



23 August 2017

## Giro Gold Project – Revision to Maiden Mineral Resource

Amani Gold Limited (ASX: ANL, Amani) reports a minor decrease to the contained gold content at a cut-off grade of 0.90g/t Au in the 30 June 2017 Mineral Resource previously reported on 5 July 2017 (together with the addendum dated 18 July 2017). The revision has been identified by independent mining consultant, The MSA Group, while completing its comprehensive Mineral Resource report. The decrease is predominantly in the Inferred Mineral Resource category where there was limited drilling and had little effect on the Indicated Mineral Resource category. The changes arose from the inclusion of a number of low grade samples associated with the intrusions that had previously been excluded from the mineral resource modelling. This resulted in portions of the previously reported Mineral Resource falling below the cut-off grade of 0.9g/t Au that have consequently been left out of the revised Mineral Resource estimate.

### *Kebigada Revised Mineral Resource Estimate – 18 August 2017*

**Table 1: Kebigada Mineral Resource at 0.90g/t Au Cut-Off Grade, 18 August 2017**

Category	Revised			Previously Reported (5 July 2017)		
	Tonnes (Millions)	Au grade g/t	Ounces (Millions)	Tonnes (Millions)	Au grade g/t	Ounces (Millions)
<u>Laterite</u>						
Measured	-	-	-	-	-	-
Indicated	1.18	1.65	0.06	1.25	1.61	0.06
Inferred	0.77	1.20	0.03	0.85	1.19	0.03
<b>Total Laterite</b>	<b>1.95</b>	<b>1.47</b>	<b>0.09</b>	<b>2.10</b>	<b>1.44</b>	<b>0.10</b>
<u>Saprolite</u>						
Measured	-	-	-	-	-	-
Indicated	1.93	1.55	0.10	2.01	1.54	0.10
Inferred	0.77	1.27	0.03	0.85	1.33	0.04
<b>Total Saprolite</b>	<b>2.69</b>	<b>1.47</b>	<b>0.13</b>	<b>2.86</b>	<b>1.48</b>	<b>0.14</b>
<u>Fresh</u>						
Measured	-	-	-	-	-	-
Indicated	13.37	1.51	0.65	13.44	1.52	0.66
Inferred	27.60	1.43	1.27	30.26	1.45	1.41
<b>Total Fresh</b>	<b>40.97</b>	<b>1.46</b>	<b>1.92</b>	<b>43.70</b>	<b>1.47</b>	<b>2.07</b>
<u>Total</u>						
Measured	-	-	-	-	-	-
Indicated	16.48	1.53	0.81	16.70	1.53	0.82
Inferred	29.14	1.42	1.33	31.97	1.44	1.48
<b>Total Mineral Resource</b>	<b>45.62</b>	<b>1.46</b>	<b>2.14</b>	<b>48.67</b>	<b>1.47</b>	<b>2.30</b>

*Notes:*

- 1. All tabulated data has been rounded and as a result minor computational errors may occur.*
- 2. Mineral Resources which are not Ore Reserves have no demonstrated economic viability.*
- 3. The Gross Mineral Resource for the Project is reported.*

The MSA Group's complete final Mineral Resource report is available on the Company's website.

**Key Points**

- **Revised Maiden Indicated and Inferred Mineral Resource of 45.62 million tonnes for 2.14 million ounces of gold at 1.5g/t Au at Kebigada (0.9g/t Au cut-off grade)**
- **Revised Maiden Indicated and Inferred Mineral Resource of 75.2 million tonnes for 2.85 million ounces of gold at 1.2g/t Au at Kebigada (0.6g/t Au cut-off grade)**
- **Mineral Resource defined over a strike length of 1.3km and a maximum width of 350m, tapering off to the north and south**
- **Mineral Resource defined from surface to a maximum of 300m below surface, mineralisation being open at depth**
- **Better grades from Indicated Mineral Resource suggest grade improvement, with further infill drilling defining high grade zones**
- **High grade, open ended mineralisation intersected in deeper diamond drilling not included in this estimate - 88.1m at 2.13g/t Au from 221.4m including 3m at 35.86g/t Au from 238m (GRDD032)**
- **Defined mineralisation remains open at depth and good potential for additional resources underlying adjacent, strong gold in soil anomalies**
- **Preparations commenced for further infill drilling for definition of Measured Resources and metallurgical drilling required for pre-feasibility and feasibility studies**
- **Amani to commence a shallow RC drilling program to follow up on high-grade soil anomalies in the immediate surrounds at Kebigada. Significant new discoveries will be followed up with further drilling to delineate potential satellite resources which could add materially to the Kebigada Mineral Resource.**

The revised Mineral Resource is reported in accordance with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) and is classified into the Indicated and Inferred categories as shown in Table 1.

The revised Total Mineral Resource Estimate of **45.62 million tonnes at 1.46g/t Au for 2.14 million ounces** at a 0.90g/t Au cut-off grade is based on gold assays and density measurements obtained from the cores of 24 NQ size diamond drillholes (DD) and 230 reverse circulation (RC) holes drilled by Amani and its predecessors between December 2013 and May 2017.

An internal, high level Whittle pit shell was run at USD1,500/oz Au to establish Reasonable Prospects for Eventual Economic Extraction (RPEEE) as per JORC guidance. Depending on key parameters such as gold price, annual throughput, process plant recoveries and operating costs, cut off grades are likely to be in the range of 0.6g/t Au and upwards for Mineral Resource reporting.

The revised Total Mineral Resource Estimate of **75.16 million tonnes at 1.18g/t Au for 2.85 million ounces** at a 0.60g/t Au cut off grade therefore supports a bulk tonnage deposit with a low strip ratio. Pre-feasibility studies are expected to aim for a 5 million tonne/annum processing rate focussed on the defined high grade areas of the Mineral Resource in the earlier years of mining.

The revised Total Indicated Mineral Resource of **24.76 million tonnes at 1.27g/t Au for 1.01 million ounces** at a 0.6g/t Au cut off grade is confined to the top 110m below surface where drilling was roughly on a 50 x 50m grid. This represents a reduction of 20,000 ounces from the original Maiden Resource estimate (1.03M ounces) and the small reduction evidences the robustness of the Indicated Mineral Resource estimate where there is higher drilling density. The Inferred Mineral Resource below this level was largely based on the 24 diamond drill holes with relatively poor drilling coverage. The increase in grade noted with the closer drill hole spacing in the Indicated section of the Mineral Resource suggests that it is possible that the grade of the Inferred portion of the Mineral Resource will improve with infill drilling on a tighter grid.

