

24 September 2015

## Siana Gold Project – Open Pit Mining Review and Reserve Update

### Key Points

#### **Siana Open Pit**

- Detailed Technical Study of open pit mining strategy completed, including independent geotechnical assessment.
- This has enabled the development of a strategy for the Siana open pit based on a Probable Ore Reserve to deliver ~181,000 recovered ounces from 1 July 2015 by adopting a revised staged cut-back strategy.
- The updated mining strategy, which includes modified pit wall angles to mitigate geotechnical risks, incorporates mining experience gained during the first two years of mining at Siana, updated cost structures and a more advanced understanding of the geotechnical characteristics of the pit.
- The estimated all-in sustaining cost per ounce is in the range of US\$740-US\$790 over the revised life of the open pit.

#### **Resource and Reserve Update and Impairment**

- Updated JORC 2012 compliant Mineral Resources and Ore Reserves completed for the Siana open pit:
  - JORC 2012 Indicated and Inferred Open Pit Mineral Resource of 5.8 Mt grading 2.6 g/t gold for 490,000 ounces
  - JORC 2012 Probable Ore Reserve estimate of 1.9 Mt grading 3.5 g/t gold for 181,000 ounces recovered
- Due to the implementation of the revised open pit mining strategy, the Company has elected to remove 74,000 ounces from its last reported open pit reserves. The Company will seek to recover a portion of these ounces in the underground mining phase of the operation.
- Based on a detailed financial model prepared following completion of the revised open pit mining strategy and Underground Concept Study (see below), Red 5 expects to incur an impairment expense in the carrying value of mine properties and development in its 2015 financial statements in the range of \$50-60 million.

#### **Operations Update and Outlook**

- The strong operational performance of the Siana Gold Project (see ASX Update – 25 August 2015) has continued with 6,025oz of gold recovered for the month of August 2015 (4,916oz recovered for July 2015), the highest gold recovered in a single month to date.
  - The Company now expects to recover over 16,000oz of gold in the September 2015 Quarter.
  - Red 5 has increased its guidance for the 2016 financial year to 50-60,000 ounces from ~40,000 ounces.
  - A new Underground Concept Study completed by independent consultants, Mining One Pty Ltd, highlights the potential to extract the resources below the -130RL level and will form the basis of additional studies targeting the development of a future long-term underground mining operation at Siana. As stated above, this will include recovering as many of the ounces previously removed from the former open pit reserve as possible.
- The Company currently expects to commence underground development activities in the second half of 2016 calendar year, funded from internal cash resources generated from the open pit.
- The current cash balance is ~A\$12 million.

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## OVERVIEW

Red 5 Limited (ASX: RED) advises that it has completed a Technical Study of its mining strategy for the remaining life of the open pit operation at the Siana Gold Project, together with updated Mineral Resource and Ore Reserve estimates as at 30 June 2015.

The revised open pit mining schedule has been developed with the assistance of specialist independent consultants and reflects mining experience gained during the first two years of mining at Siana, updated cost structures and a greater understanding of the geotechnical characteristics of the open pit.

The revised mining strategy is designed to optimise the extraction of open pit Ore Reserves over its planned remaining life up to December 2017 in order to maximise cash flows, while at the same time mitigating as far as possible geotechnical risks and striving to preserve the integrity and safety of the open pit operation.

The Red 5 Board has approved the implementation of the revised open pit mining strategy detailed below, which is forecast to recover ~181,000 recovered ounces from 1 July 2015 of open pit mining via a progressively staged cut-back of the East pit wall to allow the base of the open pit to be mined to a final depth of ~180 metres below surface.

As a result of the implementation of this open pit mine plan, the Company has elected to remove 74,000 ounces from the Ore Reserve category in its updated Mineral Resource and Ore Reserve inventory as at 30 June 2015, which is also published as part of this report.

Red 5 expects to incur an impairment charge in its 2015 financial statements in the range of \$50-60 million. The final impairment expense will be dependent on completion of the financial statements for the 2015 financial year and is subject to audit by the Company's auditors. The impairment expense is a non-cash item and does not have any impact on cash flow and will not have any impact on operations.

Further details on the impairment expense will be provided in the Company's full year financial statements to be released by 30 September 2015. In arriving at this conclusion, management considered the following in the impairment testing model:

- Independent geotechnical review and assessment of the Siana open pit;
- Independent mining assessment of the open pit recoverable ounces;
- Independent mining review of the underground mining plan;
- Baseline gold price and FX rates sourced from forecasts by a consensus of reputable financial institutions; and
- An independently reviewed WACC discount rate of 12.2 %.

### Open Pit Mining Strategy – Technical Study Outcomes

As part of an ongoing geotechnical assessment of the open pit mining operations at the Siana Gold Project and the material movement on the East pit wall in July 2015, Red 5 has completed an extensive Technical Study to determine the optimal mining schedule for the remainder of the open pit Ore Reserves. The key elements of the review included:

- Hydrological review;
- Geotechnical review;
- Open pit mine planning and mine schedule; and
- Review of existing open pit resources and further evaluation of underground resources.

The key objective of this review is to maximise the economic extraction of ounces from the open pit, while giving priority to the safety and integrity of the open pit mining operation.

The review took into consideration a number of significant factors which have changed since the original 2009 Siana Feasibility Study, at a time when the historical pit was under water. These factors include practical mining experience, updated cost structures and advanced understanding of the geotechnical characteristics of the open pit.

As part of this review, the Company commissioned an independent geotechnical review of the Siana open pit mining operation and the proposed open pit mine design and schedule by Perth-based consultants in mining geomechanics, Peter O'Bryan & Associates.

The analysis and review conducted by Peter O'Bryan & Associates included geotechnical assessment of the recent East pit wall material movement, as well as the mining schedule developed by Red 5 for a staged cut-back of the East pit wall aiming to maximise extraction by more economic open pit methods.

The original Siana open pit designs from the 2009 Feasibility Study required and relied on a significant draw-down of the groundwater table to prevent transient pressures acting in the pit walls. The recommended design parameters, based on 18m high batters and 6m wide berms, specified 60 degree batter angles for the East pit wall with the major pre-requisite being that all wall rocks needed to be de-pressurised to >100m behind the wall positions and maintained in that condition.

However, practical experience from actual mining operations has demonstrated that these pre-requisite conditions cannot be consistently maintained.

The report from Peter O'Bryan & Associates confirms this, stating that: "It is our opinion that in the Siana setting it is simply unreasonable to assume or expect that this condition can be practicably reached and maintained."

The key recommendations from the report are that a substantial reduction of overall slope angles needs to be adopted in conjunction with continued dewatering and de-pressurisation and a staged approach to mining in the East pit wall.

After taking into consideration the recommendations of the report from Peter O'Bryan & Associates and its own internal review, the Board of Red 5 has resolved to implement an open pit mining strategy involving a staged cut-back strategy for the East pit wall combined with comprehensive slope stability monitoring and increased surface drainage, pit de-watering and de-watering and de-pressurisation of the slope materials.

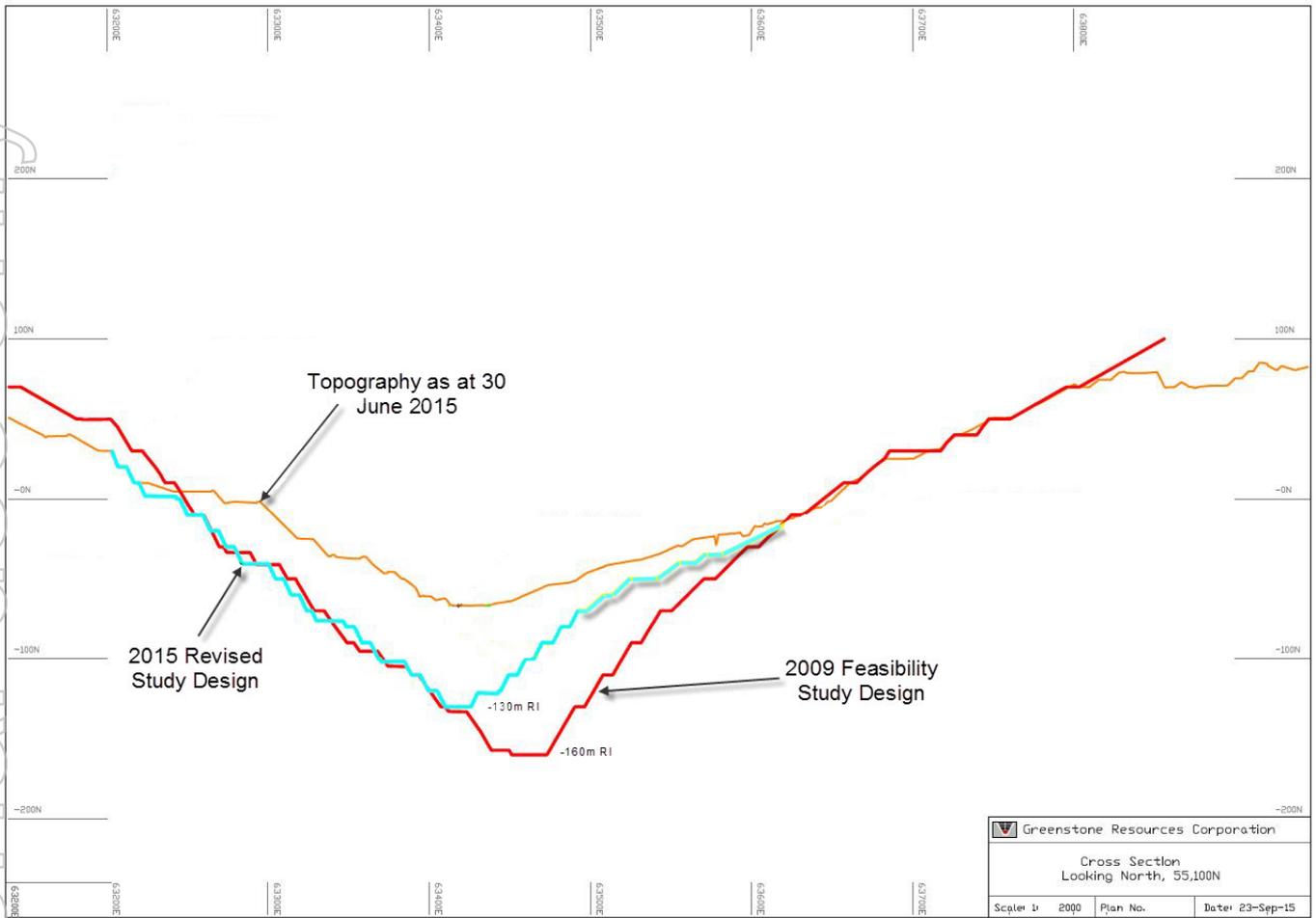
### **Open Pit Mining Schedule**

The Company's independent consulting engineers, Mining One Pty Ltd and Peter O'Bryan & Associates, have provided guidance in the redesign of the open pit. Mining One has also reviewed the associated mining schedule and has used that schedule to estimate the Ore Reserves. Following these independent reviews and technical audits, as well as a review by the Board, the Directors of Red 5 have endorsed the adoption of this mining strategy.

The key components of this mining strategy include:

- Pit redesign based on geotechnical guidelines provided by Peter O'Bryan and Associates;
- Staged cut-back of the East and west pit walls, Stages 2, 3 and 4;
- Modified pit wall slope angles of 25° to 35°;
- Ongoing monitoring;
- Mine to ultimate depth of -130RL;
- Implementation of radar monitoring of pit walls; and
- Ongoing dewatering.

The cut-back strategy and pit wall angles to be adopted as part of this strategy are depicted in the cross-section below, which compares the revised mining strategy with the 2009 feasibility study design:



**Figure 1 – Outlining the 2009 Feasibility Design, 2015 Revised Study Design and topography as at 30 June 2015**

The 2016 financial year forecast production profile from the open pit under this plan is shown in the table below:

Quarter	Estimated Au oz recovered
Quarter 1	16,000+
Quarter 2	7-10,000
Quarter 3	7-10,000
Quarter 4	20-23,000
<b>Total 2015/16 year</b>	<b>50-60,000</b>

The implementation of the revised open pit mining strategy will deliver the following headline outcomes:

<b>Summary, from 1 July 2015</b>	
Total Ore Tonnes	1.90 million
Ore Grade	3.5 g/t Au
Strip ratio	~4.5:1
Recovered Ounces (Au)	181,000oz
Cash Cost per Ounce (US\$/oz)	\$470-520/oz
All-in Sustaining Cost per Ounce (US\$/oz)	\$740-790/oz

## Siana Gold Project Mineral Resource and Ore Reserve Update

Red 5 has completed a review and update to its Mineral Resource and Ore Reserve estimates for the year to 30 June 2015. The total JORC 2012 Indicated and Inferred Mineral Resources for the Siana Open Pit Mineral Resource is now estimated at 5.8 million tonnes at 2.6 g/t gold for 490,000 contained ounces.

