

23 February 2016

## 704,000oz Mineral Resource for Siana Underground

*52% increase in Indicated Resource category to 551,000oz, providing a strong foundation for the update of the Siana Underground Feasibility Study due for completion by mid-2016*

### Key Points

- A JORC 2012 compliant Mineral Resource estimate for the Siana underground deposit in the Philippines has been completed by Mining One Pty Ltd, reported at a 2.4 g/t gold cut off the figures are:
  - *Indicated Resource of 3.3Mt grading 5.2 g/t gold for 551,000oz*
  - *Inferred Resource of 0.5Mt grading 9.3 g/t gold for 153,000oz*
  - *Total Indicated and Inferred Resource of 3.8Mt grading 5.8 g/t gold for 704,000oz*
- The updated resource model is based on an interpretation cut-off grade of 1.0 g/t gold, reflecting from an improved structural understanding of the grade distribution and controls on mineralisation at Siana developed from two years of production and recent geotechnical analysis.
- The application of modelling the resource at a lower cut-off grade for the interpretation is expected to result in a more robust underground mine design, greater continuity of the resource and the ability to extract more tonnes per vertical metre.
- The Indicated Resource, which is available for conversion to Ore Reserves, has increased by 52% to 551,000oz compared with the previously published JORC 2004 underground Mineral Resource.
- The new Mineral Resource will underpin the update of the Feasibility Study by Mining One to assess the potential to extract resources below the current Siana Open Pit design (~180 meters metres below surface).
- The Feasibility Study is progressing on schedule for targeted completion mid-2016, enabling a decision on the proposed transition to underground mining at Siana.
- Underground development activities are, subject to a successful outcome from the updated Feasibility Study, expected to commence in the second half of the 2016 calendar year.

Red 5 Limited (ASX: RED) is pleased to announce that it has taken another important step towards the proposed development of a long-term underground mining operation below the existing open pit at the **Siana Gold Project** in the Philippines following the completion of a JORC 2012 Underground Mineral Resource estimate.

The new resource, which has been estimated by Mining One Pty Ltd (Mining One), comprises a total Indicated and Inferred Resource of **3.8 million tonnes grading 5.8 g/t gold for 704,000 contained ounces of gold** and represents a comprehensive update to the previously published JORC 2004 resources for the mineralisation located below the final open pit design.

The resource includes the results of recent geotechnical drilling undertaken at Siana in 2015 (see *ASX Announcement – 11 January 2016*) plus all resource drilling since 2003. For the purposes of the updated resource interpretation a nominal cut-off grade of 1.0 g/t gold has been applied – compared with a 2.0 g/t gold cut-off grade which was used for interpreting the previously published JORC 2004 Mineral Resource.

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The application of a lower cut-off grade for the interpretation reflects significant recent advances in the Company's understanding of the grade distribution and structural controls on mineralisation at Siana. This includes an improved understanding of the characteristics of the orebody developed from two years of open pit mining.

The application of a lower cut-off grade is expected to result in a number of benefits including a more robust underground mine design, greater technical confidence in the continuity of the resource and the potential to extract more tonnes per vertical metre.

Significantly, the Indicated Resource, which is available for conversion to Ore Reserves, has increased to **3.3 million tonnes grading 5.2 g/t gold for 551,000 contained ounces of gold reported at a 2.4 g/t gold cut-off**. This represents an increase of 52% compared to the previously published JORC 2004 Indicated Resource of 359,000oz, which was reported at a 3.0 g/t gold cut-off for the resource model used at that time.

The new resource estimate will underpin the update of the Siana Underground Feasibility Study, which is currently being undertaken by Mining One. The updated Feasibility Study is progressing on schedule and is expected to be delivered in mid-2016, marking another important milestone in making the proposed transition to a future underground mining operation at Siana.

As outlined in previous announcements, a revised open pit mining strategy has been implemented at Siana following the completion of a detailed Technical Study last year. The new mine plan is forecast to recover ~181,000 ounces from July 2015 via a progressively staged cut-back of the east pit wall to allow the open pit to be mined to a final depth of ~180 metres below surface.

The revised strategy is designed to optimise the extraction of open pit Ore Reserves over the remaining life of the open pit 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. If the underground Feasibility Study identifies a viable mine plan then cash-flows generated by the open pit operation will be used to fund the underground mine development, which is targeted to commence in the second half of this year.

The overall objective is for the Siana operation to transition to a long-term underground mining operation with the completion of open pit mining. Mining from the open pit is scheduled to end in December 2017.

### Siana JORC 2012 Underground Mineral Resource Update

The JORC 2012 Indicated and Inferred Mineral Resource for the Siana Underground as at February 2016 is set out below:

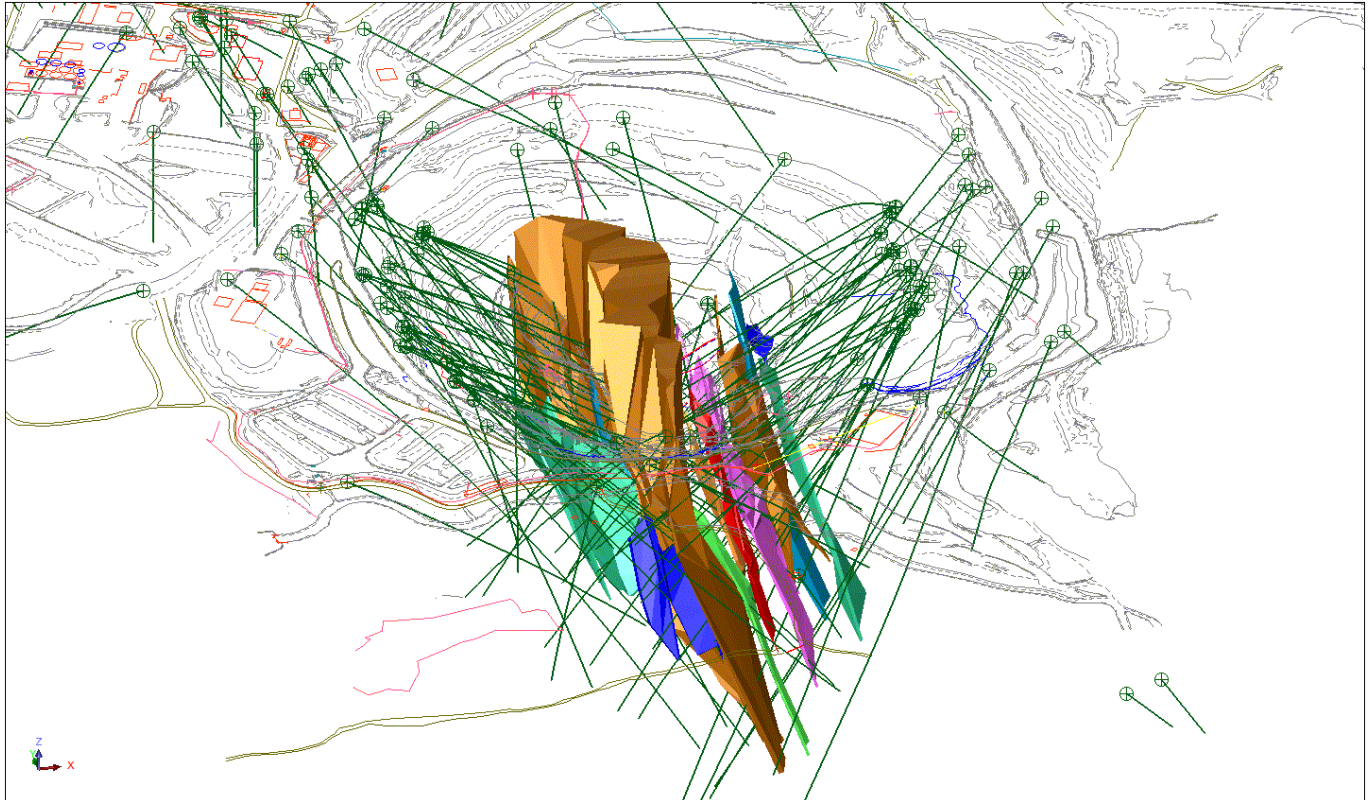
Siana JORC 2012 Underground Mineral Resource Estimate as at February 2016							
Estimate	Classification	Cut Off Au (g/t)	Tonnes (Mt)	Au g/t	Ag g/t	Contained Au (koz)	Contained Ag (koz)
Feb 2016 JORC 2012	Indicated	2.4	3.3	5.2	7.2	551	756
	Inferred	2.4	0.5	9.3	11.2	153	186
	<b>Total</b>	<b>2.4</b>	<b>3.8</b>	<b>5.8</b>	<b>7.7</b>	<b>704</b>	<b>941</b>

#### Notes on the Mineral Resource

1. Discrepancy in summation may occur due to rounding.
2. Resource for this model has only been reported below the Stage 4 Final Pit (-130m level).
3. A cut-off grade of 2.4 g/t Au has been applied. The mining cut-off is expected to range between 2.0 to 2.5 g/t Au. The underground concept study conducted in September 2015 by Mining One determined a planning (optimised) cut-off value of 2.3 g/t Au.
4. The Siana Underground Resource Model is suitable for underground mining evaluation below the Stage 4 final open pit.
5. For grade estimation, the updated Siana underground resource has been constrained based on the geological interpretation which coincides with a nominal 1.0 g/t Au threshold grade. Zones of internal waste within some zones graded less than 1.0 g/t Au over a nominal two metres length and were interpreted and estimated separately.

The JORC 2012 Mineral Resource estimate is based on all drilling since 2003 and includes the additional drilling undertaken since 2009 as well as the recent geotechnical drilling completed in 2015 and announced to the ASX on 11 January 2016. It represents a comprehensive update to the previous JORC 2004 Mineral Resource estimate that was completed for the underground component of the 2009 Siana Gold Project Feasibility Study.

The resource model confirms the significant dimensions of the Siana underground deposit, which extends over a strike length of ~450m, extends to a vertical depth of ~500m below the Stage 4 open pit design (and remains open at depth) and averages ~40m in width for the upper section of the main zone of the resource (see Figure 1).



**Figure 1: Oblique view of the Siana Underground 1.0 g/t gold mineralised envelopes looking north-east**

The new resource estimate will underpin the update of the Siana Underground Feasibility Study, which is currently being undertaken by Mining One.

The next stage of the updated Underground Feasibility Study is to develop the underground mine plan in sufficient detail to allow the estimation of JORC 2012 compliant Ore Reserves. Subject to a successful outcome from the updated Underground Feasibility Study and subject to Board approval, underground development at Siana is expected to commence in the second half of calendar year 2016.

#### **Management Comment**

Red 5's Managing Director, Mr Mark Williams, said the completion of the JORC 2012 Mineral Resource for the Siana Underground deposit represented another significant milestone for the Siana Gold Project.

"This marks another important step in the long-term development plan for the Siana Gold Project, representing a comprehensive review of the previously published underground resource inventory which formed part of the 2009 Feasibility Study," he said.

"We are encouraged by the size and scope of the underground resource, which details a consistent underground ore body over a 450m strike length, extending up to 500m below the current open pit design and averages ~40m in width for the upper section of the main zone of the resource. Importantly, the resource remains open at depth, highlighting the excellent potential for future resource growth once we are able to access deeper drilling positions from underground."