The Mineral Resource has been tabulated using a number of cut-off grades as shown in Table 2. The pit shell that was created indicated that all cut-off grades shown have reasonable prospects for eventual economic extraction. The mineralisation reported at the higher cut-off grades form generally cohesive high grade zones. Table 2 shows a Mineral Resource of 1.24 million ounces of 2g/t Au was defined using a 1.3g/t Au cut-off grade.

**Table 2: Kebigada Total Mineral Resource Grade Tonnage Table, 18 August 2017**

Category	Cut-Off Grade Au g/t	Tonnes (Millions)	Au grade g/t	Au Content (Millions oz.)
Indicated	0.6	24.76	1.27	1.01
	<b>0.9</b>	<b>16.48</b>	<b>1.53</b>	<b>0.81</b>
	1.3	7.56	2.08	0.50
	1.5	5.21	2.38	0.40
Inferred	0.6	50.40	1.14	1.84
	<b>0.9</b>	<b>29.14</b>	<b>1.42</b>	<b>1.33</b>
	1.3	11.78	1.94	0.74
	1.5	8.63	2.15	0.60
Total	0.6	75.16	1.18	2.85
	<b>0.9</b>	<b>45.62</b>	<b>1.46</b>	<b>2.14</b>
	1.3	19.34	2.00	1.24
	1.5	13.84	2.24	0.99

*Notes:*

1. *All tabulated data has been rounded and as a result minor computational errors may occur.*
2. *Mineral Resources which are not Ore Reserves have no demonstrated economic viability.*
3. *The Gross Mineral Resource for the Project is reported.*

*Geology and Geological Interpretation*

The mineralisation at Kebigada falls within the 35 km, mineralised, northwest trending corridor which transgresses both licences comprising the Giro Project. At Kebigada, this zone of deformation is in excess of 400 m wide.

The geological setting is comprised mostly of volcano-sedimentary rocks from the Kibalian complex, with multiple granites and granitoid intrusions. A network of faults seems to have been reactivated at different intervals. The main lithologies hosting the mineralisation are saprolite, quartz veins and stringers and silicified volcano-sediments. Mineralisation is associated with quartz veining and silicification of host rocks along a major northwest trending shear zone. Generally higher gold grades are associated with greater percentages of sulphide (pyrite) and silicification. Structural measurements of pyrite and chalcopyrite laminae taken from oriented diamond drillhole core confirm a steeply dipping orientation for the mineralised structures. The mineralisation is interpreted to be concentrated within a north-northwest trending dilation jog structure within the shear zone and is approximately vertically dipping.

The defined Mineral Resource occurs over a strike length of approximately 1.3 km and is in the order of 350 m wide in the wider central portion tapering off towards the north and south. The depth extent is a function of the drillhole coverage with the depth of the USD1,500/oz Au pit shell currently defined from surface to a maximum of 300 m below surface in the Mineral Resource, the mineralisation being open at depth. Faulting may occur that off-sets the mineralisation. The mineralisation is intruded by largely barren, narrow (5 to 10 m) sub-vertical dykes. The deposit is capped by laterite generally between 5 m and 10 m thick. This is underlain by a saprolite layer that is normally between 10 m and 30 m thick. The laterite has been extensively worked by artisanal miners in places and limited mining was carried out in the Belgian colonial era. The laterite and saprolite tonnage estimates were reduced by 5% to account for cavities intersected during drilling.

*Sampling and Sub-Sampling Techniques*

24 NQ size diamond drillholes (DD) and 230 reverse circulation drillholes (RC) were drilled by Amani and its predecessors between December 2013 and May 2017. The diamond drill holes were predominantly drilled to the northeast at a dip of between 50 and 60 degrees and the reverse circulation holes at constant 60 degrees. The holes were drilled on lines spaced approximately 50 m apart with holes spaced between approximately 25 m and 100 m apart along the drilling lines shown in Figure 3. Quality assurance and quality control (QAQC) measures were implemented consisting of the insertion and analysis of blank samples, certified reference materials and duplicate samples as well as second laboratory confirmation assays.

Reverse circulation holes were continuously sampled from the top to bottom of the hole by collecting the entire sample from the cyclone at 1 m intervals. The RC samples were passed through a riffle splitter three times, after which approximately 5 kg was taken as a reference sample and 2 kg was weighed, and labelled for laboratory dispatch. The final sample was crushed to >70% of the sample passing as less than 2 mm. 1,000 g of sample was split from the crushed sample and pulverised until 70% of the material could pass a 75 µm sieve. From this, a 50 g sample was obtained for fire assay. RC samples taken from the cyclone were generally dry. In rare cases where the samples were wet, they were sun dried prior to splitting. Field duplicates were taken of the RC samples every 30<sup>th</sup> sample.

A booster was used to ensure sample representation below the water table. The reverse circulation holes were cleared after every 3 m run by blowing out the hole.

The diamond drillhole cores were split longitudinally in half and the same half was continuously sampled in nominal 1 m intervals. The highly weathered saprolitic zone was split using a bladed instrument until the core had sufficient strength to withstand cutting using a diamond saw. The sample interval was adjusted in order to honour geological contacts. The maximum sample length taken was 2 m. The core samples, which had an average weight of between approximately 3 and 4 kg, were then crushed and split in an accredited laboratory to produce a 50 g charge for analysis.

### *Sample Analysis Method*

The laboratory used 50 g of sample and analysed samples using Fire Assay with an AA finish (accredited method). Where the Au grade is above the 100 g/t detection limit, the sample was re-assayed using Fire Assay gravitational method (non-accredited method). In addition to the laboratory's internal QAQC procedure, every 10<sup>th</sup> field sample comprised a blank sample, duplicate or certified reference material sample.

### *Estimation Methodology*

The Mineral Resource was defined within a three dimensional 0.3 g/t Au grade shell aligned with the interpreted structural and mineralisation trend. A 0.5 g/t Au grade shell was also modelled in order to constrain the higher grade zones. The mineralisation was categorised as either laterite, saprolite or fresh. A block model was created into which gold grades were estimated using ordinary kriging. The grade shells were filled with blocks of 20 mN x 20 mE x 20 mRL and coded according to grade domain, oxidation state (laterite, saprolite, fresh) and whether barren dyke or mineralised volcano-sedimentary rock. The blocks were sub-celled to a minimum of 4 mN x 4 mE x 1 mRL in order to accurately fill the geological model. Top-cuts were applied to the 2 m composites during estimation. Within the 0.30 to 0.50 g/t Au grade shell a top cut of 17.4 g/t Au was applied. Within the >0.50 g/t grade shell a top cut of 25.3 g/t Au was applied. For the laterite within the 0.30 to 0.50 g/t Au grade shell a top cut of 5.9 g/t Au was applied, and 6.5 g/t Au for the >0.50 g/t Au grade shell. Numerous iterations were performed to assess the impact of block size and estimation parameters.