The updated Siana Open Pit Mineral Resource inventory as at 30 June 2015 is set out below:

Siana Open Pit Resource update as at 30 June 2015							
Estimate	Classification	Cut Off Au (g/t)	Tonnes (Mt)	Au g/t	Ag g/t	Au (koz)	Ag (koz)
As at 30 Jun 2015 JORC 2012	Indicated	0.7	4.9	2.8	7.1	436	1,117
	Inferred	0.7	0.9	1.8	2.0	54	60
	<b>Total</b>	<b>0.7</b>	<b>5.8</b>	<b>2.6</b>	<b>6.3</b>	<b>490</b>	<b>1,177</b>

### Notes on Mineral Resources

1. Mineral Resources are quoted as inclusive of Ore Reserve.
2. Discrepancy in summation may occur due to rounding.
3. Resource for this model has only been reported above the -165m RL (or 215 metres below current surface).
4. The current Open Pit marginal cut off is 0.7 g/t gold.
5. The figures take into account mining depletion as at 30 June 2015.
6. Figures do not include closing ROM stocks of 87kt @ 1.8 g/t gold and 5.5 g/t silver as at 30 June 2015.
7. The Lithology Defined Resource Model is best suited for bulk mining evaluation and can be utilised below the -165m RL if this choice of method is elected. Note current JORC 2004 Resource is based on different model design for narrow vein mining evaluation.

The changes in the 2015 Mineral Resource are predominately due to:

- The updated resource has been based on the additional drilling since 2011 resource update and incorporates the historical open pit drilling, grade control sampling and mapping since the initial start of mining in 2010; and
- The Open Pit resource was previously reported within a pit shell based on marginal costings at the time. For 2015, the resource is reported on all material above -165RL, therefore additional material outside the 2014 pit-shell have been included. The updated open pit estimation is based on the resource reported above the -165RL.

Total Probable Ore Reserve for the Siana Open Pit is now estimated at 1.9 million tonnes at 3.5 g/t gold for 181,000oz of recovered gold. The updated Siana Open Pit Ore Reserve as at 30 June 2015 is set out below:

Siana Open Pit Reserve update as at 30 June 2015							
Estimate	Classification	Cut Off Au (g/t)	Tonnes (Mt)	Au g/t	Ag g/t	Recovered Au (koz)	Recovered Ag (koz)
As at 30 June 2015 JORC 2012	Probable	0.7	1.9	3.5	8.2	181	224
	<b>Total</b>	<b>0.7</b>	<b>1.9</b>	<b>3.5</b>	<b>8.2</b>	<b>181</b>	<b>224</b>

### Notes on Mineral Reserves

1. Discrepancy in summation may occur due to rounding.
2. Within the resource block model a 15% upgrade factor on gold values above 1.2 g/t has been applied. Actual mill reconciliation is closer to 25%. As a result, the variance between the upgrade factor and mill reconciliation has been used as a de facto dilution factor. A mining recovery of 100% has been used.
3. Gold price of US\$1200 /oz and silver price of US\$15 / oz were used, along with a PHP:USD exchange rate of 47:1.
4. Processing recoveries of 85% for gold and 45% for silver were used.
5. No Inferred Resources have been used in the derivation of the Ore Reserve estimate.
6. The above open pit Ore Reserve Estimate has been prepared by Mark Van Leuven, Principal Mining Engineer of Mining One Pty Ltd. He is a Chartered Professional and Fellow of The AusIMM and has the relevant experience to act as the Competent Person under the JORC Code for this Ore Reserve estimate.

### **Future Development Strategy – Siana Underground Concept Study**

Red 5 commissioned underground mining consultants Mining One Pty Ltd to undertake a detailed Underground Concept Study and technical review of previous work assessing the Siana underground resource. The purpose of the Concept Study was to provide an updated evaluation of the mine-ability of the resource beneath the proposed final open pit.

This study represents a comprehensive update of the underground mining component of the original 2009 Siana Gold Project Feasibility Study. It should be noted that the Concept Study included both Indicated and Inferred material in the technical and economic assessment of the resource. Consequently, the results of the study cannot be used as the basis of a JORC 2012 Reserve declaration. However, the results of the Concept Study did validate the previous JORC 2004 Siana underground Reserve declaration.

Mining One found that the current projected metal price, estimated cost of mining and proposed mine plan are not likely to have a significant net material effect on the current JORC 2004 underground Reserve declaration.

Mining One has undertaken a detailed review of the mining methods adopted in previous studies. The updated mine plan is based on the use of a conservative short up-hole retreat mining method with cemented paste-fill for the majority of the orebody. Previous studies (including the 2009 Feasibility Study) proposed mining of the underground resource using a cut-and-fill method with road headers.

A geotechnical assessment of the proposed mining method and tunnel development was also conducted as part of the Concept Study. Although a cut-and-fill method using road headers is technically viable, Mining One believes there are significant advantages in the up-hole retreat mining method using conventional jumbo drill and blast for tunnel development and stoping.

The Underground Concept Study has recommended that further work be undertaken to upgrade the existing JORC 2004 compliant underground Reserve to JORC 2012 status. This would involve developing a feasibility level study and associated underground mine plan.

### **Operations Update**

Further to the ASX Announcement of 25 August 2015 (*Siana Gold Project – Operations Update*), the Company advises that the strong operational performance of the Siana Gold Project has continued with a record 6,025 ounces of gold recovered for the month of August, from processing 68,387 tonnes of ore at an estimated 88% recovery.

Together with the 4,916 ounces recovered for July, the total recovered for the Quarter to the end August 2015 is 10,941 ounces. The Company now expects to recover over 16,000oz of gold in the September 2015 Quarter, exceeding previous guidance of 11-13,000 ounces.

The Company has also updated its production guidance for the 2016 financial year to ~50-60,000 ounces from ~40,000 ounces.

In other developments, the Company has continued to make excellent progress with its response to the movement of material from the Eastern pit wall into the open pit (see ASX Announcement – 14 July 2015). Removal of the sloughed material is ahead of schedule with approximately 70 per cent of the material now removed.

Re-siting of the perimeter ring drain on the Eastern side of the open pit is also advancing well, now estimated to be 60 per cent complete.

Six diamond holes have now been completed – two more than initially envisaged – as part of the geotechnical drilling to gain further understanding of the rock lithology and material strength in this area. Weak mineralisation and alteration has been intersected in hole GT3 (SMDD158). Following completion of geotechnical assessment, the core has now been dispatched for assaying with results expected in the coming weeks.

The Company currently expects to manage funding requirements from internal cash resources, which are currently ~A\$12 million.

### **Exploration**

The Company has continued work towards calculating a JORC 2012 Mineral Resource for the Mapawa LSY deposit, located approximately 20km north of Siana. The maiden JORC 2012 Resource is expected to be completed in October 2015 and will provide the foundation for a Scoping Study to be undertaken to evaluate development options for this strategic deposit, which could provide a future source of ore feed to the Siana processing plant.

Exploration plans and preparations have also progressed on identified priority exploration targets within the Company's highly prospective tenement holding, which are seen as important near-mine and regional growth opportunities.

### **Management Comment**

Red 5's Managing Director, Mr Mark Williams, said the completion of the open pit mining review was an important milestone for the Company, mapping out a plan for the remainder of the open pit phase of operations and providing a foundation to assess the longer term future of the Siana Gold Project via a potential future underground mine.

"The key objective of this review is to maximise the economic extraction of open pit ounces from the open pit, while giving priority to the safety and integrity of the open pit mining operation," he said. "I believe the mine plan we have now developed, which has been independently reviewed and assessed by a number of different specialists, strikes the right balance and sets up a solid platform for the Company.

"The implementation of this mining strategy and revised cut-back plan will result in an impairment of \$50-60 million being recorded in our 2015 financial accounts. The Board has taken a view that, while regrettable, this is a prudent and responsible measure which brings the Company's balance sheet into line with the expected production outcomes from the open pit and underground reserves.

"Our intention is that the cash-flows generated by the open pit operation will also provide a foundation for the longer term development of the Siana Gold Project via a potential future underground mining operation. In this regard, we are very pleased with the preliminary results of the Mining One Underground Concept Study, which provides us with a blueprint to move this important project forward.

"This represents the first broad update of the 2009 Siana Bankable Feasibility Study and presents a revitalised approach to the underground mine development based on a specialist independent review of the existing JORC 2004 resources, an assessment of underground mining conditions and geotechnical parameters and the incorporation of a new mining method."

## **JORC 2012 Mineral Resource and Ore Reserve Summary for the Siana deposit**

### **Mineral Resource Summary**

#### ***Geology and Geological Interpretation***

The Siana gold (silver-lead-zinc) mineralisation is characterised as a high sulphidation regime of epithermal affiliation, hosted predominantly within tectonised volcano clastics altered carbonate and basaltic lithological assemblages. The Siana model is based on lithological interpretation compiled on cross-sections and level plans.

Extensive use of core photographs together with drill logs ensured best possible consistency in the interpretation. Interpretation of the historic underground relied on visual identification and logging from drilling, annotation of caved material and timber in historic drill logs, review of the underground level plan gold grades to assess the most likely areas of stoping (ie. above mine cut-off), and examination of the Suricon longitudinal projection of the mine workings.

### ***Sampling and Sub-Sampling Techniques***

Altered and mineralised sections of the holes were sampled on a one-metre basis after splitting with a circular diamond-tungsten saw. PQ3 (83mm) diameter core was sampled by taking approximately one-quarter fillet, and HQ3 diameter core (54mm) was sampled by taking a one-third fillet for analysis. NQ3 diameter (46mm, rarely drilled), was split into equal halves. Further splits were later taken from selected holes for metallurgical purposes – these were taken from a central slab of core. Soft sections of core, particularly in the mineralised zones, were wrapped in tape before cutting to effectively maintain sample competence. In a later phase of cutting for metallurgical sampling all the mineralised zone was wrapped with tape. For historical percussion or open hole sampling was conducted using Industry Standards at the time. For the Grade Control Channel samples these were collected in calico bags over a 2.5 m interval. Samples collected by trained Samplers under geological supervision.

### ***Drilling Techniques***

Diamond drilling since 2003 was United Philippines Drilling (UPD) sled portable CS1000 6PL diamond drill rigs, later known as QED. These rigs are capable of drilling depths of ~350m, ~600m and ~1,000m of PQ3, HQ3 and NQ3 diamond core respectively. During the drilling operations, a geological aide was present at the rig at all times (rigs ran 24 hours per day continuously) specifically to record drilling progress, core recovery and downhole surveys. Holes were pre-collared to a depth of between 30 and 100 metres using tricone roller bit/mud rotary drilling and cased off with PW casing before PQ3 diamond drilling. Diamond coring continued at least 40 metres past the intended target. For the historic data confirmation as to the type drilling at this stage cannot be confirmed, however due to the type of company (Suricon) managing the drilling it can be assumed that the industry best standards at the time were used. . The nominal drill spacing above -165 m RI is 20m x 40m and below -165 by DD on a nominal 20m x 60m to 20m x 80m to approximately the -500mRI. Grade control channel samples collect from the restart in 2010 through to the stopping of Operations in May 2012 were also used.

### ***Criteria Used for Classification***

The mineral resource has been classified into Indicated and Inferred categories based on drill hole spacing, geological confidence, and grade continuity and estimation quality. The combination of these factors together guides the coding of the resource. Indicated material is generally material with average drill spacing not greater than 35 metres along with reasonable geology confidence and grade continuity. Inferred material is generally material that has average drill spacing greater than 35 metres and or the geology or grade continuity confidence is low.

### ***Sample Analysis Method***

All samples were pulverized to 75 microns before assaying. The assay techniques used for Gold are appropriate and consider as a total assay. For Silver and other element are also considered as a total assay. For Gold approximately 50g of sample pulp was used for fire assay gold analysis with AAS finish (0.005 ppm DL). For silver (0.5ppm DL), copper (5ppm DL), lead (5ppm DL), zinc(5ppm DL) by AAS following concentrated HCl and HCl/HNO3/HClO4 leach in latter stages on 1g sample.

### ***Estimation Methodology***

The resource estimation technique for grade was estimated using Ordinary kriging. Ordinary kriging is an appropriate technique for this style of mineralisation and for resource evaluation. The software package for the grade estimation, variography, and statistics was conducted using Surpac version 6.2.2. Each lithological domain was composited and estimated separately. To control grade outliers grade cuts based on the histogram break was applied to each of the lithological domains. The search radius and orientations were based on directional

variograph and drill spacing. As part of the calibration process with the grade estimation a multiplier was applied to the estimate for gold of 1.15 above 1.2 g/t and 3.0 above zero for silver. This was required based on 13 months of reconciliation data against mill head grade and reconciled milled tonnes. The process of using the multiplier against the cut grade effectively brought the grade estimate similar to the grade estimate when no cuts were applied. The reasoning for using the multiplier was it provided a more even distribution of increasing the grade across the grade range. It should be noted as at 30 June 2015 the grade estimate against the grades base on the histogram break project to date was under calling gold by 25% and silver by 350%. The reconciliation process is based on a 0.7 g/t gold cut. Current grade control practices is to block out zones at a nominal 0.5-0.7 g/t gold and/or argillic alteration within the main ore corridor. The continuous under calling of grade is still not fully understood.

#### **Cut-Off Grade(s)**

The resource has been reported at the current marginal cut off for the Siana Open Pit of 0.7 g/t gold.