“This is expected to translate into a more robust underground mine design utilising a revised mining method which is expected to maximise extraction of the resource and increase the tonnes per vertical metre included in the mining inventory,” Mr Williams continued.

“Of particular note are the exceptional grades of the underground drilling within the 1.0 g/t gold mineralised envelopes. This together with the thickness and continuity of the main mineralised zone for a resource of this nature bodes extremely well for future underground mining operations.”

“The new Underground Mineral Resource will form a key input for the update of the Underground Feasibility Study being undertaken by Mining One. The transition to underground mining represents one of the core components of our plan to extend the mine life at Siana beyond the current open pit phase of operations.”

## **JORC 2012 Mineral Resource Summary for the Siana deposit**

### **Geology and geological interpretation**

The Siana gold and associated silver-lead-zinc mineralisation belongs to the high sulphidation regime of epithermal affiliation. At Siana, the mineralisation is hosted predominantly within sheared and altered volcanoclastic sedimentary rocks, altered carbonates and basalts. The Siana lithology model is based on lithological interpretations compiled on cross-sections and level plans. Extensive use of core photographs and drill logs ensured best possible consistency in the interpretation.

For grade estimation, the updated Siana underground resource has been constrained based on the geological interpretation which coincides with a nominal 1.0 g/t Au threshold grade. Zones of internal waste within some zones graded less than 1.0 g/t Au over a nominal two metres length and were interpreted and estimated separately.

Interpretation of the location and extent of the historical underground workings relied on identification during logging of drill core, including recording of caved material and timber in historical drill logs; review of the underground level plans showing gold grades from historical underground sampling to assess what were the most likely areas of stoping based on the historical mine cut-off grade; and a longitudinal projection of the location of the historical mine workings.

The majority of the Siana mineralisation occurs in what is referred to as the “Main Zone”. The Main Zone occurs along a steeply dipping structural corridor between volcanoclastics on the footwall and basalt on the hanging wall. The structural corridor controls the strike, dip and shape of the Main Zone.

In addition to the Main Zone, there are three smaller sub-parallel footwall lenses and nine sub-parallel hanging wall lenses which also contribute to the resource.

The differences between this updated underground Siana resource and the previously announced JORC 2004 resource (*ASX Announcement, Red 5 2015 Annual Report, 16 October 2015*) are principally due to the improved understanding of the geology of the Siana mineralisation based on exposures in the current open cut; a change in the geological interpretation of the mineralised zones; and the change in cut-off grade at which the resource has been quoted from 3.0g/t Au to 2.4g/t Au.

### **Sampling and sub-sampling techniques**

Altered and mineralised sections of the holes were sampled on a one-metre basis after splitting longitudinally 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.

### **Drilling techniques**

Diamond drilling since 2003 used 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 of 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 -165m RI is 20m x 40m and below -165 by diamond drilling on a nominal 20m x 60m to 20m x 80m to approximately the -500m RI. Grade control channel samples collect from the restart in 2010 through to the cessation of operations in April 2012 were also used. Nine additional diamond drill holes (PQ to refusal then HQ, then NQ) were drilled in 2015 by Major Drilling Group International.

### **Criteria used for classification**

The Mineral Resource has been classified as Indicated and Inferred based on geological and grade continuity. In practice, this meant that the Indicated Resource is generally material with an average drill spacing of less than 40 metres which provides reasonable confidence in the geological and grade continuity and Inferred Resource is generally material that has an average drill spacing greater than 40 metres which provides lower confidence in the geological and grade continuity.

### **Sample analysis method**

All samples were pulverized before assaying. The assay techniques used for all assays were appropriate and considered as a total assays. For gold assays, approximately 50g of pulped sample was used for fire assay analysis with Atomic Absorption Spectroscopy (“AAS”) finish. For silver, copper, lead and zinc, assays were by AAS following concentrated acid leach.

### **Estimation methodology**

Grades were estimated using ordinary kriging which is an appropriate technique for resource evaluation of the style of mineralisation at Siana. The software package for statistics, variography and estimation was Surpac version 6.6. Grades for each mineralised zone were estimated separately using composited diamond drill hole samples from the mineralised zone being estimated. Outlying gold sample grades greater than 90g/t Au were cut to 90g/t Au based on a break in the Au grade sample distribution at 90g/t Au. Search radii and orientations for grade estimation were based on the results of directional variography.

### **Cut-off grade(s)**

A cut-off grade of 2.4 g/t Au has been applied. The expected mining cut-off is expected to range between 2.0 to 2.5 g/t gold. The underground concept study conducted in September 2015 by Mining One demonstrated a break even cut off value of 2.3 g/t gold.

### **Mining and metallurgical methods and parameters**

In 2015, mining studies by Mining One indicated that underground mining using decline access, trackless haulage and cut and fill stoping was feasible. No mining parameters have been built into the resource model.

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 the Siana open pit is processed on site at the Siana CIL gold processing plant and processing recoveries for gold vary from 75 to 85% for gold and from 40 to 45% for silver. No metallurgical parameters have been built into the resource model.

Refer to the Competent Person’s statement and the detailed information given in the JORC 2012 Table 1 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 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 steady-state 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 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 mines, and by recommencing exploration activities to grow its resource and reserve inventory and unlock the potential of its highly prospective exploration portfolio.

### Competent Persons Statement

#### Mineral Resource

Mr Mick McKeown, confirms that he is the Competent Person for the Mineral Resources summarised in this Report. Mr McKeown 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 McKeown 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 McKeown is a Fellow of The Australasian Institute of Mining and Metallurgy, (membership number 108456). Mr McKeown has reviewed the Report to which this Consent Statement applies. Mr McKeown is a consultant working for Mining One Pty Ltd which has been engaged by Red 5 Limited. Mr McKeown verifies that the underground Mineral Resource section of this Report fairly and accurately reflects in the form and context in which it appears, the information in his supporting documentation relating to the underground Mineral Resource estimate.