Search ellipses were based on the range of the variogram models. The search ellipse for the laterite estimate was aligned in a horizontal plane with a search of 118 m at 330°, 63 m at 240° and 9 m vertically. For the saprolite-fresh rock domain the search ellipse was aligned vertically with a search of 47 m at 330°, 10 m at 240° and 70 m vertically. Between 12 and 32 composites were used to estimate a block for the saprolite-fresh domain and between 10 and 24 samples for the laterite. Where enough samples were not collected in the first search, then the search was expanded 1.5 times and finally 7 times to ensure all model blocks were estimated. A maximum of 11 composites were allowed from a single drillhole for the saprolite-fresh rock domain.

Estimates were validated using sectional validation plots, visual checks of the drillhole grades against the model and statistical comparisons.

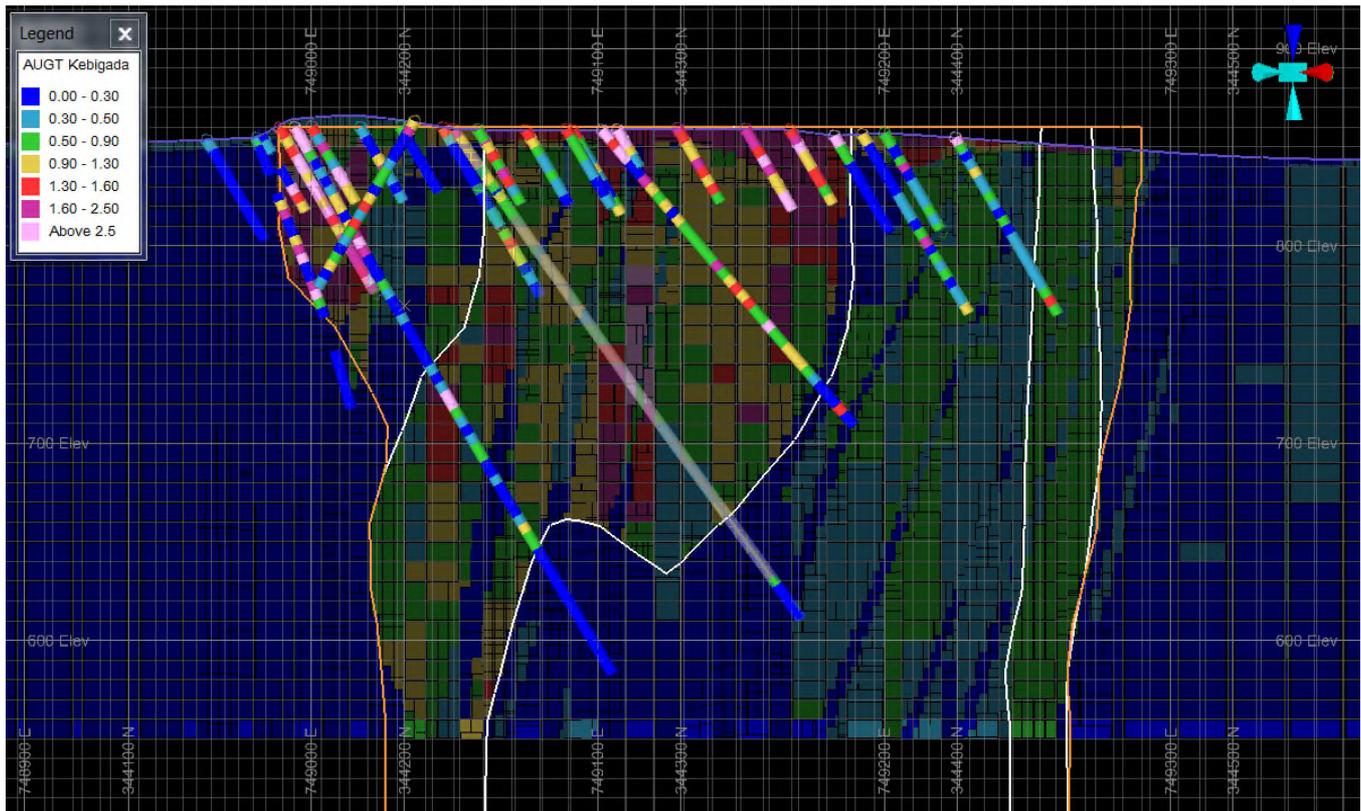
### *Mining and Metallurgical Methods and Parameters and Other Material Modifying Factors*

It is assumed that the Mineral Resource will be extracted using open-pit mining. A USD1,500 / gold ounce pit shell was modelled. A 56° slope angle was used for fresh rock and 36° for laterite. Cost per tonne of USD30.5 and 87.8% plant recovery was assumed.

