



ASX Announcement

2 May 2016

## Multiple Gold Anomalies Identified

### HIGHLIGHTS

- Lag soil sampling has identified **multiple geochemical anomalies** greater than +75 ppb Au on the four Duketon Mining (ASX:DKM) / Regis Resources (ASX:RRL) joint venture tenements
- One anomaly is over **3km long and 300m wide at greater than 75 ppb Au with a core of greater than 250 ppb Au and has two point samples of greater than 1g/t Au**
  - Anomaly centred approx. 8km from RRL's Moolart Well operation (Figures 1 and 2)
- Follow-up infill geochemistry to commence in May 2016, with aircore drilling to follow

Duketon Mining Limited (ASX: DKM) is pleased to announce that first pass lag sampling on the four tenements subject to the farm-in with RRL (see ASX announcement 13 Oct 2015) has identified numerous gold anomalies greater than +75ppb Au (see Figure 1).

A total of 9,516 (-6mm +2mm) lag samples were collected on the Duketon Mining Farm-In tenements to complete the first pass programme. This reconnaissance lag sampling was completed on a 400m x 100m grid with particular areas of interest infilled to 200m x 50m.

The best of the gold anomalies is over **3km long and 300m wide at greater than 75 ppb Au with a core of greater than 250 ppb Au** and has **two point samples of greater than 1g/t Au**.

This anomaly is situated about 7km north, along strike from Regis Resources Petra Deposit. The anomaly is discordant to the Petra mineralisation and trends broadly northeast and is approximately 3km long and up to 300m wide at greater than 75 ppb Au with a core of greater than 250 ppb Au. Two samples within this highly significant anomaly have returned assays over 1 g/t Au (see Figure 1).

Several other anomalies generated by Regis Resources as part of this regional lag programme trend in a northeast direction, oblique to the dominant structural orientation in the region. Second order structures oblique to major structural trends can often play host to significant mineralisation with these lag anomalies having the potential to be representative of mineralisation.

All significant Au anomalies will require further investigation and potentially infill sampling/geological mapping. Once this second phase of work has been completed, drill testing is likely on specific targets of interest.

Duketon's Managing Director, Stuart Fogarty, said:

"This is a significant outcome on the four tenements subject to the DKM/RRL JV. These results have surpassed our expectations and nicely complement the success that we have been having on our 100% owned tenements at Davies Bore and Henry's Bore South.

The Farm-In is now really starting to deliver some outcomes. In addition to the geochemistry results, drilling is planned to commence at Petra North and north of Garden Well at Hacks Bore over the next few months.”