#### **Mining and Metallurgical Methods and Parameters**

The operation is mined using conventional open pit mining methods using top hammer drill rigs, CAT 40 tonne articulated Dump Trucks and CAT 374 (~80 t) hydraulic excavators. Mining bench heights are 5 m with mining generally conducted on 2 x 2.5 m flitches. Mining rate is a nominal 8,000 bcm/d.

The dominant mineralisation for the Siana Mineralisation is gold and silver with the gold to silver ratios from less than 1:1 to silver being greater than 7:1. Material mined from Siana open pit is processed on site at the Siana CIL Gold processing plant. Design capacity is 1.1 Mtpa. Processing recoveries for gold vary between 75 to 85% for gold and nominally 40 to 45% for silver. Product produced is a gold/silver dore as bullion.

Please refer to the Competent Person's statement and the detailed information given in the JORC Table 1 at the end of this announcement in Appendix 1.

#### **Ore Reserves summary**

##### **Material Assumptions, Outcomes from PFS and Economic Assumptions**

The Siana Gold Project Feasibility Study (FS) was completed in June 2009. The Base Case within this study was a 750,000 t/pa open pit operation integrated with a 400,000 t/pa underground option.

Within the FS appropriate assessments and studies were carried out, and included consideration of, and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.

The Feasibility Study determined that the open pit mine was technically feasible and economically viable.

Mining recommenced in July 2014, after the project was placed on care and maintenance in June 2013 when a Cease and Desist Order was placed on the processing operations after the detection of a crack in the wall of the tailings facility.

The Siana open pit was re-optimised by Mine Planning Solutions Limited (MPS) in November 2014 utilising Whittle software. The run-of-mine (ROM) cut-off grade used in the optimisation work was 1.2 g/t gold. The waste cut-off grade was estimated at 0.7 g/t gold, where material between 0.7 g/t and 1.2 g/t was separately stockpiled as low grade for future processing.

##### **Criteria Used for Classification**

The Mineral Resource had been estimated by BKD Resources Pty Ltd. There is no Measured Mineral Resource within the resource model used to estimate the Ore Reserve.

The inventory in the Life of Mine schedule includes Inferred Mineral Resources, however the Inferred Resources were removed when evaluating the resource to determine if the Indicated Resource was economically viable

without the Inferred Resources. Only Indicated Mineral Resource material has been used to apply the economic viability test.

100% of the Probable Ore Reserve has been derived from Indicated Mineral Resources.

#### ***Mining Methods and Mining Assumptions***

The operation is mined using conventional open pit mining methods using top hammer drill rigs, CAT 40 tonne articulated dump trucks and CAT 374 (~80 t) hydraulic excavators. Mining bench heights are 5 m with mining generally conducted on 2 x 2.5 m flitches. The mining rate is a nominal 8,000 bcm/d.

Commercial underground mining by Surigao Consolidated Mining Company (Suricon) occurred in the late 1930's. Mining via shaft access was undertaken on a continuous basis between 1938 up until 1960, with ore production of ~1.6 Mt at an estimated grade of ~12 g/t Au. The primary mining method used was overhand and underhand timber stoping, which reflects the weak rockmass characteristics of the main orebody. Square set timbers were used as the primary means of ground support. Underground mining ceased in 1960, for potentially a number of reasons: exhaustion of the high-grade at the 700' level (-160RL); unstable ground conditions; high groundwater inflows / flooding; H<sub>2</sub>S gas inundation.

The historic stopes are delineated as the "stope zone" and identified as a separate lithological domain within the block model and outlines the working areas affected by stoping. To simulate the loss in volume the density has been reduced to 2.12 t/m<sup>3</sup>. It should be noted that a significant proportion of the area has not been mined within the stope zone flagged within the resource model. The majority of the lower historic stopes which are located in the open pit resource were back filled with material below the historic underground cut off of 9.0 g/t gold. The mining method used for the lower levels was underhand cut and fill with timbers used for support. Actual stoped areas included significant proportion of timbers. In the 2015 Ore Reserve at the 0.7 g/t gold cut off the stoping zone (domain 8) represents 28% of the reported ore tonnes.

In July 2015 there was a significant failure of material in the East wall of the open pit. Peter O'Bryan & Associates (POB), consultants in mining geomechanics were engaged to conduct an independent geotechnical review of the open pit operations in August 2015. The pit designs for Stages 2, 3 and 4 were updated following the failure incorporating recommendations provided by POB and have been reviewed by POB.

Part of the open pit mining capital costs spent during the first 3 years are for dewatering equipment, workshops and office blocks.

A Philippine based mining contractor has been engaged for the mining operation and a workshop complex has been constructed for their use.

Reconciliations between the current Siana resource model based on a 0.7 g/t gold cut off for indicated material and the ore processed for the 13 month period to the end of July 2015, the block model under estimated the ore tonnes by 4% and under estimated the gold grade by 25%.

To calibrate the grade estimate the resource geologist has applied a factor within the model to increase gold grades >1.2 g/t by a factor of 15% to develop the model used for the ore reserve and resource reporting. In order to estimate the Ore Reserve, mining have used the difference between the 15% and 25% under-call on gold grade as a de facto dilution factor. Therefore, no additional dilution factor has been applied. Similarly, with a 5% under-call on tonnes, no additional mining recovery factor has been applied.

No minimum mining widths were applied due to the small scale equipment that is used in the mine.

#### ***Processing Methods and Processing Assumptions***

The Siana Gold Project Feasibility Study (FS) was completed in June 2009. The process design and metallurgy in the study was conducted by Internet Engineering and Amdel in Perth. Comprehensive metallurgical testing of the

open pit ores was completed encompassing comminution, gravity concentration, flotation, cyanide leaching, carbon kinetics, thickening and slurry viscosity measurements, and cyanide detoxification testing.

With feasibility and permitting completed in 2009 site construction activities commenced in 2010. The company initially proposed a throughput of 750,000 t/pa however during financing it was decided to commit to a larger SAG mill enabling a throughput of 1,100,000 t/pa to be achieved.

The plant comprises single stage crushing, SAG milling, gravity concentration and high intensity cyanidation, leaching and adsorption (CIL), followed by carbon elution and electrowinning to produce combined gold and silver doré. The tailings from the cyanide leach area are treated in a detoxification circuit to minimize cyanide concentration prior to discharge to the tailings storage facility. The plant design also includes various reagent mixing facilities as well as water, air and electrical services. The plant uses well-tested technology.

In the eight months since the process plant recommenced, actual mill recovery has ranged from 80%-90% for gold and 24%-60% for silver. Mill recoveries of 85% for gold and 45% for silver have been used for the estimation of the Ore Reserves.

No assumptions have been made for any deleterious elements.

#### **Cut-Off Grade(s)**

When Mine Planning Solutions Limited (MPS) re-optimised the Siana open pit in November 2014, the run-of-mine (ROM) cut-off grade used in the optimisation work was 1.2 g/t gold. The waste cut-off grade was estimated at 0.7 g/t gold, where material between 0.7 g/t and 1.2 g/t was separately stockpiled as low grade for future processing.

The open pit has been redesigned following the slip in the East wall in July 2015. The same cut-off grades of 1.2 g/t and 0.7 g/t have been used to estimate the ROM and low grade inventory. Metal prices of US\$1200 /oz for gold and US\$15 for silver were used, along with metallurgical recoveries of 85% for gold and 45% for silver. The PHP:USD exchange rate used was 47:1.

#### **Estimation Methodology**

The geological model is considered to be reasonable for this style of deposit. The Siana gold mineralisation is characterised as a high sulphidation regime of epithermal affiliation, hosted predominantly within tectonised and altered carbonate and basaltic lithological assemblages. The current interpretation is suitable for bulk mining method and is suitable for open pit evaluation.

The Siana model is based on lithological interpretation compiled on cross-sections and level plans. Extensive use of core photographs together with drill logs ensured best possible consistency in the interpretation.

Interpretation of the historic underground relied on visual identification and logging from drilling, annotation of caved material and timber in historic drill logs, review of the underground level plan gold grades to assess the most likely areas of stoping (ie. above mine cut-off), and examination of the Suricon longitudinal projection of the mine workings.

The resource estimation technique for grade was estimated using ordinary kriging. Ordinary kriging is an appropriate technique for this style of mineralisation and for resource evaluation. The software package for the grade estimation, variography, and statistics was conducted using Surpac version 6.2.2.

Each lithological domain was composited and estimated separately. To control grade outliers grade cuts based on the histogram break was applied to each of the lithological domains. The search radii and orientations were based on directional variographs and drill spacing. The maximum distance for extrapolation of data points along strike was 46 metres, across strike it was 15 metres and down dip it was 60 metres.

No assumptions have been made for the recovery of by-products for the Siana Mineral Resource. Silver reports to bullion with recovery's in the order of 40 to 45%.

No estimation of deleterious elements or non-grade variables is required

**Material Modifying Factors and Approvals**

In order for the Company to operate it must submit the Social Development Management Plan (SDMP). The SDMP has 3 major components namely;

- Implementation of Community Development Project;
- Information Education Communication Program
- Declaration of mining technologies and geoscience program.

Within the 30 days from the approval of the SDMP, the Company should enter into a Memorandum of Agreement with the host communities concerned. This requirement is based on the Department of Environment and Natural Resources (DENR) Department Administrative Order DAO 2010-21 Section 134- onwards

The operations were suspended following the detection of a crack in the wall of the tailings storage facility (TSF). A Cease and Desist Order (CDO) was placed over the processing operations by the Philippines Mines and Geoscience Bureau (MGB) in June 2013 and the plant was placed into care and maintenance. In April 2014, the Department of Environment and Natural Resources (DENR) advised the Company that the CDO shall be lifted once the Company had completed construction of a new HDPE lined tailings facility, made the necessary modifications to the existing tailings facilities to accommodate the new thickened cement tailings and constructed a new thickener and cement addition facility. Construction of these activities was completed in December 2014 and the CDO was subsequently lifted. Processing recommenced in January 2015.

Please refer to the Competent Person's statement and the detailed information given in the JORC Table 1 at the end of this Announcement in Appendix 1.

**ENDS**

**For more information:**

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**About Red 5 Limited**

Red 5 Limited (ASX: RED) through its associated Philippine company Greenstone Resources Corporation is a gold producer which operates the Siana Gold Project, located in the established gold mining region of Surigao del Norte in the Philippines. This richly endowed region hosts epithermal gold systems and world-class porphyry copper-gold deposits.

The Siana Gold Project re-commenced operations in January 2015 following the redevelopment of tailings storage capacity and is now focused on achieving a steady increase in commercial gold production and laying the foundations for the Company's future growth. The Company is focusing on the following key areas to create value for shareholders:

- **Reliable production** – to progress a steady and methodical ramp-up of operations at Siana based on achievable targets;
- **Technical strength** – to implement high standards across all aspects of the business, including mining, processing, the management of the Tailings Storage Facility (TSF) and the open pit wall cut-backs; and
- **Growth** – to begin laying the foundations for the Company's future growth by finalising its long-term mining plans for the open pit and future underground mine, and by recommencing exploration activities to grow its resource and reserve inventory and unlock the potential of its highly prospective exploration portfolio.

## Competent Person's Statements

### Exploration and Mineral Resource

Mr Byron Dumpleton, confirms that he is the Competent Person for the Exploration results and the open pit Mineral Resource estimates summarized in this Report and Mr Dumpleton has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). Mr Dumpleton is a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which he is accepting responsibility. Mr Dumpleton is a Member of the Australian Institute of Geoscientists, No. 1598. Mr Dumpleton has reviewed the Report to which this Consent Statement applies. Mr Dumpleton has been engaged as a consultant to Red 5 Limited through his company BKD Resources Pty Ltd. Mr Dumpleton verifies that the Exploration Results and Mineral Resource estimate section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in his supporting documentation relating to Exploration results and open pit Mineral Resource estimate.

### Open Pit Ore Reserve

Mr Mark Van Leuven, confirms that he is the Competent Person for the open pit Ore Reserves estimates summarized in this Report and Mr Van Leuven has read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). Mr Van Leuven is a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which he is accepting responsibility. Mr Van Leuven is a Fellow of The Australasian Institute of Mining and Metallurgy, No. 104479. Mr Van Leuven has reviewed the Report to which this Consent Statement applies. Mr Van Leuven has been engaged as a consultant to Red 5 Limited and is a full time employee of Mining One Pty Ltd. Mr Van Leuven verifies that the Ore Reserve section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in his supporting documentation relating to the open pit Ore Reserves.

### Forward-Looking Statements

Certain statements made during or in connection with this statement contain or comprise certain forward-looking statements regarding Red 5 Ltd's Mineral Resources and Reserves, exploration operations, project development operations, production rates, life of mine, projected cash flow, capital expenditure, operating costs and other economic performance and financial condition as well as general market outlook. Although Red 5 Ltd believes that the expectations reflected in such forward-looking statements are reasonable, such expectations are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward looking statements and no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, delays or changes in project development, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in metals prices and exchange rates and business and operational risk management. Except for statutory liability which cannot be excluded, each of Red 5 Ltd, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in this statement and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this statement or any error or omission. Red 5 Ltd undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly you should not place undue reliance on any forward looking statement.