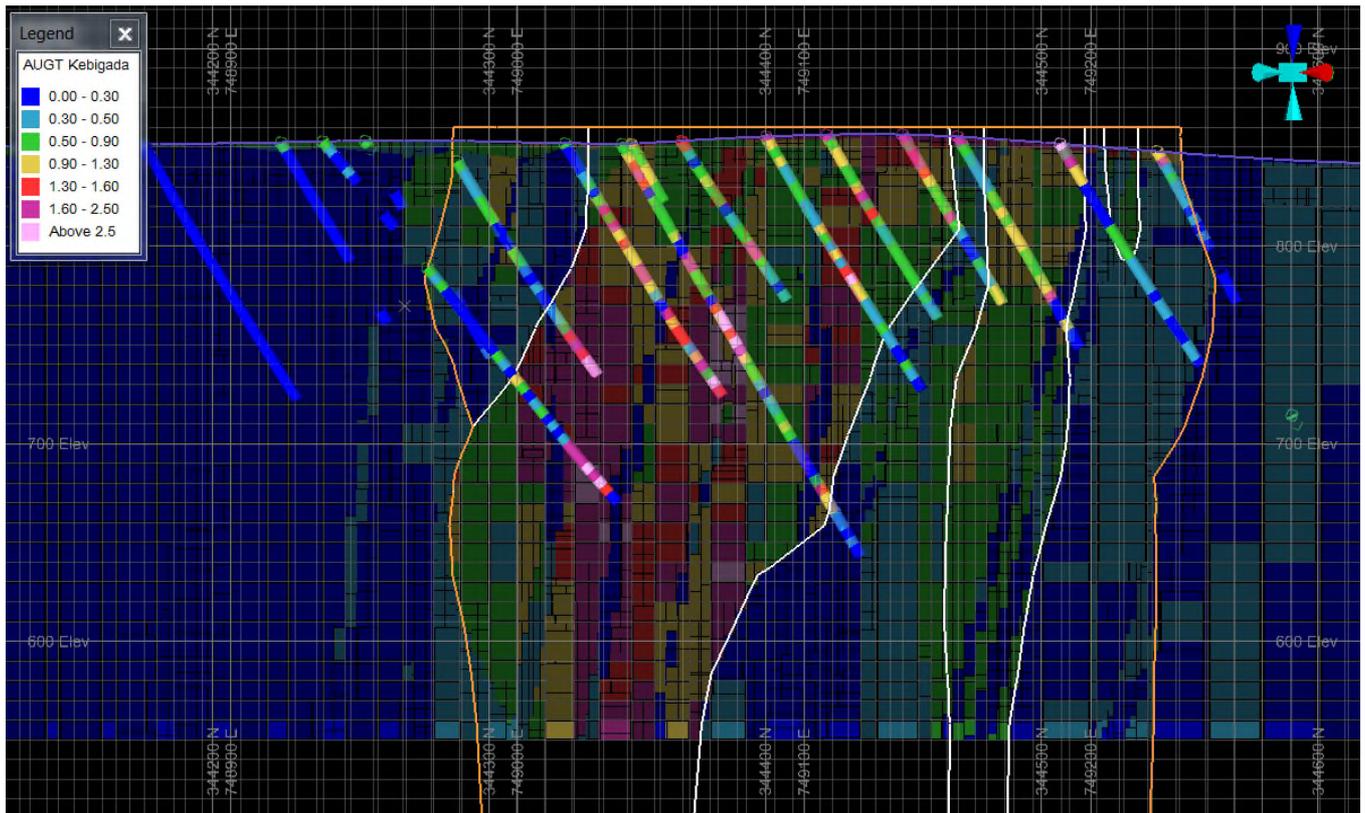
Bulk density measurements were taken using the principle of weight in air versus weight in water. 6,800 density measurements were made on the diamond drillhole cores. The average density of each domain and oxidation state was calculated and incorporated into the block model. Density of 1.64 t/m<sup>3</sup> was

applied to laterite, 1.76 t/m<sup>3</sup> to saprolite and 2.80 t/m<sup>3</sup> to fresh. The laterite and saprolite tonnage estimates from the model were reduced by 5% to account for cavities intersected during drilling. SGS (South Africa) carried out a deportment study which indicated a cyanide leach recovery of >90% (reported in the Company's release dated 9 November 2016). The actual recovery under production conditions is likely to be lower.

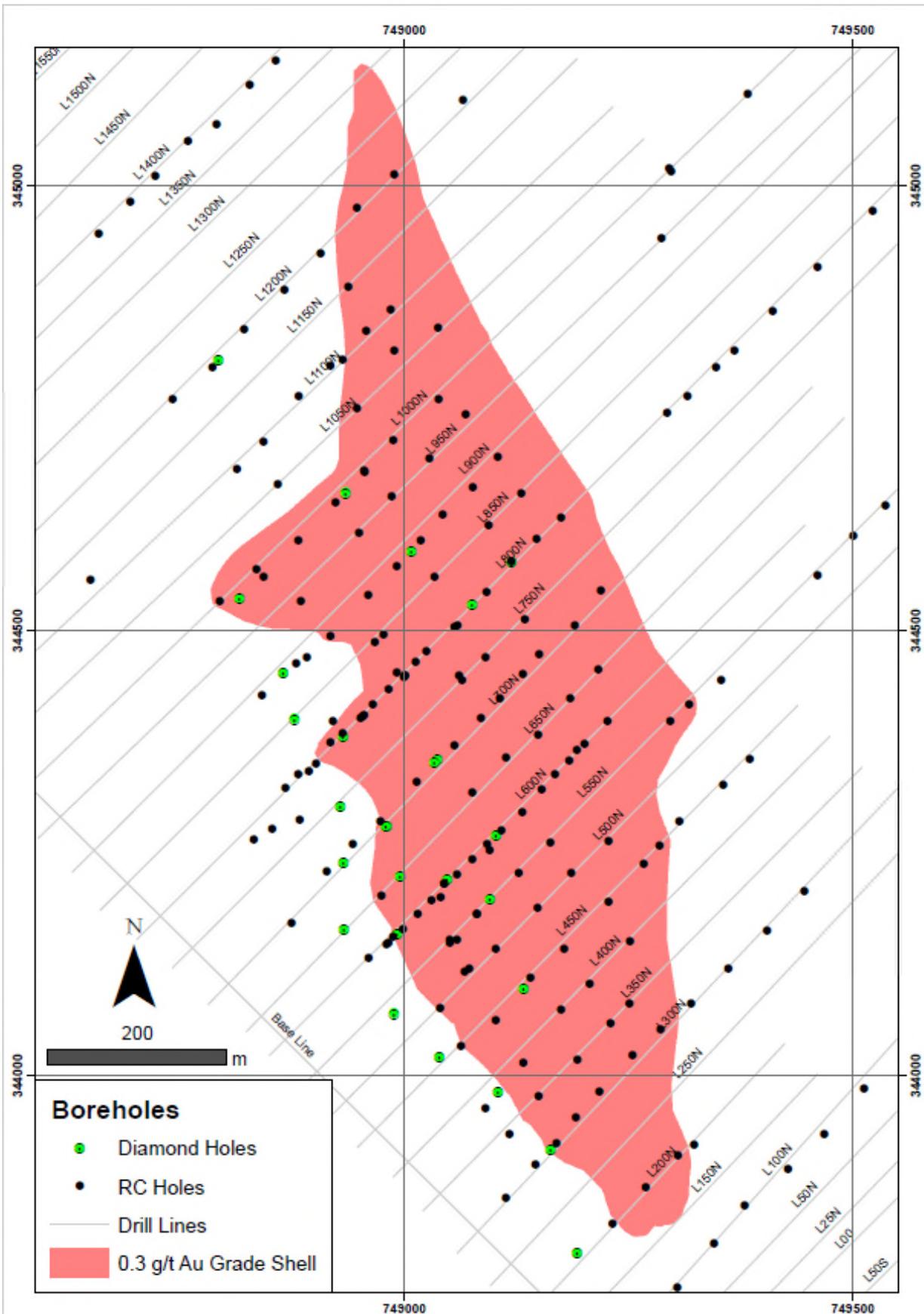
The modifying factors mentioned are purely for the purpose of establishing that there are reasonable prospects for eventual economic extraction for Mineral Resource reporting and should not be misconstrued as modifying factors for the determination of an Ore Reserve.