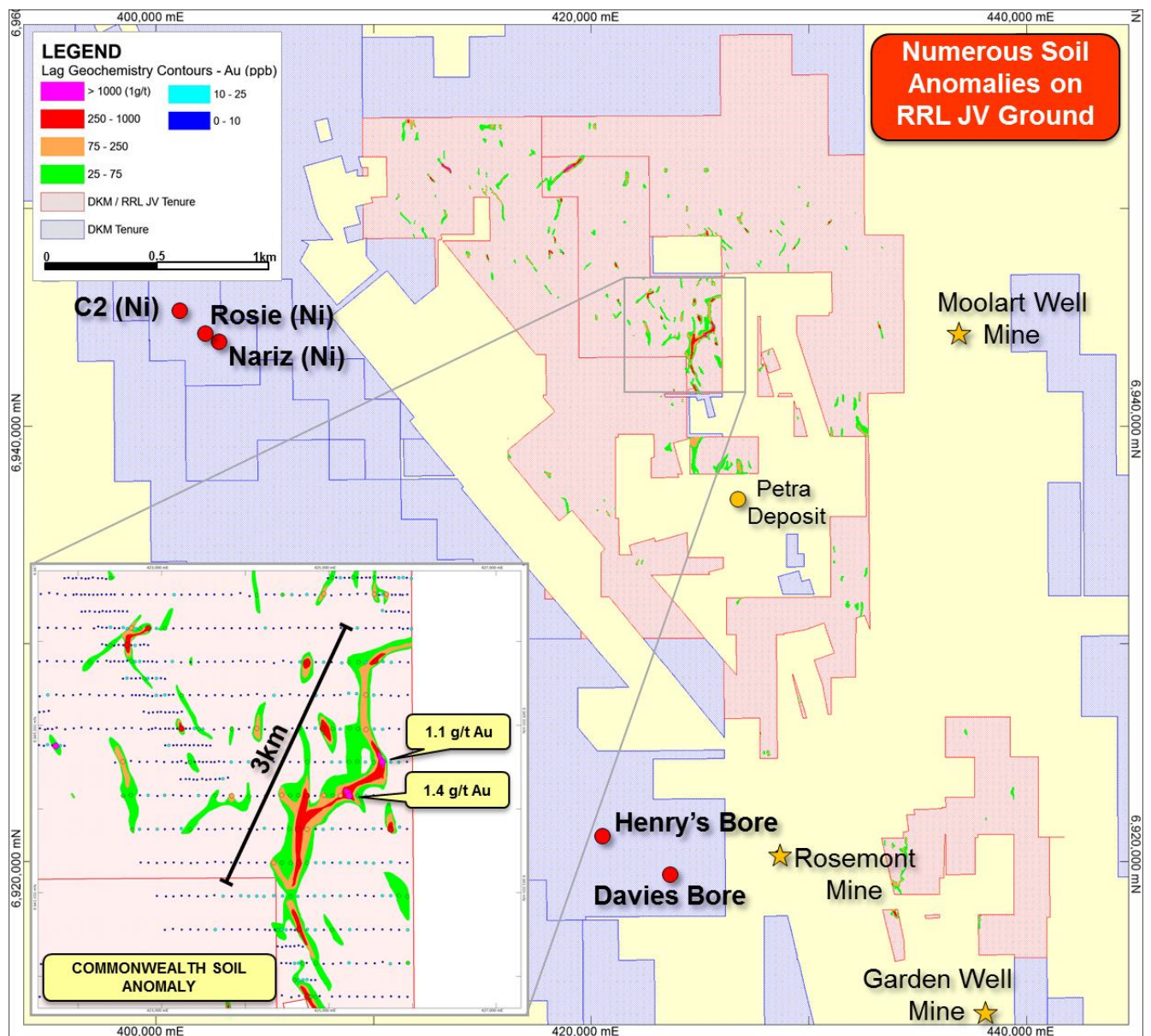


Figure 1. RRL Farm-In Tenements (In Red), DKM tenements in Blue with the inset showing the 3km long anomaly.