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## **APPENDIX 1 Siana Gold Project – Open Pit Mining Review and Reserve Update**



# 1 MINERAL RESOURCE ESTIMATE

## 1.1 RESULTS

The Mineral Resource estimate reference date is 30<sup>th</sup> June 2015. The Siana deposit has been mined and Mineral Resource depleted since the previous public report.

**Table 1: Siana Mineral Resource Estimate tabulated at various cut offs from the Lithology Defined Resource update as at 30th June 2015 above the -165RL.**

Siana Resource update as at 30 June 2015							
Estimate	Classification	Cut Off Au (g/t)	Tonnes (Mt)	Au g/t	Ag g/t	Au (koz)	Ag (koz)
As at 30 Jun 2015 JORC 2012	Indicated	0.7	4.9	2.8	7.1	436	1,117
	Inferred	0.7	0.9	1.8	2.0	53.5	60.4
	<b>Total</b>		<b>0.7</b>	<b>5.8</b>	<b>2.6</b>	<b>6.3</b>	<b>490</b>

### Notes on Mineral Resource

1. Mineral Resources are quoted as inclusive of Ore Reserve.
2. Discrepancy in summation may occur due to rounding.
3. Resource for this model has only been reported above the -165RL
4. The current Open Pit marginal cut off is 0.7 g/t gold.
5. The figures take into account mining depletion as at 30 June 2015.
6. Figures do not include closing ROM stocks of 87kt @ 1.8 g/t gold and 5.5 g/t silver as at 30 June 2015.
7. The Lithology Defined Resource Model is suited for bulk mining evaluation and can be utilised below the -165RL if this choice of mining method is elected. Material below this RL has not been reported. Note current JORC 2004 Resource is based on different model design for narrow vein mining evaluation.

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## 1.2 CHANGE FROM PREVIOUS PUBLIC REPORT

Changes to the Mineral Resource estimate has been based on the additional drilling since 2011 resource update and incorporates the historical open pit drilling, grade control sampling and mapping during the initial start of mining in 2010 by Greenstone Resources Corporation.

**Table 2: Change in Mineral Resource estimate since previous public report as at 30 June 2015.**

Estimate	Classification	Cut Off Au (g/t)	Tonnes (Mt)	Au g/t	Ag g/t	Au (koz)	Ag (koz)
<b>30 June 2015 JORC 2012</b>	Indicated	0.7	4.9	2.8	7.1	436	1,120
	Inferred	0.7	0.9	1.8	2.0	53	60
	<b>Total</b>	<b>0.7</b>	<b>5.8</b>	<b>2.6</b>	<b>6.3</b>	<b>489</b>	<b>1,180</b>
<b>30 Jun 2014 JORC 2004 (H&amp;S Sep 2011)</b>	Indicated	0.8	9.3	2.5	4.2	740	1,254
	Inferred	0.8	1.2	2.7	4.5	104	176
	<b>Total</b>	<b>0.8</b>	<b>10.5</b>	<b>2.5</b>	<b>4.2</b>	<b>844</b>	<b>1,430</b>
<i><b>difference</b></i>	<i><b>Indicated</b></i>	<i><b>Variable</b></i>	<i><b>-4.4</b></i>	<i><b>0.3</b></i>	<i><b>2.9</b></i>	<i><b>-304</b></i>	<i><b>-134</b></i>
	<i><b>Inferred</b></i>	<i><b>Variable</b></i>	<i><b>-0.3</b></i>	<i><b>-0.9</b></i>	<i><b>-2.5</b></i>	<i><b>-51</b></i>	<i><b>-116</b></i>
	<i><b>Total</b></i>	<i><b>Variable</b></i>	<i><b>-4.7</b></i>	<i><b>0.1</b></i>	<i><b>2.1</b></i>	<i><b>-355</b></i>	<i><b>-250</b></i>

### Notes on Mineral Resource

1. Mineral Resources are quoted as inclusive of Ore Reserve.
2. Discrepancy in summation may occur due to rounding.
3. For the June 2015 Open Pit reserve the marginal cut off is 0.7 g/t gold. In the 2014 release the marginal cut off was 0.8 g/t gold.
4. For the 2015 Open Pit Resource material is reported above the -165RL. For the 2014 reported figures the pit resource was reported within a pit shell based on marginal costings at the time which capture a larger component of the resource and also included material below -165RL.
5. The difference figures quoted do not take into account material mined during FY2015. Mining of 340,203 tonnes of ore @ 2.9g/t gold and 6.0 g/t silver occurred during FY2015.

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### 1.3 STATEMENT OF COMPLIANCE WITH JORC CODE REPORTING

This Mineral Resource statement has been compiled in accordance with the guidelines defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

#### 1.3.1 Competent Person Statement

I, Byron Dumpleton a Consultant Resource Geologist confirm that I am the Competent Person for the Siana Mineral Resources section of this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which I am accepting responsibility.
- I am a Member of the Australian Institute of Geologists (MAIG No. 1598).
- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of BKD Resources Pty Ltd (ABN 81 109 376 481) and acting as the Resource Development Specialist for Red 5 Limited. I have been engaged by Red 5 Limited to prepare the documentation for Siana Open Pit Mineral Resource estimate.

I have disclosed to Red 5 Limited the full nature of the relationship between myself and the company.

I verify that the Siana Mineral Resource section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources.

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**1.3.2 Competent Person Consent**

With respect to the sections of this report for which I am responsible – Mineral Resource Estimate - I consent to the release of the Siana Mineral Resource as at 30th June 2015 by the Directors of Red 5 Limited.

<b>Signature of Competent Person</b>  Byron Dumbleton AIG Member No.1596	Date  24 September 2015
<b>Signature of Witness</b> 	<b>Witness Name and Address</b>  Mark Van Leuven  Urrbrae, SA, 5064

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## 1.4 JORC CODE, 2012 EDITION – TABLE 1 REPORT: SIANA DEPOSIT

## 1.4.1 Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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. 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>The Siana deposits were sampled from diamond drill core (DD) and Historic Percussion drill hole samples which were drilled during the 1970's and 80's. The drill section spacing is at nominal 20 metre intervals along the strike of the deposit and variable down dip. The nominal drill spacing above -165 m RI is 20m x 40m and below -165 by DD on a nominal 20m x 60m to 20m x 80m to approximately the -500mRI. Grade control channel samples collect from the restart in 2010 through to the stopping of Operations in May2012 were also used. The nominal surface height around the Siana pit edge is approximately 50mRI.</li> <li>Sampling for diamond and RC drilling is carried out as specified within the company's sampling and QAQC procedures as per industry standard. RC chips and diamond core provide high quality representative samples for analysis. Historical data was completed by previous holders (Suricon) to industry standards at that time. All resent diamond core is aligned, measured and metre marked. All diamond drill core was systematically photographed before sampling for holes since 2003.</li> <li>The core size and samples for the diamond holes were ¼ cut for PQ (83mm), 1/3 cut for HQ (54mm) and ½ cut for NQ 46mm). For the grade control samples the average channel sample width was 2.5m and approximately 1.5 kg was collected. For the company's diamond hole core samples were crushed, dried and pulverised. For assays, gold was done using a 50g charge for fire assay with AAS finish. For the other elements Routine analyses included silver (0.5ppm DL), copper (5ppm DL), lead (5ppm DL), zinc(5ppm DL) by AAS following concentrated HCl and HCl/HNO3/HClO4 leach in latter stages on 1g sample, and arsenic/antimony (1ppm DL) by vapour generation/AAS from the same acid leach. For grade control the on-site laboratory was used. Samples were crushed, dried and pulverised to produce a 50 gram charge for fire assay. Assays by the previous holders (Suricon) were assumed to be conducted to industry standards at that time.</li> </ul>



Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul style="list-style-type: none"><li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li></ul>	<ul style="list-style-type: none"><li>• Diamond drilling since 2003 was United Philippines Drilling (UPD) sled portable CS1000 6PL diamond drill rigs, later known as QED. These rigs are capable of drilling depths of ~350m, ~600m and ~1,000m of PQ3, HQ3 and NQ3 diamond core respectively. During the drilling operations, a geological aide was present at the rig at all times (rigs ran 24 hours per day continuously) specifically to record drilling progress, core recovery and downhole surveys. Holes were pre-collared to a depth of between 30 and 100 metres using tricone roller bit/mud rotary drilling and cased off with PW casing before PQ3 diamond drilling. Diamond coring continued at least 40 metres past the intended target. For the historic data confirmation as to the type drilling at this stage cannot be confirmed, however due to the type of company (Suricon) managing the drilling it can be assumed that the industry best standards at the time were used.</li></ul>
Drill sample recovery	<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>• Core recovery was measured at the drill site. Markers were placed in trays where core was lost, or where the hole passed through minor voids due to previous mining.</li><li>• Industry standard drilling practices resulted in good sample recoveries for Diamond core for drilling since 2003.</li><li>• Core loss does occur and is generally around clay alteration zone or fracture zones or through historical backfilled underground stopes. Relationship appears to exist between recovery and grade for certain sections. The impact is under quoting mineralised material. This is considered minimal.</li></ul>
Logging	<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>• Core was logged by senior Filipino geologists and coded data were entered into a standard format spreadsheet, using two data entry clerks. Geotechnical logging of diamond core was overseen by Mining One Pty Ltd. A total of 54 holes used in the 2009 BFS Resource estimate were systematically logged, including 14,501 routine RQD measurements, and a number of other parameters from oriented sections of core including Q, Q', RMR and MRMR. Holes post 2009 were also geotechnically logged. All logging is to the level of detail to support the Siana style of mineralisation (Epithermal Gold).</li><li>• All logging recorded lithology, alteration and mineralization; minor fields include colour, texture, structure, weathering and comments. All diamond drill core was systematically photographed at high resolution before sampling.</li><li>• All diamond and historical holes were logged for the entire length. Channel samples were visually inspected by Grade Control Geologists.</li></ul>
Sub-sampling techniques and sample	<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</i></li></ul>	<ul style="list-style-type: none"><li>• Altered and mineralised sections of the holes were sampled on a one-metre basis after splitting with a circular diamond-tungsten saw. PQ3 (83mm) diameter core was sampled by taking approximately one-quarter fillet, and HQ3 diameter core (54mm) was sampled by taking a one-third fillet for</li></ul>



Criteria	JORC Code explanation	Commentary
preparation	<p>sample preparation technique.</p> <ul style="list-style-type: none"> <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>	<p>analysis. NQ3 diameter (46mm, rarely drilled), was split into equal halves. Further splits were later taken from selected holes for metallurgical purposes – these were taken from a central slab of core. Soft sections of core, particularly in the mineralised zones, were wrapped in tape before cutting to effectively maintain sample competence. In a later phase of cutting for metallurgical sampling all the mineralised zone was wrapped with tape.</p> <ul style="list-style-type: none"> <li>For historical percussion or open hole sampling was conducted using Industry Standards at the time. For the Grade Control Channel samples these were collected in calico bags over a 2.5 m interval. Samples collected by trained Samplers under geological supervision.</li> <li>Samples taken are appropriate for the Siana mineralisation style (Epithermal - Gold).</li> <li>Sample blanks and industry standards are routinely submitted, Pulps retained to be re-submitted to test for reproducibility for all core submitted since 2003. For the grade control channel samples 1 in 20 was repeat. No blanks or standards were submitted.</li> <li>The occurrence and distribution of coarse gold was tested by re-submission of bulk fines samples for screen fire assay, representing a range of gold grade from 0.3g/t to 102g/t in both carbonate and basalt mineralisation from throughout the Resource. Samples from the area affected by previous mining were avoided. The tests were conducted at both McPhar (Philippine Laboratory) and Amdel Laboratories (Australia). The results indicate that in general less than 20% of the gold is coarser than 75 micron, that there is a similar distribution of grade between the coarse and fine fractions, and that a high degree of confidence can be placed on the reliability of the routine 50g fire assays. All the evidence from the testing indicates low sample variance in the deposit. Field sampling precision was tested in a batch of 98 duplicate core splits selected from lithotypes unaffected by previous mining in holes SMDD061 to 085. The selection was made to represent a grade range above 0.3g/t Au, a range of rock types, and carbonate and basalt hosted mineralization types from throughout the Resource to a depth of -200m RL. Both PQ3 and HQ3 core sizes were represented. The duplicate split was taken from the opposite side of the core as the original split to emulate the original sample weight as closely as possible. The resulting central fillet was retained for reference. Gold results indicated an acceptable level of precision between splits. The distribution of paired differences is similar for the PQ3 and HQ3 splits indicating no significant difference in the reliability of PQ3 splits compared with HQ3 splits.</li> <li>The sample sizes are considered appropriate to the grain size of the material being sampled.</li> </ul>
Quality of assay data and	<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> </ul>	<ul style="list-style-type: none"> <li>The assay techniques used for Gold are appropriate and consider as a total assay. For Silver and other element are also considered as a total assay.</li> </ul>