**Figure 1: Cross section looking north through the Mineral Resource block model and grade shells (white 0.5 g/t and orange 0.3 g/t Au)**



**Figure 2: Cross section looking north through the Mineral Resource block model and grade shells (white 0.5 g/t and orange 0.3 g/t Au)**



**Figure 3: Drillhole collars in relation to the 0.3 g/t Au grade shell that forms the limit of the Mineral Resource**

## **Future Work**

Amani is currently planning a further infill drilling programme over the high grade portion of the Mineral Resource near surface where current Indicated Mineral Resources will be converted to Measured Mineral Resources in preparation for pre-feasibility and feasibility studies. Three HQ diamond holes targeting the western zone, central zone and eastern zone will be drilled for metallurgical purposes. Bulk samples of laterite and saprolite will also be submitted for metallurgical test-work.

The planned 3,500m, shallow scout RC drilling program to follow up on high-grade soil anomalies in the immediate surrounds at Kebigada, will be revised once additional soil geochemical results have been reported. Significant new discoveries will be followed up with further drilling to delineate potential satellite resources which could add materially to the Kebigada Mineral Resource.

A programme of vertical holes is being planned to drill the flat lying structures at Douze Match for resource definition during the year.

Regional soil sampling programmes are near completion over both licences, PE5046 and 5049. The source of newly identified soil anomalies will be investigated with trenching and shallow drilling as follow up to infill soil sampling over anomalous areas.

## **Project Background and Potential – Giro**

The Giro Gold Project comprises two exploitation permits covering a surface area of 497km<sup>2</sup> and lies within the Kilo-Moto Belt, a significant under-explored greenstone belt which hosts Randgold Resources' 17-million ounce Kibali group of deposits, lying within 30km of Giro. Kibali produced 585,946 ounces of gold in 2016 and is targeting production of 610,000 ounces for 2017, confirming a favourable mining environment in the region.

Historically, Belgian colonials mined high grade gold veins and laterite at Giro, Peteku, Douze Match, Mangote and Kai-Kai, all of which lie within an interpreted 30km structural corridor which transgresses both licenses from the SE to the NW. Initial focus was at Giro where Amani's exploration was concentrated on drilling and geochemical sampling in the area mined historically during Belgian rule and in areas currently being mined by artisanal means. Drilling under Amani's >200ppb gold-in-soil anomaly which extends over 2,000m x 900m, defined a significant zone of mineralisation over 1,400m x 400m which is open at depths exceeding 150m. Highly significant diamond and RC drilling results included 97m at 2.56g/t Au from surface; **36m at 6.56g/t Au** from 14m including **14m at 15.15g/t Au** from 15m and **65m at 7.73g/t Au** from 74m including **44m at 10.69g/t Au** from 85m; **47m at 4.13g/t Au** from 25m, including **29m at 5.93g/t Au** from 25m and 38.1m at 2.53g/t Au from 191m including 30.6m at 3.00g/t Au from 198.5m. The Giro Prospect is cross-cut by numerous high-grade ENE-trending structures currently mined by artisanal miners and identified in the diamond drilling. One such vein at Peteku reported **4m at 21.7g/t Au**.

The Company has completed soil sampling programmes for complete coverage of the corridor and has almost completed sampling of the remaining areas of both licences for new discovery or to assist with identifying areas to be dropped off to reduce licence fees. Highly significant soil anomalies were defined at Douze Match and Adoku where shallow scout drilling at Douze Match returned exceptional results of **2m at 196g/t Au** from 12m and **15m at 255.6g/t Au** from 15m, including **3m at 1,260g/t Au** from 15m. Mineralisation at Douze Match is more complicated than expected and Amani is doing follow up work to better understand controls on mineralization.

To the north, Belgian colonials mined two deposits on PE 5049 up to the end of the colonial era in the 1960s. These were the Mangote open pit where historic drilling results included **0.6m at 37g/t Au** and **0.35m at 485g/t Au** and the Kai-Kai underground workings. There is no record of methods used to obtain these results. Only quartz veins were sampled historically by the Belgians although recent diamond

drilling reported a best intersection of **8.91m at 3.09g/t Au** from 78.05m confirming potential for a broader zone of mineralisation surrounding high grade quartz veins. Both deposits are associated with a 1km long soil anomaly.

For more information contact:

Mr YU Qiu-Ming  
Chairman  
Tel: +86 137 0113 3617  
[yqm@amanigold.com](mailto:yqm@amanigold.com)

Peter Taylor  
Investor Relations  
Tel: +61 (0)412 036 231  
[peter@nwrcommunications.com.au](mailto:peter@nwrcommunications.com.au)

Or visit [www.amanigold.com](http://www.amanigold.com)

### **Competent Person's Statement – Mineral Resource Estimate**

The information in this report that relates to the revised Kebabada Mineral Resource estimate is based on, and fairly represents information and supporting documentation prepared by Mr Jeremy Charles Witley (BSc Hons, MSc (Eng.)) who is a geologist with 28 years' experience in base and precious metals exploration and mining as well as Mineral Resource evaluation and reporting. He is a Principal Mineral Resource Consultant for The MSA Group (an independent consulting company), is a member in good standing with the South African Council for Natural Scientific Professions (SACNASP) and is a Fellow of the Geological Society of South Africa (GSSA). Mr Witley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Witley consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

### **Competent Person's Statement – Exploration Results**

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr Klaus Eckhof, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr Eckhof is a director of Amani Gold Limited. Mr Eckhof has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Eckhof consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Giro Gold Project has been previously reported by the Company in compliance with JORC 2012 in various market releases, with the last one being dated 7 August 2017. The Company confirms that it is not aware of any new information or data that materially affects the information included in those earlier market announcements.

### **Forward Looking Statements**

Statements regarding the Company's plans with respect to its mineral properties are forward-looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that the Company will be able to confirm the presence of additional mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.