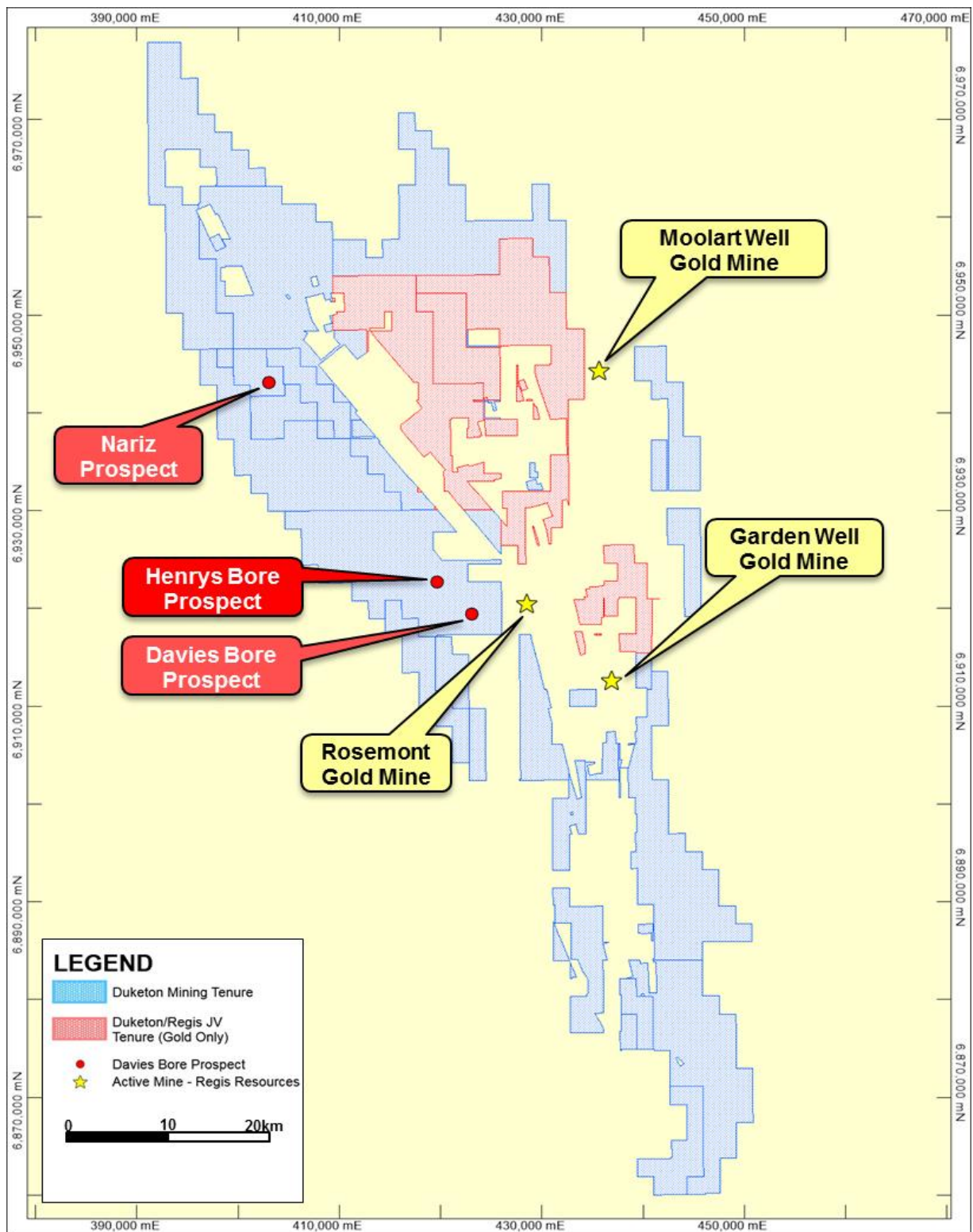


Figure 2. Map showing location of Joint Venture tenements and 100% owned tenements.





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 Mr Brad Drabsch, Member of the Australian Institute of Geoscientists ("AIG") and an employee for Duketon Mining Limited. Mr Drabsch 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 Drabsch 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 – Regis Resource Lag Sampling

(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>Samples were swept from the surface into a dustpan and screened as - 6mm +2mm lag</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>No drilling undertaken</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> <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>No drilling undertaken</li> </ul>                                                            |

| Criteria                                              | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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>No drilling undertaken</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>The sample (approx. 150g) 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 were collected at the rate of 3 per 100 samples. Pulp duplicates have been taken at the pulverising stage and selective repeats conducted at the laboratories discretion. The results reported for are all within tolerable limits.</li> <li>Sample sizes are considered appropriate for the grain size 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 derivation, etc.</li> <li>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.</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, Sb, Bi, Te, Mo.</li> <li>Certified Reference Material (Standards) was submitted with batches (3 in every 100 samples) and laboratory inserted standards, blanks and duplicates were also reported. The results reported for are all within tolerable limits.</li> </ul> |
| <b>Verification of sampling</b>                       | <ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>All data have been checked internally for correctness by senior DKM geological staff.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Criteria                                                       | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                          | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>and assaying</b>                                            | <ul style="list-style-type: none"> <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 location data is captured on handheld GPS and uploaded into the Regis Database. Descriptive data written on paper sheets and entered into spreadsheet at the end of each day.</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 handheld GPS in AMG 84 – Zone 51</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>Samples were originally collected on a 400m x 100m grid with selected areas infilled to 200m x 50m</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 sampling was conducted using appropriate orientations for interpreted structures.</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>Samples are boxed, taped shut and plastic wrapped, labelled with sample submission sheet and couriered from site to laboratory via Skippers aircraft. Sample submission sheet stored on server on site, a copy emailed to RRL DB administrator and laboratory. The bags are delivered to MinAnalytical in Canning Vale, WA who are NATA accredited for compliance with ISO/IEC17025:2005.</li> </ul> |
| <b>Audits or reviews</b>                                       | <ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></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 tenements subject to the DKM/RRL JV (E38/2737, E38/2699, E38/2231 and E38/2666) are 100% owned by Duketon Mining Limited and are in good standing and there are no known impediments to obtaining a licence to operate in the area.</li> <li>Details of the DKM/RRL JV can be found in the ASX announcement released by DKM on the 13<sup>th</sup> of October 2015</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>Numerous companies have conducted previous exploration on the tenements subject to the DKM/RRL joint venture. This work has included surface geochemical sampling and various phases of drilling. This previous work has not been considered during the lag sampling programme conducted by RRL. All areas of the JV tenure have been sampled.</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>An understanding of the detailed geology in the region is yet to be made. The area is known to contain Archaean rocks with typical orogenic gold deposits targeted by the current work.</li> </ul>                                                                                                                                                                                |
| <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>No drilling has been undertaken .</li> </ul>                                                                                                                                                                                                                                                                                                                                      |
| <b>Data aggregation</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> </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> </ul>                                                                                                                                                                                                                                        |



| Criteria                                                                | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                   | Commentary                                                                                                                 |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>methods</b>                                                          | <ul style="list-style-type: none"> <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>                           |                                                                                                                            |
| <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>No drilling conducted</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 Exploration Results.</li> </ul>                                                                                                                                                             | <ul style="list-style-type: none"> <li>Figures provide a graphical representation of all samples taken.</li> </ul>         |
| <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 infill soil sampling followed by drill testing.</li> </ul> |