Criteria	JORC Code explanation	Commentary
laboratory tests	<ul style="list-style-type: none"><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>	<p>For Gold approximately 50g of sample pulp was used for fire assay gold analysis with AAS finish (0.005 ppm DL). Each charge of 30 crucibles contained 26 unknown samples, two replicates, one internal laboratory standard, and one blank. Routine analyses included silver (0.5ppm DL), copper (5ppm DL), lead (5ppm DL), zinc(5ppm DL) by AAS following concentrated HCl and HCl/HNO<sub>3</sub>/HClO<sub>4</sub> leach in latter stages on 1g sample, and arsenic/antimony (1ppm DL) by vapour generation/AAS from the same acid leach. McPhar inserted two or three internal standards and one blank for every 100 samples.</p> <ul style="list-style-type: none"><li>N/A</li><li>All routine samples have been processed at McPhar Geoservices (Phil.) Inc. located In Makati, Metro Manila. The laboratory is accredited with ISO 9001 certification, and is a regular participant in the Australian based Geostats Pty. Ltd. international laboratory quality monitoring scheme. Umpire check analyses including fire assay (Au), AAS (multielements), sizing analysis, and screen fire assay (Au) were completed by Amdel Laboratory in Perth, (NATA registered for ISO/IEC 17025 and accredited for AS/NZS ISO 9001). Amdel was also a participant in the Geostats quality assurance survey. Geostats reported on the performance of both laboratories over the period April 2003 to April 2005. The regular surveys include distribution of sets of samples to over 120 laboratories worldwide. Elements of particular relevance include gold by fire assay, and silver, copper, lead, zinc and arsenic by AAS. Over the surveys completed during the review period Geostats concluded that both laboratories performed very well for all elements (gold, silver, base metals and sulphur) and were capable of producing high quality results. Ninety percent of biases associated with both laboratories' results were within 1.0 standard deviation. STANDARDS: Australian sourced gold standards (120g pulps, -75 micron, supplied by Gannet Holdings, Perth) were included in analytical batches from the inception of drilling. At start-up, standards or blanks were inserted every 50 samples, but as the programme evolved the frequency of use was increased to 1:20 and additional gold standards were introduced to cover a wider grade range (0.4g/t to 6.0g/t). The same internal laboratory standards were used throughout the period of the drilling programme. Synthetic and Certified Reference Materials (CRM) were used in both the gold and base metal analytical procedures. BLANKS: Initial blank samples comprised screened local andesite aggregate which averaged ~0.02ppm Au. A new commercial certified blank made from colour pigmented quartz sand was introduced for holes SMDD063 -155. Results for the commercial blank were consistently at or below the fire assay detection limit of 5ppb Au, confirming the excellent cleaning procedures used at the lab during the sample pulverisation process. ACCURACY: Excellent precision with minimal variance in accuracy is indicated for all standards used. Company policy is to repeat batches or partial batches</li></ul>



Criteria	JORC Code explanation	Commentary
		<p>where two (different) standards fall significantly outside a two standard deviation range – it has not been necessary to invoke the policy throughout the term of the resource drilling programme. Multielement performance of the internal standards demonstrate consistent precision within 2SD tolerance limits. Performance of the McPhar internal gold and multielement standards indicated consistently high levels of accuracy and precision. REPLICATES: A suite of selected pulps (82) were repackaged, re-numbered and re-submitted for blind repeat analysis of gold and multielements. Scatter plots indicate good batch to batch precision for all elements, with only minor scatter at lower grade levels. UMPIRE CHECKS: The accuracy of the McPhar analyses was checked at Amdel Laboratory in Perth on three occasions. Selected pulp samples (n=293) from resource diamond drilling with gold grades greater than 0.1 g/t were spatially representative of the Resource, and also the time interval over which the drilling was conducted. There is a high degree of correlation between the laboratories, with an insignificant positive bias in the McPhar results.</p>
<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>• Core was logged by senior Filipino geologists. Significant mineralised intersections are reviewed by the Senior Geologist in charge.</li> <li>• No twinned holes were conducted.</li> <li>• All drill hole planning, drill hole surveys, core recovery, specific gravity and magnetic susceptibility determinations, geological logging and geotechnical logging are first recorded on data entry forms and checked by the Geologist in Charge of the site. This data is manually keyed to spreadsheets, checked and verified by the Geologist and transferred to Australia by email. Drill hole records are copied for site files and originals retained in Perth. In Perth, data are checked by a senior database geologist prior to entry to a backup database and dispatch to ioDigital (a division of ioGlobal) for contracted database management and maintenance within acQuire software. IoDigital validated data and generated routine QA/QC reports on assay batches. IoDigital has provided this service for all drilling and sample data from the Siana Gold Project since inception. Currently data is store on MS Access database.</li> <li>• No adjustments to assay data were made.</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>• The accuracy of drillhole collar data and other accuracy dependent data collected on site using a survey grade Sokkia GSR2650 differential GPS instrument is computed to be +/-0.25 metres. A digital terrain model (DTM) for use in mine planning and resource estimation was constructed from 3D point data derived from three sources: 1) ground survey measurements recorded by Greenstone Resource Corporation (GRC) personnel (32,940 points), 2) pit and waste dump surveys from Suricon site plans (2,377 points), 3) a digital terrain model constructed from stereo-pair Ikonos</li> </ul>



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Criteria	JORC Code explanation	Commentary
		<p>satellite imagery (subsampled at 50mx50m, 2,247 points).</p> <ul style="list-style-type: none"> <li>The ground survey data were collected between November 2004 and March 2005. Surveys were collected at nominal 5m x 5m and 10m x 10m spacing, referenced daily to a local base station. Data were recorded in UTM zone 51N projection, using WGS84 as the horizontal and vertical datum, and converted to the local mine grid. The DTM was modified to represent the post mining surface prior to the NE wall slip. All modelling and geology interpretation was conducted using the Local Siana Mine Grid (No Rotation is applied).</li> <li>Quality and accuracy of the drill collars are suitable for resource work and resource evaluation for Proved and Probable reserve.</li> </ul>
<i>Data spacing and distribution</i>	<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 drill section spacing is at nominal 20 metre intervals along the strike of the deposit and variable down dip. The nominal drill spacing above -165 m RI is 20m x 40m and below -165 by DD on a nominal 20m x 60m to 20m x 80m to approximately the -500mRI. Grade control channel samples collect from the restart in 2010 through to the stopping of Operations in May2012 were also used. The nominal surface height around the Siana pit edge is approximately 50mRI.</li> <li>The Siana mineralisation is defined sufficiently to define both geology and grade continuity for a Mineral Resource estimation and Ore Reserve evaluation for a bulk mining method. For a more selective mining method it is recommended that further infill drilling is done to confirm grade continuity. Pending on the mining method selected infill drilling could be obtained at the Grade Control level.</li> <li>Samples are collected at 1 metre intervals and or to geology breaks. For the resource estimation 1 metre composites were generated and applied.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<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>Due to the structural, lithological and alteration complexity of the mineralisation, there is potential for change in strike orientation for mineralisation. This may induce BIAS to the data sampled.</li> <li>No material issues due to drill orientation sampling BIAS for key mineralised zones is expected due to the extensive geological knowledge and mining history, therefore this is seen as a low risk.</li> </ul>
<i>Sample security</i>	<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>Chain of Custody is managed by the company. Samples were stored in a locked and patrolled storage pen on site, prior to transport to Manila by ferry. Each transported batch was accompanied by a GRC staff member until delivery and handover at the laboratory.</li> </ul>
<i>Audits or</i>	<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>A detailed inspection of the laboratory facilities and procedures was</li> </ul>



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Criteria	JORC Code explanation	Commentary
<i>reviews</i>		conducted by the Management prior to commencement of resource drilling in February 2003. Spot inspections were later made to review lab cleanliness and procedures during processing of Siana core samples. On each occasion the laboratory was observed to have maintained very high standards in the sample preparation area, fire assay facility and wet chemical section, and to follow accepted procedures in sample preparation and analysis. Independent inspection and review of the site data collection, sampling methods and QA/QC procedures, and the McPhar laboratory sample preparation facilities and analytical techniques was undertaken and reported by Snowden Consultants in 2005 and found to be within standard industry practice.



### 1.4.2 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding 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>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li><li>• <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li></ul>	<ul style="list-style-type: none"><li>• The Siana resource is located in NE Mindinao, Surigao Del Norte, Philippines within Mineral Production Sharing Agreement (MPSA) No. 184-2002-XIII, granted on 11 December 2002 and registered in Surigao on 27 December 2002 for a term of 25 years (renewable for a further 25 years). The Siana Mineral Production and Sharing Agreement (MPSA) is held by Greenstone Resources Corporation (GRC), a Red 5 affiliated company.</li><li>• The MPSA tenements are in good standing and also have the license to operate Mining within the Partial Declaration of the Project Mining Feasibility (PDPMF) of 245 ha within the MPSA.</li></ul>
<i>Exploration done by other parties</i>	<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 Siana orebody was mined underground from 1935 to 1960 and by open pit from 1980 to 1990. Past mine production totalled 4.9Mt at 6.4g/t Au, producing 1.1Moz of gold. The original Suricon pit was mined to a depth of 110m (-60mRI). The current pit floor is at approximately -67.5m RI or approximate 117.5m depth. Early resource drilling on the project was conducted by Suricon from 1975-81; 30 holes were drilled totalling 3,514m. A second campaign of drilling took place during the open pit operations from 1983-89, consisting of 47 holes and 6,893m; these holes were drilled from the open pit benches as the pit was progressively deepened. Phoneix carried out some exploration airtrack bedrock sampling in 1993 and 1994 and defined some significant anomalies to the northwest along the Surigao Valley Fault. The company commenced its first campaign in 2003. A limited programme of RC and diamond drilling was undertaken with encouraging results. On this basis a major diamond drilling programme was commenced along strike of, and below, the old open pit. Drilling included specialised geotechnical and metallurgical holes. The database for the Siana resource estimate totaled 109 holes and approximately 47,300m plus the 79 historic Suricon holes drilled between 1980 to 1990 for approximately 10,600m and 10,417 Grade Control channel samples conducted by GRC before the Cease and Desist Order (CDO) was place on the Operations. Air core drilling of the tailings ponds and bulk sampling of the low grade surface dumps was also carried out. The company resumed exploration and extension drilling at Siana in March 2011, with holes drilled to the north, south and east of the pit to follow up mineralisation extensions along strike and at depth.</li></ul>
<i>Geology</i>	<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 Siana gold (silver-lead-zinc) mineralisation is characterised as a high sulphidation regime of epithermal affiliation, hosted predominantly within tectonised volcano clastics altered carbonate and basaltic lithological assemblages.</li></ul>



Criteria	JORC Code explanation	Commentary
Drill hole Information	<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:               <ol 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> </ol> </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>No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource.</li> <li>N/A</li> </ul>
Data aggregation methods	<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> <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>No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource. For modelling the drilling was composited to two metres with grades cut at the histogram break for Au and Ag or adjusted down to reduce the CoV to below 1.8.</li> <li>N/A.</li> <li>There are no metal equivalents reported in this release.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<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 (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The mineralization at Siana occurs over broad widths (up to 80m in the central carbonate zone) but the deposit envelope is orientated approximately north-south.</li> <li>The drilling grid was orientated at 090 °– 270 ° (magnetic), a less than one degree variance from the original Siana Mine Grid. The majority of the resource holes were drilled toward magnetic east or west at moderate to shallow angles.</li> <li>No exploration has been reported in this release, therefore there are no drill hole intercepts to report. This section is not relevant to this report on Mineral Resource.</li> </ul>
Diagrams	<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>No Diagrams are referenced in this release.</li> </ul>
Balanced	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable,</li> </ul>	<ul style="list-style-type: none"> <li>The exploration drilling used for the resource release was conducted before</li> </ul>



Criteria	JORC Code explanation	Commentary
reporting	<i>representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	December 2012 i.e. pre JORC 2012. Historic drilling and grade control channel sampling between 2010 and May 2012 have been included in the modelling but not reported.
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>No substantive data acquisition has been completed in recent times.</li> </ul>
Further work	<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 infill drilling may be carried out inside the current JORC 2004 underground reserve to improve confidence. Additional drilling is being planned to follow high grade structure to the NE and NW of the Pit and to the east the current pit East Wall.</li> </ul>

### 1.4.3 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>All drill hole planning, drill hole surveys, core recovery, specific gravity and magnetic susceptibility determinations, geological logging and geotechnical logging are first recorded on data entry forms and checked by the Geologist in Charge. These data are manually keyed to spreadsheets, checked and verified by the Geologist and transferred to Australia by email. Drill hole records are copied for site files and originals retained in Perth. In Perth, data are checked by a senior database geologist prior to entry to a backup database and dispatch to ioDigital (a division of ioGlobal) for contracted database management and maintenance within acQuire software. ioDigital validated data and generated routine QA/QC reports on assay batches. ioDigital has provided this service for all drilling and sample data from the Siana Gold Project since inception. For the pre 2003 historical holes it is assumed that the data was manage using industry standards of the time. Grade Control data used from the 2010 start is stored using Microsoft Access database. Current database is now managed on site using MS Access by GRC with backups stored in the Perth Corporate Office.</li> <li>Data validation checks are based on the Companies Drilling, sampling, and quality control procedures.</li> </ul>