#### Production Forecast

The ore reserves underpinning the production forecast in this report are probable ore reserves and have been prepared by a competent person in accordance with the requirements of JORC 2012.

#### Forward-Looking Statements

Certain statements made during or in connection with this statement contain or comprise certain forward-looking statements regarding Red 5'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 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, 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 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.



## **APPENDIX 1 Siana Gold Project – Underground Resource Update**



## 1 MINERAL RESOURCE ESTIMATE

### 1.1 RESULTS

The Mineral Resource estimate reference date is February 2016. This is an updated release for the underground resource for the Siana deposit made in accordance with the JORC Code 2012.

**Table 1: Siana Underground Mineral Resource at 2.4 g/t gold cut off as at February 2016 for material reported below the Final Stage 4 Open Pit Design.**

Siana JORC 2012 Underground Mineral Resource Estimate as at February 2016							
Estimate	Classification	Cut Off Au (g/t)	Tonnes (Mt)	Au g/t	Ag g/t	Contained Au (koz)	Contained Ag (koz)
Feb 2016 JORC 2012	Indicated	2.4	3.3	5.2	7.2	551	756
	Inferred	2.4	0.5	9.3	11.2	153	186
	<b>Total</b>	<b>2.4</b>	<b>3.8</b>	<b>5.8</b>	<b>7.7</b>	<b>704</b>	<b>941</b>

#### Notes on Mineral Resource

1. Mineral Resources are quoted inclusive of Ore Reserves.
2. Discrepancy in summation may occur due to rounding.
3. Resource for this model has only been reported below the Stage 4 Final Open Pit (-130m level).
4. A cut-off grade of 2.4 g/t Au has been applied. The mining cut-off is expected to range between 2.0 to 2.5g/t Au. The underground concept study conducted in September 2015 by Mining One demonstrated a break even cut-off value of 2.3 g/t Au.
5. The Siana Underground Resource Model is suitable for underground mining evaluation below the Stage 4 final open pit.
6. For grade estimation, the updated Siana underground resource has been constrained based on the geological interpretation which coincides with a nominal 1.0 g/t Au threshold grade. Zones of internal waste within some zones graded less than 1.0 g/t Au over a nominal two metres length and were interpreted and estimated separately.



## 1.2 CHANGE FROM PREVIOUS PUBLIC REPORT

Changes to the Mineral Resource estimate have been made based on the additional drilling and available assays since the last underground Mineral Resource estimate as reported in 2015 (*ASX Announcement, Red 5 2015 Annual Report, 16 October 2015*).

The differences between this underground Siana resource estimate and the previously announced JORC 2004 resource (*ASX Announcement, Red 5 2015 Annual Report, 16 October 2015*) are due to the change in the grade cut off used to interpret the grade shells from a nominal 2.0 g/t Au to a nominal 1.0 g/t Au along with the improved geological and structural knowledge of the resource. Figures quoted are also reported at difference gold grade cut offs and the position of the reported material.

For the Siana underground resource estimation update no historic or Open Pit grade control data was used. Only the drilling conducted by Greenstone Resources Corporation since 2003 has been used.

**Table 2: Siana Mineral Resource estimate comparison between the JORC 2004 Underground Resource and the JORC 2012 Underground Resource update as at February 2016.**

Siana Underground Mineral Resource as at February 2016							
Estimate	Classification	Cut Off Au (g/t)	Tonnes (Mt)	Au g/t	Ag g/t	Contained Au (koz)	Contained Ag (koz)
<b>Feb 2016 JORC 2012 (Below Stage 4 Final Open Pit -130mRI)</b>	Indicated	2.4	3.3	5.2	7.2	551	756
	Inferred	2.4	0.5	9.3	11.2	153	186
	<b>Total</b>	<b>2.4</b>	<b>3.8</b>	<b>5.8</b>	<b>7.7</b>	<b>704</b>	<b>941</b>
<i>June 2015 JORC 2004 (Below -165mRI)</i>	<i>Indicated</i>	3.0	1.7	6.8	10.6	363	569
	<i>Inferred</i>	3.0	1.2	7.7	11.9	292	451
	<b>Total</b>	<b>3.0</b>	<b>2.8</b>	<b>6.1</b>	<b>11.2</b>	<b>655</b>	<b>1,020</b>
<i>difference between June 2015 and Feb 2016</i>	<i>Indicated</i>		1.6	-1.6	-3.4	188	187
	<i>Inferred</i>		-0.7	1.6	-0.7	-139	-265
	<b>Total</b>		<b>1.0</b>	<b>-0.3</b>	<b>-3.5</b>	<b>49</b>	<b>-79</b>
<i>percentage difference</i>	<i>Indicated</i>		193%	77%	67%	152%	133%
	<i>Inferred</i>		43%	120%	94%	52%	41%
	<b>Total</b>		<b>136%</b>	<b>94%</b>	<b>69%</b>	<b>108%</b>	<b>92%</b>

### Notes on Mineral Resource

1. Mineral Resources are quoted inclusive of Ore Reserves.
2. Discrepancy in summation may occur due to rounding.
3. Resource for this model has only been reported below the Stage 4 Final Open Pit (-130m level).
4. A cut-off grade of 2.4 g/t Au has been applied. The mining cut-off is expected to range between 2.0 to 2.5g/t Au. The underground concept study conducted in September 2015 by Mining One demonstrated a break even cut-off value of 2.3 g/t Au.
5. The Siana Underground Resource Model is suitable for underground mining evaluation below the Stage 4 final open pit.
6. For grade estimation, the updated Siana underground resource has been constrained based on the geological interpretation which coincides with a nominal 1.0 g/t Au threshold grade. Zones of internal waste within some zones graded less than 1.0 g/t Au over a nominal two metres length and were interpreted and estimated separately.
7. A cut off for the JORC 2004 underground resource is reported at a 3.0 g/t cut off.
8. Figures quoted for the JORC 2004 underground resource is for material below the -165m RI.
9. Original JORC 2004 underground resource was estimated by Cube Consulting in 2009.