## JORC TABLE 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (e.g. 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></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 24 NQ size diamond drillholes (DD) and 230 reverse circulation drillholes (RC) were drilled by Amani and its predecessors between December 2013 and May 2017.</li> <li>• Reverse circulation holes were continuously sampled from the top to bottom of the hole by collecting the entire sample from the cyclone at 1 m intervals.</li> <li>• The RC samples were passed through a riffle splitter three times, after which approximately 5 kg was taken as a reference sample and 2 kg was weighed, and labelled for laboratory dispatch. The samples were then crushed and split in an accredited laboratory to produce a 50g charge for fire assay with AA finish.</li> <li>• A booster was used to ensure sample representatively below the water table.</li> <li>• The reverse circulation holes were cleared after every 3 m run by blowing out the hole.</li> <li>• The diamond drillhole cores were split longitudinally in half and the same half was continuously sampled in nominal 1 m intervals. The sample interval was adjusted in order to honour geological contacts. The maximum sample length taken was 2 m.</li> <li>• The core samples, which had an average weight of between approximately 3 and 4 kg, were then crushed and split in an accredited laboratory to produce a 50g charge for fire assay with AA finish.</li> </ul>
<p><i>Drilling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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></li> </ul>	<ul style="list-style-type: none"> <li>• 24 NQ size diamond drillholes and 230 reverse circulation holes were drilled within the zone of interest at Kebigada by Amani and its predecessors between December 2013 and May 2017.</li> <li>• Reverse circulation drilling of holes was with an 11.1 cm diameter hammer</li> <li>• The cores were oriented.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p><i>Drill sample recovery</i></p>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Dust losses occur but were not considered to be excessive.</li> <li>• Whether the RC sample was wet or dry was noted.</li> <li>• The quality of samples was recorded and any cavities noted.</li> <li>• Cores were fitted together and core loss was measured at the drill site. Average core recovery was approximately 92% in the saprolite and 99% in the fresh rock. Saprolite and laterite recoveries averaged approximately 70% for the first four holes (GRDD001 to GRDD004) and improved to greater than 90% on average for the later holes.</li> <li>• There is no discernible relationship between core recovery and the gold grade of the sample.</li> </ul>
<p><i>Logging</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC chip samples were washed and placed in a chip box.</li> <li>• The chips were logged for lithology, weathering state and colour. Cores were logged in detail both structurally and lithologically recording lithology, alteration, weathering, colour, grain size, strength, mineralisation and quartz veining, and orientation of structural features and mineralisation.</li> <li>• Geotechnical logs were completed.</li> <li>• All cores (6,962 m) and RC chips (22,632 m) were logged.</li> <li>• All cores were photographed both wet and dry.</li> </ul>
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The diamond drillhole cores were split longitudinally in half and were continuously sampled in nominal 1 m intervals. The sample interval was adjusted in order to honour geological contacts. The highly weathered saprolitic zone was split using a bladed instrument until the core had sufficient strength to withstand cutting using a diamond saw.</li> <li>• The RC samples were passed through a riffle splitter three times after which approximately 5 kg was taken as a reference sample and 2 kg was weighed, and labelled for laboratory dispatch.</li> <li>• The final sample was crushed to &gt;70% of the sample passing at less than 2 mm. 1,000 g of sample was split from the crushed sample and pulverised until 70% of the material could pass a 75 µm sieve. From this, a 50 g sample was obtained for fire assay.</li> <li>• RC samples taken from the cyclone were generally dry. In rare cases where the samples were wet, they were sun dried prior to splitting.</li> <li>• Field duplicates were taken of the RC samples every 30<sup>th</sup> sample.</li> <li>• The RC sample size is considered appropriate for the grain size of the material, the RC chips being generally fine.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The laboratory used 50g of sample and analysed samples using Fire Assay with an AA finish (accredited method). This technique is considered an appropriate method to evaluate total gold content of the samples.</li> <li>• Two primary laboratories were used, ALS Johannesburg and SGS Mwanza. Both laboratories are ISO17025 accredited by SANAS. ALS was used as the primary laboratory in the earlier part of the programme.</li> <li>• Where the Au grade is above the 100g/t detection limit, the sample was re-assayed using Fire Assay gravitational method (non-accredited method). In addition to the laboratory's internal QAQC procedure, every 10th field sample comprised a blank sample, duplicate or certified reference material sample.</li> <li>• Contamination in excess of ten times detection limit (&gt;0.10 g/t) was noted for three out of 1,078 blanks submitted.</li> <li>• 23 different CRMs were used over the length of the exploration programme. A total of 1,114 CRM samples were assayed. Failures were rare and no significant concerns were noted. ALS assays tended to be slightly lower than the accepted value of the CRM and SGS assays tended to be slightly higher, both being largely within the tolerance limits (three standard deviations).</li> <li>• A total of 1,201 RC field duplicates were submitted. 80% of the duplicates returned assays with an absolute percentage difference of less than 40% and 60% of the duplicates returned assays with an absolute percentage difference of less than 20%. Significant improvements were noted in the second half of the campaign with 90% of the duplicates returning assays with an absolute percentage difference of less than 40% and 80% of the duplicates returning assays with an absolute percentage difference of less than 20%.</li> <li>• SGS acted as the "umpire laboratory" in the earlier part of the programme and ALS later on. 601 samples were assayed by SGS that were originally assayed by ALS and 600 samples were assayed by ALS that were originally assayed by SGS. A slight tendency for SGS to return higher grades than ALS was noted (approximately 4% bias). However the CRM assays indicated that both sets of assays were within tolerance.</li> <li>• Overall the level of precision, accuracy and contamination is acceptable for the style of mineralisation at Kebigada.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Log and sampling data was entered into spreadsheets, and then checked for inconsistencies by the Exploration Manager and stored in an Access database.</li> <li>• No holes were twinned.</li> <li>• Holes were logged by hand on printed log sheets. Logging was carried out according to standardised header, lithological and structural information. Data were then input into Microsoft Excel spreadsheets which were then emailed to the Database Manager for input into a Microsoft Access database. Data were interrogated by the Database Manager and all discrepancies were communicated and resolved with field teams to ensure only properly verified data were stored in the Access database.</li> </ul>
<p>Location of data points</p>	<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>• Topography was modelled using Leapfrog Geo using the accurately surveyed (DGPS) drillhole collars.</li> <li>• The area is flat to gently undulating and the topographic control is considered acceptable.</li> <li>• Drillhole collars were recorded with a handheld Garmin GPS with better than 10 m accuracy. Drillhole positions were laid out using tape and compass.</li> <li>• The drillhole collars were also surveyed using a DGPS with centimetre accuracy.</li> <li>• 100 of the 254 holes drilled were not surveyed using DGPS. The handheld X and Y coordinates were accepted and the elevation was derived by projecting to the modelled topographic surface.</li> <li>• Coordinates are relative to the WGS84-UTM35N datum.</li> <li>• All of the DD holes were surveyed down-the-hole using a Reflex instrument at 30 m intervals. 142 out of 230 RC holes were surveyed down-the-hole. The inclination and direction of the drillhole at the set-up position was taken as the down-hole-survey for the 88 holes that do not have surveys. The holes that do not have surveys are of variable lengths to a maximum of 120 m.</li> </ul>
<p>Data spacing and distribution</p>	<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>• The holes were drilled on lines spaced approximately 50 m apart with holes spaced between approximately 25 m and 100 m apart along the drilling lines.</li> <li>• In the Competent Persons opinion, the spacing is sufficient to establish geological and grade continuity consistent with Inferred Mineral Resources and in some areas Indicated Mineral Resources.</li> <li>• Samples were composited to 2 m intervals for grade estimation.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling was inclined at between 50 and 60 degrees approximately to the northeast (043°). Three holes were drilled in the opposite direction. The northeast direction was selected as it is perpendicular to the strike of the sub-vertically dipping Kebigada Shear Zone. Gold mineralisation within the shear trends between north and northwest and is sub-vertical.</li> <li>• No material sampling bias due to drilling direction is considered to exist.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples were collected under strict supervision of the Senior Exploration Geologist. Bagged samples were then labelled and sealed and stored on site in a locked dwelling for transport to the laboratory. Samples were transported to the laboratory in a sealed vehicle under supervision of a contracted logistics company.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• The sampling techniques and data management processes were reviewed by the Competent Person during the site visit.</li> <li>• The CP considers that the exploration work conducted by Amani was carried out using appropriate techniques for the style of mineralisation at Kebigada, and that the resulting database is suitable for Mineral Resource estimation.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the previous section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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 project comprises two Exploitation Permits (Permis d'Exploitation), PE5046 and PE5049. These are owned by a joint venture company Giro Goldfields sarl formed between Amani Consulting sarl (65%) and Société Minière de Kilo-Moto sa (SOKIMO) (35%), both DRC registered entities. Amani Gold holds 85% of Amani Consulting. Amani reports that tenure is in good standing. This has not been verified by MSA.</li> <li>• MSA is unaware of any impediments to the licence to operate.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The licensed area has not been systematically explored since the end of Belgian colonial rule in 1960.</li> <li>Two field visits were conducted in the area, the first in 2010 by the “Office des Mines d’or de Kilo-Moto” (OKIMO), and the second in December 2011 by Universal Consulting SPRL on behalf of PANEX.</li> <li>Following a review of historical and previous exploration data, PANEX Resources Inc. conducted a first RC drilling campaign at the Giro prospect between December 2013 and February 2014, completing 57 holes for 2,888m.</li> </ul>
<p><i>Geology</i></p>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The geological setting is comprised mostly of volcano-sedimentary rocks from the Kibalian complex, with multiple granites and granitoid intrusions. A network of faults seems to have been reactivated at different intervals.</li> <li>The main lithologies hosting the mineralisation are saprolite, quartz veins and stringers and silicified volcano-sediments. Mineralisation is associated with quartz veining and silicification of host rocks along a major NW trending shear zone. Generally higher gold grades are associated with greater percentages of sulphide (pyrite) and silicification.</li> <li>The mineralisation is interpreted to be concentrated within a north-northwest trending dilation jog structure within the shear zone and is approximately vertically dipping.</li> <li>The defined Mineral Resource occurs over a strike length of approximately 1.3 km and is in the order of 350 m wide in the wider central portion tapering off towards the north and south.</li> <li>Faulting may occur that off-sets the mineralisation.</li> <li>The mineralisation is intruded by largely barren, narrow (5 to 10 m) sub-vertical dykes.</li> <li>The deposit is capped by laterite generally between 5 m and 10 m thick. This is underlain by a saprolite layer that is normally between 10 m and 30 m thick. The laterite has been extensively worked by artisanal miners in places and limited mining was carried out in the Belgian colonial era. The laterite and saprolite tonnage estimates were reduced by 5% to account for cavities intersected during drilling.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</i>	<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> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• This information is excluded as the exploration results have been superseded by a Mineral Resource estimate. It is noted however that all drill results incorporated in the Mineral Resource estimate have been publicly reported by Amani Gold previously.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples were composited to 2 m intervals using length weighting.</li> <li>• Top-cuts were applied to the 2 m composites during estimation. Within the 0.30 to 0.50 g/t Au grade shell a top cut of 17.4 g/t Au was applied. Within the &gt;0.50 g/t Au grade shell a top cut of 25.3 g/t Au was applied. For the laterite within the 0.30 to 0.50 g/t Au grade shell a top cut of 5.9 g/t Au was applied and 6.5 g/t Au for the &gt;0.50 g/t Au grade shell.</li> <li>• Top cuts were determined based on breaks in log probability plots and histograms.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <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 (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• No relationship between mineralisation width and gold grade was found.</li> <li>• Drilling was inclined at between 50 and 60 degrees approximately to the northeast (43°). Three holes were drilled in the opposite direction. The northeast direction was selected as it is perpendicular to the strike of the sub-vertically dipping Kebigada Shear Zone. Gold mineralisation within the shear trends between north and northwest and is sub-vertical.</li> </ul>
<i>Diagrams</i>	<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>• This information is excluded as the exploration results have been superseded by a Mineral Resource estimate.</li> </ul>
<i>Balanced reporting</i>	<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>• This information is excluded as the exploration results have been superseded by a Mineral Resource estimate.</li> </ul>