Criteria	JORC Code explanation	Commentary
Site visits	<ul style="list-style-type: none"><li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li><li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li></ul>	<ul style="list-style-type: none"><li>• Byron Dumbleton has made numerous site visits to the Siana resource and is currently contracted to the company as the Resource Development Specialist. As the Competent Person Byron Dumbleton has inspected the core and drill locations of the holes drilled by Greenstone Resources Corporation (Post 2003). All drilling and sampling was conducted before joining the company. Majority of the facts and figures quoted in Table 1 for the Siana Resource has been obtained from the 2009 Feasibility Study. The Siana Resource is currently been mined as an Open Pit.</li><li>• N/A.</li></ul>
Geological interpretation	<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 geological model is considered to be reasonable for this style of deposit. The Siana gold mineralisation is characterised as a high sulphidation regime of epithermal affiliation, hosted predominantly within tectonised and altered carbonate and basaltic lithological assemblages.</li><li>• The nature of the Siana drilling data generally intersects the mineralisation at good angles. Geological logging is used extensively to control mineralised boundaries.</li><li>• The current interpretation is suitable for bulk mining method and is suitable for open pit evaluation. For more selective mining method a different approach based on a combination of lithological, structural controls based on a higher grade cut of maybe required. This will have an effect on the tonnes and grade distribution of the resource.</li><li>• The Siana model is based on lithological interpretation compiled on cross-sections and level plans. Extensive use of core photographs together with drill logs ensured best possible consistency in the interpretation. Interpretation of the historic underground relied on visual identification and logging from drilling, annotation of caved material and timber in historic drill logs, review of the underground level plan gold grades to assess the most likely areas of stoping (ie. above mine cut-off), and examination of the Suricon longitudinal projection of the mine workings.</li><li>• The mineralisation at Siana is controlled by lithology, structure and breccias and changes in wall rock alteration and ore mineralogy with depth. The main factors that will contribute to the reliability of the grade and geological continuity is the drill spacing.</li></ul>
Dimensions	<ol style="list-style-type: none"><li>1. <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></ol>	<ol style="list-style-type: none"><li>1. In cross section, the central carbonate breccia varies between 20m to 80m in width below the current open pit floor (the main ore zone). Adjacent and west, the volcanoclastic sediments are often bleached and carbonate altered, and host some economic gold mineralisation. Distal chlorite altered sediments are barren. The basalt hosted mineralisation to the east occurs in numerous discrete soft, bleached, pyritic alteration zones, often 10m or more in width, over a lateral distance of approximately 140 metres. Hard fresh basalt between the lodes is barren. Mineralisation progressively narrows to the north</li></ol>



Criteria	JORC Code explanation	Commentary
		<p>and south in both the carbonate and basalt hosts, but is known to persist to approximately 400m below surface, but narrowing. The mineralisation is generally is sub vertical to steeply dipping to the east at approximately -70 degrees. The main mineralised zone strikes N-S to NNW-SSE and also trends to the NE in the northern section of the resource. The Siana resource has a strike length of approximately 500 metres with mineralisation down to approximately 500 metres below surface.</p>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"><li>• <i>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.</i></li><li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li><li>• <i>The assumptions made regarding recovery of by-products.</i></li><li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li><li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li><li>• <i>Any assumptions behind modelling of selective mining units.</i></li><li>• <i>Any assumptions about correlation between variables.</i></li><li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li><li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li><li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li></ul>	<ul style="list-style-type: none"><li>• The resource estimation technique for grade was estimated using Ordinary kriging. Ordinary kriging is an appropriate technique for this style of mineralisation and for resource evaluation. The software package for the grade estimation, variography, and statistics was conducted using Surpac version 6.2.2. Each lithological domain was composited and estimated separately. To control grade outliers grade cuts based on the histogram break was applied to each of the lithological domains. The search radius and orientations were based on directional variograph and drill spacing. The maximum distance for extrapolation of data points along strike is 46 metres, across strike it is 15 metres and down dip it was 60 metres. Due to not being able to match the grade with previous production due to continuous under calling of the grade for gold and silver, instead of modifying top cuts a modifying factor was applied to the grade. The factor applied is multiplying the gold grade above a 1.2 g/t cut off by 1.15 for gold and for silver a multiplying factor of 3.0 was applied against the gold and silver grade estimate based on the grade cutting methodology outlined below in under commentary point 9.</li><li>• Reconciliations for the Indicated resource model against Mill Production for the mining conducted between 1 August 2014 to 30 July 2015 and material mined in May 2013 demonstrates at a 0.7 g/t gold cut off that the Indicated resource model based on the original modelled grade estimated has under called tonnes by 3%, under called gold grade by 25% and under called gold ounces by 31%, under called silver grade by 346%. Processing of the mining stocks commenced in January 2015 and has process 298kt of ore with closing stocks as at 30 June 2015 being 87kt @ 1.8 g/t Au and 5.5 g/t Ag. The continuous under calling of grade is still not fully under stood.</li><li>• No assumptions have been made for the recovery of by-products for the Siana Mineral Resource. Silver reports to bullion with recovery's in the order of 40 to 45%.</li><li>• No estimation of deleterious elements or non-grade variables is required.</li><li>• The Siana resource was modelled using a 20 mN by 4 mE by 10 mZ with sub celling down to 5 mN by 1 mE and 10 mZ. Each lithology domain has been flagged and estimated separately. Block model parent cell size dimension takes into account both the drill spacing and the orientation of grade trends and lithological domains to ensure that parent cell size and sub cells are an</li></ul>



Criteria	JORC Code explanation	Commentary
		<p>appropriate size for honouring the volumes and the shape of the lithological boundaries. Composites used for the estimation are based on 2 metre composites for each lithological domain.</p> <ul style="list-style-type: none"> <li>No assumptions have been applied to the model for selective mining unit.</li> <li>No correlation has been made between variables.</li> <li>Grade estimation was control within the separate lithological boundaries, effectively unconstrained within the domain. Mineralization is predominantly hosted in the central carbonate and eastern basalt domains. Historic stoping area was also domain out separately and estimated separately.</li> <li>A top cut at the histogram break was applied for estimation of grade for each element and reviewing the CoV and adjusting the cuts to bring the CoV to below 1.8 to estimate the original gold and silver grade. Then this value was multiplied by a factor of 1.15 for gold for gold values above 1.2 and a factor of 3.0 for silver. This was deemed by the Competent Person the most satisfactory way to bring the grade closer inline to mill production head grade.</li> <li>Block model volume validation was validated against ore solid wireframes for each mineralised domain. Block model validation for grade was conducted both by visually expecting model sections by northings at 20 metre increments, by benches at 10 metre increments.</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>The current marginal cut off for the Siana Open Pit which is 0.7 g/t gold.</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>Mining of the Siana Resource is currently by Open pit mining methods involving mechanised mining techniques and at depth underground is planned. Some of the factors used in consideration of the mining method include, proximity of the mineralisation to surface, geotechnical and hydrogeological factors, prevailing gold price, planned mining dilution and mining recoveries and the average plant processing recoveries. This model is suitable for open pit evaluation and for underground evaluation to approximately the -165m RI or if a bulk underground method is used. No consideration has been taken into for ore loss or dilution in this model. For more selective underground method tighter grade boundaries which honour structural, alteration and lithological control will be required and hence a different model maybe required.</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</li> </ul>	<ul style="list-style-type: none"> <li>The dominant mineralisation for the Siana Mineralisation is gold and silver with the gold to silver ratios from less than 1:1 to silver being greater than 7:1. Material mined from Siana open pit is process on site at the Siana CIL Gold processing plant. Design capacity is 1.1 Mtpa. Processing recoveries for gold vary between 75 to 85% for gold and nominally 40 to 45% for silver. Product</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	produced is a gold/silver dore as bullion.
<i>Environmental factors or assumptions</i>	<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>Waste from processing is disposed at the current tailings storage facility at Siana. The Environmental Impact Statement (EIS) was prepared by BMP Environment &amp; Community Care, Inc., and was accepted by the DENR EMB for review in November, 2008. BMP is a highly professional and well-respected Philippine company that has undertaken a number of environmental studies for major mineral and development projects in other business sectors. The EIS includes results of the detailed baseline studies. The major project impacts have been identified and an Environmental Protection and Management Plan formulated. The Environmental Compliance Certificate (ECC) was granted 21st April 2009. From a natural environment perspective the Project will have minimal, if not reversible impacts. Ongoing environmental monitoring over the past five years indicates there are no major environmental issues relating to the Project and indeed there will be a positive impact, especially an improvement in the quality of the water in the surrounding water courses, the impact of progressive revegetation program conducted and the positive impact on the socio-economic aspects due to livelihood and development programs designed for the local residents. The potential for acid mine drainage (AMD) from waste material generated by a new open pit development was tested using drill core samples from waste material within the pit design. The results indicated an inherent buffer capacity due to the presence of limestone and calcareous sediments to prevent acid formation, as supported by the sites routine measurements with near neutral pH from water within the historic open pit and drainages from the site area.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Bulk density determinations were carried out routinely at site. All mineralised zones were measured as well as the footwall and hanging wall waste material. From these determinations the average value by lithology type was hard coded into each lithological domain.</li> <li>Bulk density for the resource has been measured using samples of core taken from each metre sample interval, weighed and the density determined using the "Archimedes Principle" water displacement method.</li> <li>Bulk density has been estimated by the actual measurements for fresh mineralised and non-mineralised material by lithology.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of</li> </ul>	<ul style="list-style-type: none"> <li>The mineral resource has been classified into Indicated and Inferred categories based on drill hole spacing, geological confidence, and grade continuity and estimation quality. The combination of these factors together guides the coding of the resource. Indicated material is generally material with average drill spacing not greater than 35 metres along with reasonable</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p>the data).</p> <ul style="list-style-type: none"> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<p>geology confidence and grade continuity. Inferred material is generally material that has average drill spacing greater than 35 metres and or the geology or grade continuity confidence is low.</p> <ul style="list-style-type: none"> <li>The drill and input data density is comprehensive in its coverage for this style of resource for an open pit evaluation to allow reasonable confidence for the tonnage and grade distribution to the levels of Indicated and Inferred.</li> <li>The Mineral Resource estimated appropriately reflects the view of the competent person.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>External reviews and audits have been conducted by BDA for early generations of the Siana resource models for the open pit evaluation. No fatal flaws were identified. The current model follows the similar principles for their interpretation methodology. The differences are the estimation technique chosen (Ordinary Kriging) along with tighter search parameters than previously applied with the rotation of the search ellipse adjusted to better reflect the observed grade trends from grade control data.</li> </ul>
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>The model has been validated visually against drilling and statistically against input data sets on a domain and on swath plot basis. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC code.</li> <li>The statement relates to a global estimate for Indicated material. For the Indicated material, grade control drilling to a nominal 8 x 7 metres or tighter will be required to firm the mineralised position and grade distribution suitable for ore block delineation. Inferred material relates to a global estimate.</li> <li>Reconciliations for the Indicated resource model against Mill Production for the mining conducted between 1 August 2014 to 30 July 2015 and material mined in May 2013 (thirteen months) demonstrates at a 0.7 g/t gold cut off that the Indicated resource model has under called tonnes by 4%, under called grade by 25% and under called gold ounces by 31%. Processing of the mining stocks commenced in January 2015 and has process 298kt of ore with closing stocks as at 30 June 2015 being 87kt @ 1.8 g/t Au and 5.5 g/t Ag.</li> </ul>



## 2 ORE RESERVE ESTIMATE

### 2.1 RESULTS

The Siana Open Pit Ore Reserve Estimate as at 30<sup>th</sup> June 2015. It is reported according to JORC 2012.

**Table 3: Siana Ore Reserve Estimate as at 30 June 2015.**

Siana Open Pit Reserve update as at 30 June 2015									
Estimate	Classification	Cut Off Au (g/t)	Tonnes (Mt)	Au g/t	Ag g/t	Recovered Au (koz)	Recovered Ag (koz)		
As at 30 Jun 2015 JORC 2015	Probable	0.7	1.9	3.5	8.2	181	224		
	<b>Total</b>	<b>0.7</b>	<b>1.9</b>	<b>3.5</b>	<b>8.2</b>	<b>181</b>	<b>224</b>		

#### Notes on Ore Reserves

1. Discrepancy in summation may occur due to rounding.
2. Within the resource block model a 15% upgrade factor on gold values above 1.2 g/t has been applied. Actual mill reconciliation is closer to 25%. As a result, the variance between the upgrade factor and mill reconciliation has been used as a de facto dilution factor. A mining recovery of 100% has been used.
3. Gold price of US\$1200 /oz and silver price of US\$15 / oz were used, along with a PHP:USD exchange rate of 47:1.
4. Processing recoveries of 85% for gold and 45% for silver were used.
5. No Inferred Resources have been used in the derivation of the Ore Reserve estimate.
6. The above open pit Ore Reserve Estimate has been prepared by Mark Van Leuven, Principal Mining Engineer of Mining One Pty Ltd. He is a Chartered Professional and Fellow of The AusIMM and has the relevant experience to act as the Competent Person under the JORC Code for this Ore Reserve estimate.

### 2.2 CHANGE FROM PREVIOUS PUBLIC REPORT

The Ore Reserve estimate presented in this report is a significant revision arising from a substantial re-design of the open pit. No depletion of the Mineral Resource has taken place due to mining. Hence all changes in the Ore Reserve estimate are due to re-design. The previous Ore Reserve estimate was made in 2013.

