349	506	-60	270	350.6	54	55	1	181	1m @ 0.18 g/t Au
			and				93	95	2	198	2m @ 0.20 g/t Au
			and				289	311	22	419	22m @ 0.42 g/t Au
			inc.				302	303	1	2047	1m @ 2.05 g/t Au
			and				315	316.1	1.1	203	1.1m @ 0.20 g/t Au
			and				334.7	335.7	1	291	1m @ 0.29 g/t Au
DKDD0003	423618	6919300	506	-60	270	251.7	159	173	14	512	14m @ 0.51 g/t Au
			inc.				166.8	167.9	1.1	1242	1.1m @ 1.24 g/t Au
			and				176	195	19	1427	19m @ 1.43 g/t Au
			inc.				177.7	182	4.3	3362	4.3m @ 3.36 g/t Au
			inc.				188	190.5	2.5	3539	2.5m @ 3.54 g/t Au
DKDD0004	423524	6919397	506	-60	270	250.9	89	99	10	7668	10m @ 7.67 g/t Au
			inc.				91.1	94.3	3.2	23328	3.2m @ 23.33 g/t Au
			and				160	171	11	746	11m @ 0.75 g/t Au
			inc.				163	167	4	1431	4m @ 1.43 g/t Au
			and				233	234	1	305	1m @ 0.31 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.

For further enquiries, please contact:

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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 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 competent fresh rock and NQ2 to end of hole. The core was cut in half using a diamond core saw and half core sampled for assay. The core was sampled on a nominal 1 metre interval to geological contacts. Each sample provided between 2.5-3kg of material as an assay sample. The core was cut along the orientation line, with the same side sampled to ensure sample is representative. Certified samples, blanks and field duplicates are inserted every 25th sample for the drilling. Mineralisation determined qualitatively by geological logging and quantitatively through assaying.
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"> Diamond drilling using HQ3 (61.1mm) sized core to fresh competent rock then NQ2 (50.6mm) sized core to end of hole. Core was oriented using a REFLEX ACT orientation tool
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> 	<ul style="list-style-type: none"> Core is metre marked and orientated. Run recoveries are recorded in the DKM database. Triple tube HQ was used to maximise recovery through the weathered zone and ensure a representative sample.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	
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 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, structure. Quantitative: Vein percentage, assaying for gold and other elements. All holes are logged in their entirety. 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, half core is sampled. Where duplicates are taken the sample is quarter core. The entire sample (approx. 2-3kg) has been crushed to 10mm and pulverised to 85% passing 75µm. Field duplicates are collected at a rate of 1 in 25. Pulp duplicates are 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	<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, 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. 	<ul style="list-style-type: none"> Samples were assayed using a Fire Assay 50g charge with AAS finish for Au and a multi-acid digest with ICP-OES finish for 34 elements. This technique is industry standard for gold and considered appropriate. Assays were returned for the following elements: Au, Ag, Al, As, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, Tl, V, W and Zn. Certified Reference Material (Standards), blanks and field duplicates were submitted with batches (1 in every 25 samples).

Criteria	JORC Code explanation	Commentary
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 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	<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 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 diamond drillholes was measured by the drilling contractors using a Reflex Ez-trac camera.
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 classifications applied.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> 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.
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, structure and mineralization is steeply dipping (70 degrees) to the east and striking north north-west.
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 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 in Laverton. The bags are delivered directly to MinAnalytical in Canning Vale, WA who are NATA accredited for compliance with

Criteria	JORC Code explanation	Commentary
		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 and land tenure status	<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 ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in</i> 	<ul style="list-style-type: none"> Significant intercepts are provided in a table within the text of this announcement.

Criteria	JORC Code explanation	Commentary
	<p><i>metres) of the drill hole collar</i></p> <ul style="list-style-type: none"> <i>o dip and azimuth of the hole</i> <i>o down hole length and interception depth</i> <i>o hole length.</i> 	
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<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. 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	<ul style="list-style-type: none"> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> Downhole length is reported for the drillholes, true width is not yet known.
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Refer to figures in document.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<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"> <i>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</i> 	<ul style="list-style-type: none"> Refer to document.

Criteria	JORC Code explanation	Commentary
	<i>deleterious or contaminating substances.</i>	
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Further work may involve drilling of more diamond drill holes around the significant intervals presented and Aircore drilling along strike and in surrounding areas.