### 1.3 JORC CODE, 2012 EDITION – TABLE 1 REPORT: SIANA DEPOSIT FOR THE UNDERGROUND RESOURCE

#### 1.3.1 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 deposit has been 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 collected from the restart in 2010 through to the cessation of operations in April 2012 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 recent 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. All diamond holes from 2015 are cut into half for sampling for all hole sizes (PQ, HQ and NQ). 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/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. 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. Assays for the 2015 drilling for Au, fire assay is used in a 50g charge with AAS finish. Four acid ICP-OES method was employed to determine the 37 other elements which includes Cu, Pb, Zn, Ag, Mo, As, Sb, Al, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Fe, L, La Li, Mg, Mn, Na, Nb, Ni, P, S, Sc, Se, Sn, Sr, Te, Ti, Tl, V, W and Zr. Hg is determined through aqua regia digestion of 1 g charge with ICP-MS finish</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of</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</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>~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 of 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. 2015 drilling was conducted by Major Drilling Group International (MDGI) using UDR 200 and VD5000 rigs. During the drilling operations, a geological aide was present at the rig at all times specifically to record drilling progress, core recovery, downhole surveys and take photos of the core</p>
<p><i>Drill sample recovery</i></p>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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>
<p><i>Logging</i></p>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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). An additional 6 geotechnical holes for the East Wall geotechnical evaluation (2015) and 5 dewatering probing holes (2015) were also used for the geology interpretation update. Only the assays from SMDD159 and SMDD161 were available at the time of the resource estimation.</li> <li>• All logging recorded lithology, alteration and mineralisation; 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. Note grade control samples were not used in the estimation.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"><li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li><li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li><li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li><li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li><li><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li><li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li></ul>	<ul style="list-style-type: none"><li>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 the 2015 drilling altered and mineralised sections of the holes were sampled on a one-metre basis after splitting with a circular diamond-tungsten saw. All core sizes are split into equal halves where the other half is taken as sample. Minimum sample length for mineralised zone is 0.3m while maximum is 1.2m. On sections where there is no mineralisation, ¼ of the core is taken over a length of 2-meter sample.</li><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 repeated. 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</li></ul>



Criteria	JORC Code explanation	Commentary
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<p>PQ3 splits compared with HQ3 splits.</p> <ul style="list-style-type: none"> <li>The sample sizes are considered appropriate to the grain size of the material being sampled.</li> </ul> <ul style="list-style-type: none"> <li>The assay techniques used for Gold are appropriate and considered as a total assay. For Silver and other elements 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). 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/HNO3/HClO4 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.</li> <li>No geophysical tools used for assay data.</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</li> </ul>



Criteria	JORC Code explanation	Commentary
		<p>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 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. Multi-element performance of the internal standards demonstrate consistent precision within 2SD tolerance limits. Performance of the McPhar internal gold and multi-element 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 multi-elements. 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. For the 2015 drilling, one sample blanks and/or standard sample is inserted every 20 samples. The standards are from the previous exploration campaigns. The blank samples post-mineralisation limestone units are sourced from within the project area. Initial analysis of blank samples (22 blanks) resulted in 19 samples with below detection limit (&lt;0.005 g/t) Au.</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>• 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 stored on MS Access database.</li> <li>• No adjustments to assay data were made. For the 2015 drilling assay values that are below detection limit are assigned by half the value of the detection limit before importing to the final database. A master file of all original assay results is kept for reference.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</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 satellite imagery (subsampling at 50mx50m, 2,247 points). For the 2015 drilling the company used the NIKON DTM-322 (Accuracy = 2"), TOPCON PS-103A ESO 352 (Accuracy = 3"), and FOCUS 8 SPECTRA (Accuracy= 2"). The collar is initially surveyed prior to set up and then is resurveyed once the hole is terminated</li> <li>• 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 reserves.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</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 collected from 2010 through to the cessation of operations in April 2012 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. Depending on the mining method selected infill drilling could be obtained at the Grade Control level from underground drilling and face sampling.</li> <li>• Samples are collected at 1 metre intervals and or to geology breaks. For the resource estimation 2 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>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• 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>• The measures taken to ensure sample security.</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</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"><li><i>The results of any audits or reviews of sampling techniques and data.</i></li></ul>	<p>batch was accompanied by a GRC staff member until delivery and handover at the laboratory.</p> <ul style="list-style-type: none"><li>A detailed inspection of the laboratory facilities and procedures was conducted by company 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.</li></ul>





### 1.3.2 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>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The 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 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>Acknowledgment and appraisal of exploration by other parties.</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 (-60mRL). The current pit floor is at approximately -67.5m RL or approximately 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 Ccessation of operations in April 2012. 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>Deposit type, geological setting and style of mineralisation.</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>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:             <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</li> </ol> </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> </ul>