**Table 4: Change in Ore Reserve estimate since previous public report as at 30 June 2015.**

Estimate	Classification	Tonnes (Mt)	Au g/t	Ag g/t	Recovered Au (koz)	Recovered Ag (koz)
As at 30 Jun 2015 JORC 2012	Probable	1.90	3.5	8.2	181	224
	<b>Total</b>	<b>1.90</b>	<b>3.5</b>	<b>8.2</b>	<b>181</b>	<b>224</b>
As at 30 Jun 2014 JORC 2004	Probable	3.60	2.8	8.2	282	347
	<b>Total</b>	<b>3.60</b>	<b>2.8</b>	<b>8.2</b>	<b>282</b>	<b>347</b>
<b>Production for 2015</b>		<b>0.34</b>	<b>2.9</b>	<b>6.0</b>	<b>27</b>	<b>30</b>
difference	Probable	-1.70	0.7	0.0	-101	-123
	<b>Total</b>	<b>-1.70</b>	<b>0.7</b>	<b>0.0</b>	<b>-101</b>	<b>-123</b>
<b>after 2015 production (depletion)</b>		<b>-1.4</b>	<b>0.6</b>	<b>-0.4</b>	<b>-74</b>	<b>-93</b>

#### Notes on Ore Reserves

1. Ore Reserves are reported as Inclusive of the supporting Mineral Resource estimate.
2. Discrepancies in summation will occur due to rounding.
3. Processing recoveries of 85% for gold and 45% for silver were used for the recovered metal for the JORC 2012 figures.
4. Processing recoveries of 87.5% for gold and 52.7% for silver were used for the recovered metal for the JORC 2004 figures.



**2.3 STATEMENT OF COMPLIANCE WITH JORC CODE REPORTING**

This Ore Reserve estimate and statement has been compiled in accordance with the guidelines defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

**2.3.1 Competent Person Statement**

I, Mark Van Leuven, confirm that I am the Competent Person for the Siana Ore Reserve section of this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report and to the activity for which I am accepting responsibility.
- I am a Fellow of The Australasian Institute of Mining and Metallurgy, Member No. 104479.
- I have reviewed the Report to which this Consent Statement applies.

I am a full time employee of Mining One Pty Ltd and have been engaged as a consultant for Red 5 Limited.

I verify that the Ore Reserve section of this Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to the Ore Reserve estimate.

**2.3.2 Competent Person Consent**

With respect to the sections of this report for which I am responsible – Siana Open Pit Ore Reserve - I consent to the release of the Siana Open Pit Ore Reserve as at 30th June 2015 by the Directors of Red 5 Limited.

<p><b>Signature of Competent Person</b></p>  <p>Mark Van Leuven FAusIMM Member No.104479</p>	<p><b>Date</b></p> <p>24 September 2015</p>
<p><b>Signature of Witness</b></p> 	<p><b>Witness Name and Address</b></p> <p>Byron Dumpleton PO Box 3021, WA Kingsley</p>

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## 3 JORC Code, 2012 Edition – Table 1 - Siana Gold Ore Reserve Estimate – September 2015

### 4 Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<ul style="list-style-type: none"><li><i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></li></ul>	<ul style="list-style-type: none"><li>The geological model is considered to be reasonable for this style of deposit. The Siana gold mineralisation is characterised as a high sulphidation regime of epithermal affiliation, hosted predominantly within tectonised and altered carbonate and basaltic lithological assemblages. The current interpretation is suitable for bulk mining method and is suitable for open pit evaluation.</li><li>The Siana model is based on lithological interpretation compiled on cross-sections and level plans. Extensive use of core photographs together with drill logs ensured best possible consistency in the interpretation.</li><li>Interpretation of the historic underground relied on visual identification and logging from drilling, annotation of caved material and timber in historic drill logs, review of the underground level plan gold grades to assess the most likely areas of stoping (ie. above mine cut-off), and examination of the Suricon longitudinal projection of the mine workings.</li><li>The mineralisation at Siana is controlled by lithology, structure and breccias and changes in wall rock alteration and ore mineralogy with depth. The main factors that will contribute to the reliability of the grade and geological continuity is the drill spacing.</li><li>The resource estimation technique for grade was estimated using ordinary kriging. Ordinary kriging is an appropriate technique for this style of mineralisation and for resource evaluation. The software package for the grade estimation, variography, and statistics was conducted using Surpac version 6.2.2.</li><li>Each lithological domain was composited and estimated separately. To control grade outliers grade cuts based on the histogram break was applied to each of the lithological domains. The search radii and orientations were based on directional variographs and drill spacing. The maximum distance for extrapolation of data points along strike was 46 metres, across strike it was 15 metres and down dip it was 60 metres. Reconciliations for the Indicated Resource model against</li><li>Mill Production for the mining conducted between 1 August 2014 to 30 July 2015 and material mined in May 2013 demonstrates at a 0.7 g/t gold cut off that the Indicated resource model has under called tonnes by 4%, under called grade by 25% and under called gold ounces by 31%. Processing of the mining stocks commenced in January 2015 and has processed 298 kt of ore</li></ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i></li> </ul>	<p>with closing stocks as at 30 June 2015 being 87 kt @ 1.8 g/t Au and 5.5 g/t Ag.</p> <ul style="list-style-type: none"> <li>• No assumptions have been made for the recovery of by-products for the Siana Mineral Resource. Silver reports to bullion with recovery's in the order of 40 to 45%.</li> <li>• No estimation of deleterious elements or non-grade variables is required. The Siana resource was modelled using a 20 mN by 4 mE by 10 mZ block size with sub celling down to 5 mN by 1 mE and 10 mZ. Each lithology domain has been flagged and estimated separately.</li> <li>• The block model parent cell size dimension takes into account both the drill spacing and the orientation of grade trends and lithological domains to ensure that parent cell size and sub cells are an appropriate size for honouring the volumes and the shape of the lithological boundaries. Composites used for the estimation are based on 2 metre composites for each lithological domain. No assumptions have been applied to the model for the selective mining unit.</li> <li>• No correlation has been made between variables.</li> <li>• Grade estimation was controlled within the separate lithological boundaries, effectively unconstrained within the domain. Mineralization is predominantly hosted in the central carbonate and eastern basalt domains. The historic stoping area was also domained and estimated separately.</li> <li>• A top cut at the histogram break was applied for estimation of grade for each element and reviewing the CoV and adjusting the cuts to bring the CoV to below 1.8.</li> <li>• Block model volume validation was validated against ore solid wireframes for each mineralised domain. Block model validation for grade was conducted both by visually inspecting model sections by northings at 20 metre increments and by benches at 10 metre increments.</li> <li>• The Mineral Resources are inclusive of the Ore Reserves</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Competent Person, Mark Van Leuven visited site on 14-17 August and 8-22 September 2015. During these visits, discussions were held with senior mining professionals in charge of the mining operations, mine and resource geology, geotechnical and mineral processing, along with the site general manager.</li> <li>• The CP reviewed the updated open pit design and mine production schedule used for estimating the Ore Reserve.</li> <li>• The CP made himself aware of the site conditions and available information regarding the modifying factors for the estimation of the open pit Ore Reserves.</li> </ul>
Study status	<ul style="list-style-type: none"> <li>• <i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li> <li>• <i>The Code requires that a study to at least Pre-Feasibility Study level has</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Siana Gold Project Feasibility Study (FS) was completed in June 2009..</li> <li>• The Base Case within this study was an open pit 750,000 t/a operation integrated with a 400,000 t/a underground option.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i>	<ul style="list-style-type: none"> <li>• Within the FS appropriate assessments and studies were carried out, and included consideration of, and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.</li> <li>• The FS determined that the open pit mine was technically feasible and economically viable.</li> <li>• Mining recommenced in September 2014 after the project was placed on care and maintenance in June 2013 when a Cease and Desist Order was placed on the processing operations after the detection of a crack in the wall of the tailings facility.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>• <i>The basis of the cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Siana open pit was re-optimised by Mine Planning Solutions Limited (MPS) in November 2014. The run-of-mine (ROM) cut-off grade used in the optimisation work was 1.2 g/t gold. The waste cut-off grade was estimated at 0.7 g/t gold, where material between 0.7 g/t and 1.2 g/t was separately stockpiled as low grade for future processing.</li> <li>• In order to derive the above cut-off grade, a gold price of US\$1297 /oz and a silver price of US\$20 /oz were used, along with metallurgical recovery of 48.4%.</li> <li>• A mining cost of US\$4.09 /t, processing cost of US\$15.43 /t and a G&amp;A cost of US\$5.48 were used.</li> <li>• The open pit has been redesigned following the slip in the east wall in July 2015. The same cut-off grades of 1.2 g/t and 0.7 g/t have been used to estimate the ROM and low grade inventory. Metal prices of US\$1200 /oz for gold and US\$15 for silver were used, along with metallurgical recoveries of 85% for gold and 45% for silver. The PHP:USD exchange rate used was 47:1.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>• <i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></li> <li>• <i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></li> <li>• <i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></li> <li>• <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li>• <i>The mining dilution factors used.</i></li> <li>• <i>The mining recovery factors used.</i></li> <li>• <i>Any minimum mining widths used.</i></li> <li>• <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Siana open pit was re-optimised by Mine Planning Solutions Limited (MPS) in November 2014 using Whittle optimization software. Final pit designs were also produced.</li> <li>• The operation is mined using conventional open pit mining methods using top hammer drill rigs, CAT 40 tonne articulated Dump Trucks and CAT 374 (~80 t) hydraulic excavators. Mining bench heights are 5 m with mining generally conducted on 2 x 2.5 m flitches. Mining rate is a nominal 8,000 bcm/d.</li> <li>• Commercial underground mining by Surigao Consolidated Mining Company (Suricon) occurred in the late 1930's. Mining via shaft access was undertaken on a continuous basis between 1938 up until 1960, with ore production of ~1.6 Mt at an estimated grade of ~12 g/t Au. The primary mining method used was overhand and underhand timber stoping, which reflects the weak rockmass characteristics of the main orebody. Square set timbers were used as the primary means of ground support. Underground mining ceased in 1960, for potentially a number of reasons: exhaustion of the high-grade at the 700' level (-160 mRL); unstable ground conditions; high groundwater inflows /</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"><li data-bbox="383 277 1099 304">• <i>The infrastructure requirements of the selected mining methods.</i></li></ul>	<p data-bbox="1308 277 1626 304">flooding; H2S gas inundation.</p> <ul style="list-style-type: none"><li data-bbox="1272 309 2148 639">• The historic stopes are delineated as the “stope zone” and identified as domain 8 or lithcode 800 within the block model and outlines the working areas affected by stoping. To simulate the loss in volume the density has been reduced to 2.12 t/m<sup>3</sup>. It should be noted that a significant proportion of the area has not been mined within the stope zone flagged within the resource model. The majority of the lower historic stopes which are located in the open pit resource were back filled with material below the historic underground cut off of ~9 g/t gold. The mining method used for the lower levels was underhand cut and fill with timbers for support. Actual stoped areas included significant proportion of timbers. In the 2015 Ore Reserve at the 0.7 g/t gold cut off the stoping zone (domain 8) represents 28% of the reported ore tonnes.</li><li data-bbox="1272 644 2148 751">• In July 2015 there was a significant material movement in the East wall of the open pit. Peter O’Bryan &amp; Associates (POB), consultants in mining geomechanics were engaged to conduct an independent geotechnical review of the open pit operations in August 2015.</li><li data-bbox="1272 756 2148 831">• The pit designs for Stages 2, 3 and 4 were updated following the failure incorporating recommendations provided by POB. and have been reviewed by POB.</li><li data-bbox="1272 836 2148 911">• A number of external consultants have provided assistance in geotechnical and hydrogeological aspects of the open pit design including Golder, Mining One and Peter O’Bryan &amp; Associates.</li><li data-bbox="1272 916 2148 1086">• The original RSG Global pit design accommodated differing pit slope angles (40 to 44 degrees) in four sectors around the pit and over the vertical range 0 mRL to -70 mRL From -70 mRL to the pit base the slopes steepened to 51 degrees in better quality rock mass, and from 0 mRL to surface (+50 mRL) the angles flattened to 38 degrees in weathered bedrock with lower rock mass ratings.</li><li data-bbox="1272 1091 2148 1166">• Seismic risk was addressed in the derivation of the recommended pit slope angles, for events with return periods of 100 years and 500 years. Peak ground acceleration rates of 0.15 g and 0.24 g were apply respectively.</li><li data-bbox="1272 1171 2148 1278">• Currently there are no specific grade control holes drilled, however, all production drill holes in ore shots and holes adjacent to ore boundaries are routinely sampled and the assays used to calibrate the resource model and in mine to mill reconciliation.</li><li data-bbox="1272 1283 2148 1358">• The resource block model used for estimating the Ore Reserves was titled “sia_bkdr_30jun2015_gc_fy16_rev17_pit_as_at_30jun2015.mdl”. This is the same model that was used for the estimation of the 2015 Mineral Resource.</li><li data-bbox="1272 1362 2148 1481">• Reconciliations between the current Siana resource model based on a 0.7 g/t gold cut off for indicated material and the ore processed for the 13 month period to the end of July 2015, the block model under estimated the ore tonnes by 4%, and under estimated the gold grade by 25%.</li></ul>