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<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>A resistivity survey has highlighted faults that may offset the mineralisation. These are difficult to interpret as the mineralisation occurs in wide zones not constrained by lithology.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. 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>Deep diamond drilling is planned to identify high grade zones at depth that may be amenable to underground mining.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The grade data were electronically transferred into the Access database.</li> <li>The data were validated during import into Datamine RM software and subsequent de-surveying. Procedures included: <ul style="list-style-type: none"> <li>checks for overlaps and gaps in the logging and sampling data,</li> <li>position of collars relative to their planned survey line and topographic survey,</li> <li>examination of the assay and density data in order to ascertain whether they were within expected ranges,</li> <li>interrogation of high grade values and their position relative to their neighbours,</li> <li>examining the sample assay, collar survey, down-hole survey and geology data to ensure that the data were complete for all of the drillholes.</li> </ul> </li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person conducted a site inspection in November 2016 in order to inspect the cores, review the exploration processes and further his understanding of the Kebabada mineralisation. The CP considers that the exploration work conducted by Amani was carried out using appropriate techniques for the style of mineralisation at Kebabada.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The quantity and spacing of drilling is sufficient to define the broad zone of mineralisation to a reasonable level of confidence.</li> <li>• Structural measurements of pyrite and chalcopyrite laminae taken from oriented diamond drillhole core confirm the steeply dipping orientation.</li> <li>• It is possible that other trends may occur that have not been identified by the current drilling grid that could result in more constrained high grade zones.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The defined Mineral Resource occurs over a strike length of approximately 1.3 km and is in the order of 350 m wide in the wider central portion tapering off towards the north and south. The depth extent is a function of the drillhole coverage and the depth of the USD1500/oz. Au pit shell, with the Mineral Resource currently defined from surface to a maximum of 300 m below surface, the mineralisation being open at depth.</li> </ul>