Criteria	JORC Code explanation	Commentary
	<p>hole collar</p> <p>c. dip and azimuth of the hole</p> <p>d. down hole length and interception depth</p> <p>e. hole length.</p> <ul style="list-style-type: none"> <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>	
<p>Data aggregation methods</p>	<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.</li> <li>There are no metal equivalents reported in this release.</li> </ul>
<p>Relationship between mineralisation widths and intercept lengths</p>	<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 mineralisation at Siana occurs over broad widths up to 60m in the main zone in the upper levels and narrows with depth to approximately 6 metres below the -300m RI. Between -130 to -290 mRI the main zone averages approximately 30 to 40 m in width. The deposit envelope is orientated approximately north-south with the East Wall fault zone having an influence in the orientation of the mineralisation. The main resource is up to 400 metres in strike and to a maximum of 400 metres down dip. The dip above the -290 mRI is near vertical to -80 to the east with the mineralisation below -290 mRI changing dip to -65 degrees to the east. The sub parallel footwall and hanging wall lenses are significantly small in width, and shorter in strike length and down dip extension varying from less than 100 metres to 300 metres. The average widths for the footwall and hanging wall lenses vary from 2 to 4 plus metres.</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>
<p>Diagrams</p>	<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>	

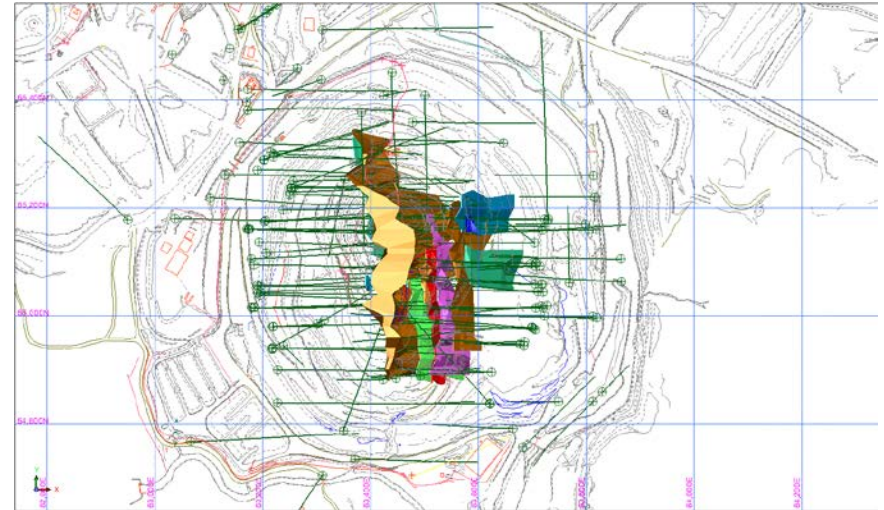


Criteria

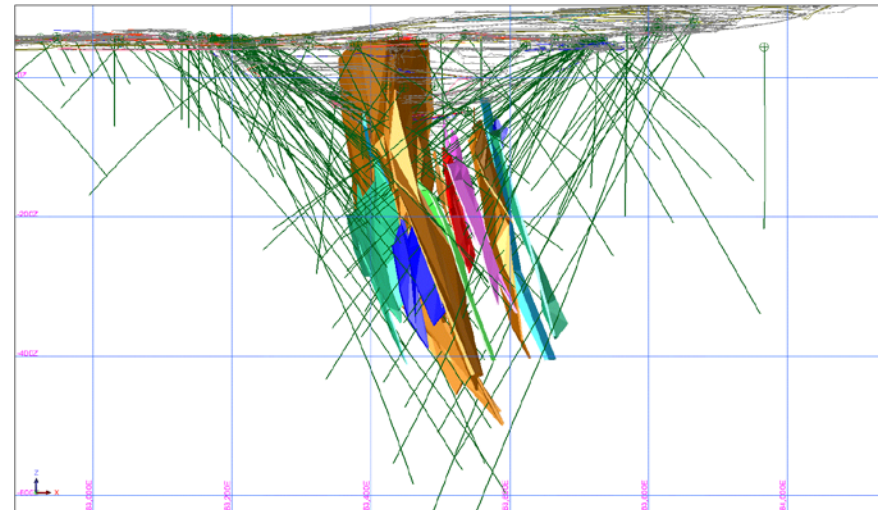
JORC Code explanation

Commentary

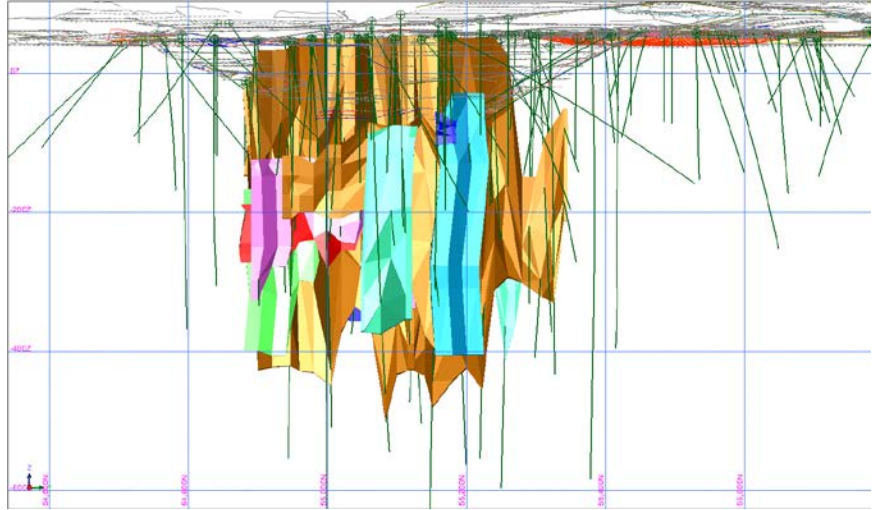
Location map for the Siana Drilling and the nominal 1 g/t gold grade envelopes:



Section view of the nominal 1 g/t gold grade envelopes looking North:





Criteria	JORC Code explanation	Commentary
		<p>Long section view of the nominal 1 g/t gold grade envelopes looking West:</p> 
<p><i>Balanced reporting</i></p>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Majority of the exploration drilling used for the resource release was conducted before December 2012 (i.e. pre JORC 2012). Assays from the additional drilling from the 2015 geotechnical program were also used for the resource estimation. Refer to the 11 January 2016 ASX announcement (<i>High Grade Intersections from geotechnical drilling at Siana</i>).</li> </ul>
<p><i>Other substantive exploration data</i></p>	<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>
<p><i>Further work</i></p>	<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 2012 underground resource to improve confidence along with extensional drilling along strike and down dip.</li> </ul>

### 1.3.3 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 recorded onto 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 the originals are retained in Perth. In Perth, data are checked by a senior database geologist prior to entry to a backup database and dispatched to ioDigital (a division of ioGlobal) for contracted database management and maintenance within acQuire software. IoDigital validate data and generate 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 drilling it is assumed that the data was managed using industry standards of the time. Grade Control data used from the start of open cut mining in 2010 is stored using a Microsoft Access database. The current database is now managed on site using MS Access by GRC with backups stored in Perth.</li> <li>Data validation checks are based on the company's drilling, sampling, and quality control procedures. In addition, upon receipt of the database and during the work for this resource estimate, Mining One made checks on the database, including checking that: <ul style="list-style-type: none"> <li>drill holes plotted within the spatial limits of the Siana project;</li> <li>down-hole surveys were within the expected range;</li> <li>down-hole azimuths were in the correct range;</li> <li>there were no overlapping assay intervals;</li> <li>there were no overlapping lithology intervals;</li> <li>lithologies as plotted were consistent with Au assays;</li> <li>Au and other assays used for grade estimation fell within appropriate mineralisation interpretations;</li> <li>Au and other assays did not exceed the theoretical maxima for these elements given the mineral species present.</li> </ul> These checks revealed no anomalies.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Mick McKeown visited Siana from 3 December 2015 to 8 December 2015. He had previously visited Siana from 24 to 26 February 2015. He inspected relevant drill core, exposures of the mineralisation in the open pit, and reviewed and discussed the geological interpretation and ore controls with mine geologists, including the Resource Development Specialist, Byron Dumbleton.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The geological model is considered to be reasonable for this style of deposit.</li> <li>• Surveyed drill hole collars and down hole drill hole paths, geological logging and assaying of modern and historical diamond drill core, historical and modern geological mapping, and surveyed locations of historical underground development and stoping were used in the creation of the geological interpretation.</li> <li>• The geological model is considered to be reasonable for this style of deposit.</li> <li>• The Siana gold and associated silver-lead-zinc mineralisation belongs to the high sulphidation regime of epithermal affiliation. At Siana, the mineralisation is hosted predominantly within sheared and altered volcanoclastic sedimentary rocks, altered carbonates and basalts. The Siana lithology model is based on lithological interpretations compiled on cross-sections and level plans. Extensive use of core photographs and drill logs ensured consistency in the interpretation.</li> <li>• A three dimensional model of historical underground development and a longitudinal projection of the location of the historical stopes are available to help to identify the location and extent of underground workings. Interpretation of the location and extent of the historical underground stopes was assisted by the identification of workings intersected in drill core and the records of caved material and timber in historical drill logs. Review of underground level plans showing gold grades from historical underground sampling allowed an assessment of what were the most likely areas of stoping based on the historical mine cut-off grade.</li> <li>• The majority of the Siana mineralisation occurs in what is referred to as the “Main Zone”. The Main Zone occurs along a steeply dipping structural corridor between volcanoclastics on the footwall and basalt on the hanging wall. The structural corridor controls the strike, dip and shape of the Main Zone. In addition to the Main Zone, there are three smaller sub-parallel footwall lenses and nine sub-parallel hanging wall lenses which contribute to the resource.</li> <li>• Geological logging is used extensively to define mineralised boundaries. The mineralised zones have been defined based on a geological interpretation which coincides more or less with a nominal 1.0 g/t Au threshold grade.</li> <li>• The Siana drilling data generally intersects the mineralisation at appropriate angles.</li> <li>• The mineralisation at Siana is controlled by lithology, structure and brecciation, and changes in wall rock alteration and ore mineralogy with depth.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Main Zone strikes at 330° to 360° and dips at -60° to -90° to the north-east. The strike length of the Main Zone is about 450m, known down dip extent is over 500m and the across strike horizontal thickness ranges up to about 60m. Main Zone includes six zones of internal waste, the largest of which has a strike length of nearly 400m, a down dip extent of about 400m and an across strike horizontal thickness of up to about 15m. The Main Zone extends to about 500m below the original ground surface.</li> </ul>