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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>To calibrate the grade estimate resource geologist has applied a factor within the model to increase gold grades &gt;1.2 g/t by a factor of 15% to develop the model used for the ore reserve and resource reporting. In order to estimate the Ore Reserve, mining have used the difference between the 15% and 25% under-call on gold grade as a de facto dilution factor. Therefore, no additional dilution factor has been applied. Similarly, with a 4% under-call on tonnes, no additional mining recovery factor has been applied.</li> <li>No minimum mining widths were applied.</li> <li>Inferred Mineral Resources have been used to derive the overall mine production schedule, but have been excluded from the financial model when determining if the Indicated Resource can be economically mined and hence converted to a Probable Ore Reserve.</li> <li>A process plant has been constructed and commissioned. Part of the open pit mining capital costs spent during the first 3 years are dewatering equipment, workshops and office blocks.</li> <li>A mining contractor has been engaged for the mining operation and a workshop complex has been constructed for their use.</li> </ul>
<p><i>Metallurgical factors or assumptions</i></p>	<ul style="list-style-type: none"> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li><i>Any assumptions or allowances made for deleterious elements.</i></li> <li><i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>The Siana Gold Project Feasibility Study (FS) was completed in June 2009. The process design and metallurgy in the study was conducted by Internet Engineering and Amdel in Perth. Comprehensive metallurgical testing of the open pit ores was completed encompassing comminution, gravity concentration, flotation, cyanide leaching, carbon kinetics, thickening and slurry viscosity measurements, and cyanide detoxification testing.</li> <li>With feasibility and permitting completed in 2009 site construction activities commenced in 2010. The company initially proposed a throughput of 750,000 t/a however during financing it was decided to commit to a larger SAG mill enabling a throughput of 1,100,000 t/a to be achieved. In April 2013 the processing plant was operating at close to full capacity.</li> <li>The plant comprises single stage crushing, SAG milling, gravity concentration and high intensity cyanidation, leaching and adsorption (CIL), followed by carbon elution and electrowinning to produce combined gold and silver doré. The tailings from the cyanide leach area are treated in a detoxification circuit to minimize cyanide concentration prior to discharge to the tailings storage facility. The plant design also includes various reagent mixing facilities as well as water, air and electrical services. The plant uses well-tested technology.</li> <li>The operations were suspended in April 2013 following the detection of a crack in the wall of the tailings storage facility (TSF). A CDO was placed over the processing operations by the Philippines Mines and Geoscience Bureau (MGB) in June 2013 and the plant was placed into care and maintenance. In April 2014, the Department of Environment and Natural Resources (DENR) advised the Company that the CDO shall be lifted once the Company had completed construction of a new HDPE lined tailings facility, made the</li> </ul>



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Criteria	JORC Code explanation	Commentary
		<p>necessary modifications to the existing tailings facilities to accommodate the new thickened cement tailings and constructed a new thickener and cement addition facility. Construction of these activities was completed in December 2014 and the CDO was subsequently lifted. Processing recommenced in January 2015.</p> <ul style="list-style-type: none"> <li>• Substantial testwork was done for the FS and the plant has now been running for nine months since it recommenced operations.</li> <li>• In the eight months since the process plant recommenced, actual mill recovery has ranged from 80%-90% for gold and 24%-60% for silver. Mill recoveries of 85% for gold and 45% for silver have been used for the estimation of the Ore Reserves.</li> <li>• No assumptions have been made for any deleterious elements.</li> </ul>
<p><i>Environmental</i></p>	<ul style="list-style-type: none"> <li>• <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>• An Environmental Compliance Certificate (ECC) was issued by the DENR on 21 April 2009 following submission and approval of the Environmental Impact Statement (EIS), and high level project acceptance at a Public Open Forum.</li> <li>• The EIS presented baseline study findings, identified potential impacts and presented the framework of programmes that will be implemented and maintained under the conditions of the ECC.</li> <li>• BMP Environment &amp; Community Care, Manila, undertook acid-base accounting of waste rock core samples obtained from the waste wall zones of the open pit design. Acid-base accounting is a two-part analytical procedure for determining both the acid potential and neutralizing potential of waste rocks.</li> <li>• The test results indicate that for Domain 100 (western volcanics) that makes up about 33% of the total waste rocks for extraction, only 13% of the total 15 samples is PAF (potentially acid forming). For Domain 400 (eastern basalts) which is about 27% of the estimated waste rocks, 15% of the total 13 samples is PAF.</li> <li>• For Domain 600 (feldspar porphyry) which is roughly 16% of the estimated waste rocks, 38% of the total 8 samples is PAF. The rest of the samples represent 24% of the estimated waste rocks and are NAF (non acid forming).</li> <li>• Overall BMP stated that the waste rock has an inherent buffer capacity to prevent acid generation. This is consistent with pH measurements of 7.4 to 8.3 for run-off from the former Suricon tailings ponds and waste rock dumps during routine environmental monitoring at the site.</li> <li>• Ongoing environmental monitoring over the past five years indicates there are no major environmental issues relating to the Project.</li> <li>• As discussed under Metallurgical factors and Assumptions, a CDO was placed on the process plant after the detection of a crack in the wall of the tailings storage facility. In order for the CDO to be lifted the Company constructed a new high density polyethylene (HDPE) lined tailings storage facility for additional storage capacity and strength; installed a thickener and</li> </ul>



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		<p>cement mixing facility to allow for production of dry tailings with greater residual strength and made the necessary modifications to existing tailings storage facilities (TSF 3 and TSF 4) to accommodate the new thickened cemented tailings.</p> <ul style="list-style-type: none"><li>• The MGB formally lifted the CDO after they had performed a site inspection to verify the completeness of the construction activities mentioned previously.</li></ul>
<i>Infrastructure</i>	<ul style="list-style-type: none"><li>• <i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></li></ul>	<ul style="list-style-type: none"><li>• The Siana mining operation and plant is located approximately 30 km by road from Surigao City. Access to the site from Surigao City is via the partly bitumen sealed concrete National Highway.</li><li>• Most goods and materials required for the operations are transported from the ports of Surigao City, Lipata, Placer or Butuan along the National Highway to the mine site.</li><li>• A new TSF was constructed on the existing tailings dam areas. Explosive magazines, pit dewatering and bore dewatering infrastructure is located at the southern end of the pit. Settling ponds and the main raw water pond are located east of the existing TSF 3. The raw water and settling ponds are required for the staging of pit dewatering to either supply water to the process plant and/or discharge of surplus water into the Dayano River.</li><li>• An accommodation and messing facility was constructed to the north-west of the plant site adjacent to the incoming site access road. The treatment plant is located approximately 1 km north-west of the existing Siana pit. The site is generally flat with a gentle slope to the west. The plant site utilises the natural contours to allow drainage of storm water to the west. The extension to the existing run-of-mine pad (ROM) stockpile area was constructed with mine waste.</li><li>• Accommodation and messing facilities have been determined based on staffing numbers provided by GRC. Expatriate, senior local staff and managers are accommodated in the site facility on a single status basis. Junior staff, general mining, plant and maintenance staff are employed from the surrounding communities. Staff not housed at the village are transported to the mine site by bus.</li><li>• Primary raw water for the process plant is sourced from pit dewatering bores and pumped to the plant feed water pond and from catchments from the TSF</li><li>• Process water is supplied from tailings decant water and stored in a lined 1,000 m<sup>3</sup> capacity process water tank. The shortfall in process water between the return from the tailings decant and the plant requirements will be made up from raw water from the plant feed water pond which will be sourced from pit dewatering.</li><li>• Power is provided by two 750 kVA generators.</li></ul>

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Costs	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul style="list-style-type: none"> <li>The Siana Gold FS used a throughput rate of 750,000 t/a to estimate the capital costs. Internet Engineering (and its sub-consultants), other contractors, RSG Global (now Coffey Mining), GHD and GRC were responsible for the development of the capital estimate.</li> <li>For plant &gt; US\$50,000 three quotations were obtained, between US\$5000 and US\$50,000 one quote was obtained. Unit rate costs were based on quotations from large and medium sized contractors in the Philippines. Mining capital costs were based on mine schedules developed in the FS.</li> <li>The operating costs have been determined from a variety of sources including: <ul style="list-style-type: none"> <li>Testwork results and supplier quotations</li> <li>GRC advice</li> <li>Internet Engineering database for similar sized operations</li> <li>Mining costs provided by RSG Global and Red Rock Engineering</li> <li>First principle estimates</li> </ul> </li> <li>In the Ore Reserve model an allowance of 20% of total mine operating cost has been used for sustaining capital.</li> <li>Operating costs in the Ore Reserve estimate are based on actual operating costs from the previous year's production.</li> <li>Exchange rate used in the Ore Reserve estimate was provided by Perth Corporate and was 47 Philippine Peso to 1 US dollar</li> <li>Refining charges and list of deleterious metal penalties provided by the refiner.</li> <li>A combined 3% for excise and royalty has been applied to the revenue provided by the gold.</li> </ul>
Revenue factors	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul style="list-style-type: none"> <li>Head grade to the mill for both silver and gold is based on the ore delivered to the ROM pad in the mine production schedule and any ore that may be fed from the low grade stockpile.</li> <li>Commodity prices and exchange rates were provided by the Perth Corporate office: US\$1200 /oz for gold, US\$15 /oz for silver and 47 PHP:USD.</li> <li>Transportation and treatment charges, and penalties provided by the refiner.</li> </ul>
Market assessment	<ul style="list-style-type: none"> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<ul style="list-style-type: none"> <li>The doré is sold directly to the gold refinery.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including</li> </ul>	<ul style="list-style-type: none"> <li>Ore tonnes and gold and silver head grades from the life of mine (LOM) schedule are input to the milling schedule.</li> </ul>



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	<p><i>estimated inflation, discount rate, etc.</i></p> <ul style="list-style-type: none"> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul style="list-style-type: none"> <li>Mill feed is calculated based on ROM feed and stockpile movements. Mill recoveries of 85% for Au and 45% for Ag are applied to determine recovered metal</li> <li>Total material movement (in bcm) is used to estimate other mine physicals and costs from first principles.</li> <li>Operating cost estimates are based on last year's actual unit rates and contractor rates.</li> <li>As the LOM is less than three years no inflation has been applied. Similarly no discount rate has been used to test the financial viability of the ore in the schedule. The schedule passes the positive cash flow test and is therefore economic and can be classified as an Ore Reserve.</li> </ul>
Social	<ul style="list-style-type: none"> <li>The status of agreements with key stakeholders and matters leading to social licence to operate.</li> </ul>	<ul style="list-style-type: none"> <li>In order for the Company to operate it must submit the Social Development Management Plan (SDMP). The SDMP has 3 major components namely; <ul style="list-style-type: none"> <li>Implementation of Community Development Project;</li> <li>Information Education Communication Program</li> <li>Declaration of mining technologies and geoscience program.</li> </ul> </li> <li>Within the 30 days from the approval of the SDMP, the Company should enter into a Memorandum of Agreement with the host communities concerned. This requirement is based on the Department of Environment and Natural Resources (DENR) Department Administrative Order DAO 2010-21 Section 134- onwards.</li> </ul>
Other	<ul style="list-style-type: none"> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	<ul style="list-style-type: none"> <li>The open pit will have an estimated annual water inflow of 6.8GL. Rain related inflow occurs predominantly over a three month period and is the time when the pit is at most risk of minor flooding. Once a pit floor has flooded it takes time to recover sufficiently for mining to resume. Dewatering is under the control of a dedicated supervisor. Duplicate pump systems are installed for back up purposes.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul style="list-style-type: none"> <li>There is no Measured Resource within the resource model used to estimate the reserve. Only Indicated Mineral Resource material has been used to apply the economic viability test. The inventory in the LOM schedule satisfies the requirement to be classified as a Probable Ore Reserve.</li> <li>The mine schedule and the overall result appropriately reflects the Competent Person's view of the deposit.</li> <li>100% of the Probable Ore Reserve has been derived from Indicated Mineral Resources.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Audits conducted were by internal peer review and the geotechnical review conducted by POB of which the geotechnical parameters for the 2015 design</li> </ul>



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<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"><li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></li><li>• <i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li></ul>	<p>were used.</p> <ul style="list-style-type: none"><li>• As discussed above, the gold grades in the resource model have been factored based on thirteen months of mill reconciliation. The ongoing calibration of the resource model may impact on the accuracy of this Ore Reserve estimate. Mill reconciliation is still substantially higher than the modelled grades.</li><li>• Similarly, 28% of the resource in the estimate is based on a zone that encloses previous underground stopes that have been backfilled with material that was available at the time at &lt; 9 g/t Au. Based on resource drilling of this zone, there would appear to be minimal if any voids in this zone that are not backfilled. A reduced in situ density of 2.12 t/m<sup>3</sup> has been used to take into account the lower density of the fill and the volume of support timber that was used in the stoping operations and remains in the stope voids. A change in the amount of timber used in various underground areas may impact on the estimate within the “stope zone”.</li></ul>

End Report