*Estimation and modelling techniques*

- *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*
  - *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
  - *The assumptions made regarding recovery of by-products.*
  - *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*
  - *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
  - *Any assumptions behind modelling of selective mining units.*
  - *Any assumptions about correlation between variables.*
  - *Description of how the geological interpretation was used to control the resource estimates.*
  - *Discussion of basis for using or not using grade cutting or capping.*
  - *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
- Datamine RM was used to model the volumes and estimate grades.
  - Barren dykes, base of laterite and base of saprolite were modelled using Leapfrog Geo.
  - Samples were composited to 2 m intervals using length weighting.
  - A 0.3 g/t Au and a 0.5 g/t Au grade shell were defined, guided by the results of an indicator kriging exercise. Strings were digitised on 25 m horizontal sections and linked to form the wireframes.
  - The grade shells were filled with blocks of 20 mN by 20 mE by 20 mRL and coded according to grade domain, oxidation state (laterite, saprolite, fresh) and whether dyke or volcano-sedimentary rock.
  - The parent block size is two fifths of the drillhole spacing.
  - The blocks were sub-celled to a minimum of 4 mN by 4 mE by 1 mRL in order to accurately fill the geological model.
  - The laterite was estimated separately to the saprolite-fresh rock due to near surface concentration and lateral grade spreading in the laterite unit.
  - The saprolite and fresh rock domains were combined after statistical analysis confirmed no significant grade difference between them.
  - The mineralisation within the grade shells was estimated using hard boundaries and the dykes were estimated separately.
  - Top-cuts were applied to the 2 m composites during estimation. Within the 0.30 to 0.50 g/t Au grade shell a top cut of 17.4 g/t Au was applied. Within the >0.50 g/t Au grade shell a top cut of 25.3 g/t Au was applied. For the laterite within the 0.30 to 0.50 g/t Au grade shell a top cut of 5.9 g/t Au was applied, and 6.5 g/t Au for the >0.50 g/t Au grade shell.
  - The grades were estimated using ordinary kriging. Numerous iterations were performed to assess the impact of block size and estimation parameters.
  - Search ellipses were based on the range of the variogram models.
  - The search ellipse for the laterite estimate was aligned in a horizontal plane with a search of 118 m at 330°, 63 m at 240° and 9 m vertically. For the saprolite-fresh rock domain the search ellipse was aligned vertically with a search of 47 m at 330°, 10 m at 240° and 70 m vertically. Between 12 and 32 composites were used to estimate a block for the saprolite-fresh domain and between 10 and 24 samples for the laterite. Should enough samples not be collected in the first search then the search was expanded 1.5 times and finally 7 times to ensure all model blocks were estimated. A maximum of 11 composites were allowed from a single drillhole for the saprolite-fresh rock domain.
  - No bi-products or deleterious elements were estimated.
  - A recoverable resource estimate was not carried out.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Estimates were validated using sectional validation plots, visual checks of the drillhole grades against the model and statistical comparisons.</li> </ul>
Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages are estimated on a dry basis.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>A USD1500 / gold ounce pit shell was modelled. This indicated a minimum cut-off grade of 0.60 g/t Au. The Mineral Resource was reported at a base case grade of 0.90 g/t Au.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>It is assumed that the Mineral Resource will be extracted using open-pit mining.</li> <li>A USD1500 / gold ounce pit shell was modelled. A 56° slope angle was used for fresh rock and 36° for laterite. Cost per tonne of USD30.50 and 87.8% plant recovery was assumed.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>SGS (South Africa) carried out a deportment study which indicated a cyanide leach recovery of &gt;90%. The actual recovery under production conditions is likely to be lower.</li> </ul>
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No environmental studies have been carried out.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>• <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li>• <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Density measurements were taken using the principle of weight in air versus weight in water.</li> <li>• 6,800 density measurements were made on the drillhole cores.</li> <li>• The average density of each domain and oxidation state was calculated and incorporated into the block model. Density of 1.64 t/m<sup>3</sup> was applied to laterite, 1.76 t/m<sup>3</sup> to saprolite and 2.80 t/m<sup>3</sup> to fresh.</li> <li>• The laterite and saprolite tonnage estimates from the model were reduced by 5% to account for cavities intersected during drilling.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The data are considered to be reliable having been collected over recent years using acceptable industry practice.</li> <li>• The Mineral Resource was classified as Indicated where cohesive areas of the model occur within 50 m by 50 m grid. The majority of the Indicated estimates are informed by samples collected within the variogram range. The Indicated Resources extend to 110 m below surface.</li> <li>• The Mineral Resource was classified as Inferred within the remainder of the 50 m spaced section lines within the 0.30 g/t grade shell and the pit shell.</li> <li>• The Mineral Resource extends to 300 m below surface, with continuation of relatively high grade mineralisation at depth being confirmed by diamond drillholes.</li> <li>• The Mineral Resource was extrapolated 25 m along strike away from the 50 m spaced lines as the mineralisation appears to degrade to the north and south. Where drilling did not continue to the minimum elevation of 560 mRL in the area, the Mineral Resource was extrapolated 50 m below the deepest intersection on the section line.</li> <li>• Sparse mineralised drillhole intersections deeper than 560 mRL demonstrate that the mineralisation continues at depth.</li> <li>• The classification reflects the Competent Person's view of the deposit.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No reviews or audits of the estimates have been completed outside of MSA's internal processes.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p><i>Discussion of relative accuracy/confidence</i></p>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Indicated estimates are largely within the variogram range and accuracy is expected to be consistent with the classification applied. Confidence is sufficient to allow application of Modifying Factors within a technical and economic study.</li> <li>• Caution should be placed on the Inferred estimates as they are based on limited data and are not suitable to support technical and economic studies at a Pre-Feasibility level.</li> <li>• The block model estimates reported as Inferred are suitable for use in high level technical and economic studies such as a Concept Study.</li> <li>• Recoverable resource estimates were not carried out.</li> </ul>