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		<ul style="list-style-type: none"> <li>The three footwall zones are relatively small compared to the Main Zone and strike and dip parallel to the Main Zone. Strike lengths range from 20m to 250m, down dip extents range from 50m to about 250m and across strike horizontal thicknesses are less than 10m. The footwall zones extend to about 500m below the original ground surface.</li> <li>The nine hangingwall zones strike at about 360° and dip steeply to the east. Strike lengths range from 10m to 250m, down dip extents range from 100m to about 400m and across strike horizontal thicknesses are generally less than 15m. The hangingwall zones are known to about 450m below the original ground surface.</li> </ul>
<p><i>Estimation and modelling techniques</i></p>	<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>Gold, silver, copper, lead and zinc grades were estimated by ordinary kriging which is an appropriate technique for resource evaluation of the style of mineralisation at Siana.</li> <li>The software package for statistics, variography and estimation was Surpac version 6.6.</li> <li>Grades for each mineralised zone were estimated separately using composited diamond drill hole samples from the mineralised zone being estimated. Outlying gold sample grades greater than 90g/t Au were cut to 90g/t Au based on a break in the Au grade sample distribution at 90g/t Au.</li> <li>Search radii and orientations for grade estimation were based on the results of directional variography. Grades for each mineralised zone were estimated separately using composited diamond drill hole samples from the mineralised zone being estimated.</li> <li>The maximum distance for extrapolation from data points along strike and down dip was about 50 metres.</li> <li>No check estimates or reliable mine production records are available. The available historical production records are not adequate to allow for meaningful comparison of this estimate against production.</li> <li>A previous estimate was made in 2004 but there are understandable differences between that estimate and this estimate. The differences are principally due to the improved understanding of the geology of the Siana mineralisation based on exposures in the current open cut; a change in the nominal threshold grade used to assist in the definition of the mineralised zones from 2.0 g/t Au cut-off to 1.0 g/t Au, based on statistical analysis; and the change in cut-off grade at which the resource has been quoted from 3.0g/t Au to 2.4g/t Au.</li> <li>No assumptions have been made regarding the recovery of by-products but, in current processing, silver reports to gold bullion with processing recoveries of 40 to 45%.</li> <li>Grades were estimated for the potentially deleterious and potentially economic significant elements copper, lead and zinc.</li> <li>The block model has a parent block size of 20m N by 4m E by 10m vertically with sub celling to 5m N by 1m E and 2.5m vertically to achieve reasonable three dimensional modelling of the mineralisation. Grade estimations were made at the parent block size. The parent block size in the north-south direction was about half the nominal cross-section spacing. Grade estimation was constrained within wireframes representing individual mineralised zones. Grades were estimated in two passes; the first pass for the estimation of the grade of</li> </ul>



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		<p>each element for each mineralised zone used a search ellipsoid with dimensions based on the ranges of the relevant directional variograms; the second pass for each estimation of the grade of each element for each mineralised zone used a search ellipsoid with dimensions adequate to allow grades in all blocks in the zone to be estimated.</p> <ul style="list-style-type: none"> <li>No assumptions were made behind modelling of selective mining units.</li> <li>No assumptions were made about correlation of variables.</li> <li>Grade estimation was constrained within wireframes representing individual mineralised zones. Grades for each mineralised zone were estimated separately using composited diamond drill hole samples from the mineralised zone being estimated.</li> <li>An area of historical stoping area was flagged in the block model to allow for appropriate depletion of the model.</li> <li>Outlying gold sample grades greater than 90g/t Au were cut to 90g/t Au based on a break in the Au grade sample distribution at 90g/t Au. Search radii and orientations for grade estimation were based on the results of directional variography.</li> <li>Validation of the block model tonnages included comparisons of volumes of the zone wireframes and blocks representing the zones in the block model. The comparisons were satisfactory.</li> <li>Validation of grade estimates were made by comparing average global grades made by ordinary kriging with average global grades estimated by a nearest neighbour method, and average global grades based on the averages of composited grades. There was reasonable to excellent agreement among all average global grade estimates.</li> <li>Visual checks of estimated block grades against grades in nearby drill holes did not reveal any anomalies.</li> <li>The available historical mining records are not adequate to allow for meaningful reconciliation of the model against production.</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 were estimated on a dry basis.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>A cut-off grade of 2.4 g/t Au has been applied. At a gold price of AUD\$1500, this cut-off grade implies that material with a contained metal value of about AUD\$100 could be treated at a profit, which seems reasonable.</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>In 2015, mining studies by Mining One indicated that underground mining using decline access, trackless haulage and cut and fill stoping was feasible. No mining parameters have been built into the resource model.</li> </ul>





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<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>The Siana mineralisation contains gold and silver with silver to gold ratios from less than 1:1 to greater than 7:1. No assumptions have been regarding the recovery of silver but, in current processing, silver reports to gold bullion with processing recoveries of 40 to 45%.</li> <li>No metallurgical parameters have been built into the resource model.</li> </ul>
<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 densities have been determined, not assumed.</li> <li>Bulk density determinations are carried out routinely at site. Bulk density determinations for all lithological domains and footwall and hanging wall waste material have been made. From these determinations, average bulk densities have been attributed by lithological type.</li> <li>Bulk density for mineralised zones has been estimated from determinations of density made using the "Archimedes Method" on samples of diamond drill core taken from each metre sample interval.</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</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource has been classified as Indicated and Inferred based on geological and grade continuity. In practice, this meant that the Indicated resource is generally material with an average drill spacing of less than 40 metres which provides reasonable confidence in the geological and grade continuity. Inferred material is generally material that has an</li> </ul>



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	<p><i>continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> <li><i>Whether the result appropriately reflects the Competent Person’s view of the deposit.</i></li> </ul>	<p>average drill spacing greater than 40 metres which provides lower confidence in the geological and grade continuity.</p> <ul style="list-style-type: none"> <li>Validation of the block model shows acceptable correlation of the input data to the estimated grades. The input data is comprehensive and no biases are believed to have been introduced. The geological model has a high degree of continuity and confidence. Infill drilling has confirmed this continuity.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>Satisfactory reviews of the resource estimates for this report were made by Mining One and Siana personnel.</li> </ul>
<p><i>Discussion of relative accuracy/ confidence</i></p>	<ul style="list-style-type: none"> <li><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code (2012 Edition). The block models and resource estimates are suitable for planning and scheduling of medium to long-term production over periods such as yearly or quarterly. The block model is not suitable for selection of blocks at the time of mining – block selection at the time of mining will require more sampling during a grade control program.</li> <li>This statement relates to global estimates of tonnes and grade.</li> <li>The available historical production records are not adequate to allow for meaningful comparison of this estimate against production.</li> </ul>