



ASX Announcement

2 December 2013

Revised Resource Estimate for Bird-in-Hand Gold Project

HIGHLIGHTS

- Resource Estimate of 557,000 tonnes at 13.0g/t gold for 233,000 ounces of gold
- Potential to add additional mineralisation as ore body is open down plunge
- Historic mines indicate potential for high grade shoots along strike

Terramin is pleased to announce a revised Bird-in-Hand Resource Estimate that confirms both tonnage and contained metal of the August 2008 Resource Estimate published by Maximus Resources Limited (ASX: MXR). Terramin's revision has been estimated and reported in accordance with the 2012 edition of the Australasian Code for the Reporting of Exploration results, Mineral Resources and Ore Reserves ("2012 JORC Code").

The Bird-in-Hand Gold Project lies within Exploration Licence 4303 and is located approximately 30 km north of Terramin's existing mining and processing facilities at the Angas Zinc Mine. (Figure 1).



Figure 1. Fleurieu and Adelaide Hills tenement package.

For the updated Resource Estimate, Terramin has reviewed the Bird-in-Hand geological and assay databases, wireframed the mineralisation in 3D and undertaken various geostatistical analyses. There has been no additional drilling since the previous Resource Estimate published by Maximus in August 2008, which recorded a Mineral Resource of 598kt @ 12.3g/t containing 237,000 ounces of gold using the polygonal method. The 2013 Resource Estimate of 557kt @ 13.0g/t gold for 233,000 ounces of gold was modelled and calculated using Vulcan™ into a 3-D block model utilising ordinary kriging estimation and reported at a 1g/t gold cut-off. The 2008 and 2013 Resource Estimates, summarised in Table A, are comparable both in grade and tonnage.

Lode	Maximus 2008 Estimate			Terramin 2013 Estimate			
	Tonnes	Au (g/t)	Ounces	Tonnes	Au (g/t)	Ag (g/t)	Ounces
Main Reef Indicated	160,000	13.6	70000	-	-	-	-
Main Reef Inferred	406,000	11.7	153000	430,000	14.0	6	193,000
Main Reef	566,000	12.2	223,000	430,000	14.0	6	193,000
White Reef	32,000	13.6	14,000	105,000	10.5	2	36,000
Yellow Reef	-	-	-	22,000	6.0	1	4,000
Total	598,000	12.3	237,000	557,000	13.0	5	233,000

Table A: Comparison between the Maximus August 2008 and Terramin November 2013 Resource estimates.

Appendix 1 consists of Table 1: 'Assessment and Reporting Criteria Table Mineral Resource – JORC 2012'. This table is structured in three sections (1-3) that describe the Bird-in-Hand Mineral Resource Estimate's compliance with the 2012 JORC Code requirements.

Approximately a quarter of the 2008 Resource Estimate tonnes were classified as Indicated, whereas 100% of the 2013 Resource has been classified as Inferred. The change in the resource classification largely resulted from the exclusion of drillhole BH012 (drilled in 1997) from the 2013 estimate due to lack of downhole surveys. All significant changes and their implications are listed in Table B.

Change	2008	2013	Comment
Drilling	BH012 intercepted White Reef from 155m (3m @ 16.58 g/t Au) and Main Reef from 172m (8m @ 11.36 g/t Au).	BH012 excluded due to lack of downhole surveys.	Drillhole BH012 - 190m deep vertical RC hole drilled by Capricorn in 1997. BH012 intercepts plot above expected locations such that the hole appears to have lifted and swung to the northwest.
Estimation Technique	Polygonal model.	Ordinary kriging.	2013 Resource Estimate used Vulcan™ software for; 3D modelling of the mineralisation, block modelling and grade estimation by ordinary kriging.

Intersection Selection	Geology based - no minimum cutoff grade. Minimum intersection length 1.5m	Geology based. Minimum width of 2m, +1g/t gold (except for constraining holes).	Difference between 1.5m and 2m minimum width has little effect on Main Reef which is typically 6m thick but does have a minor effect on White Reef which is typically 3.5m thick.
Main Reef/White Reef Join	Full height assigned to Main Reef.	Volume split equally between the two reefs.	Reassigned tonnes from Main Reef to White Reef.
Historic Mining	In-situ tonnes from Level 6 included in Resource Estimate	Main Reef has been modelled above Level 6 but material not reported in 2013 Estimate. White Reef modelled to Level 5.	Level 6 in-situ tonnes defined in 2013 block model estimate essentially matches both tonnes and grade of the 1935 polygonal estimate based on channel sampling (~2,200 ounces gold).
Modelled Lodes	Main Reef and White Reef.	Main Reef, White Reef and Yellow Reef.	Yellow Reef refers to a down-plunge equivalent to the White Reef.
Void spaces	Not modelled.	Void allowance equates to 6.5% reduction in tonnes.	Naturally occurring cavities recorded in drilling and historic mining records.
Density	Flat 2.78t/m ³ .	Ordinary kriging used to assign density to blocks.	Average density in the 2013 Resource Estimate once voids are allowed for is 2.55t/m ³ .
Silver estimation	Not modelled.	Modelled.	Average grade of 5g/t silver calculated for 2013 Resource Estimate.
Resource Classification	Main Reef Mineral Resource classified Indicated above 200m RL (equated to approx. 30% of contained metal) and Inferred below 200m RL	All Resource classified Inferred after drillhole BH012 excluded from Resource Estimation.	Two additional holes are required to re-classify material as Indicated above the 200mRL; (1) replacement of BH012 (280RL) and (2) a hole targeted at 309030E, 6129650N, 245RL.

Table B: Significant changes between 2008 and 2013 Resource Estimates

Based on structural and lithological interpretations, grade distribution (the mineralisation is open at depth), and the shapes and distribution of historic gold mines close to Bird-in-Hand, Terramin has reasonable expectations for additional mineralisation to exist down plunge of the defined resource and possibly as separate lodes along strike, (Figure 2). Furthermore, infill drilling of the resource is likely to define small but readily accessible mineralisation in the immediate footwall. An example of this is drillhole BH033 which intersected from 162m, 2m @ 43.74g/t gold located only eight metres (true width) below Main Reef.

Potential to discover additional high grade mineralisation further along strike is highlighted by the presence of two historic mines' Bird-in-Hand Extended and The Ridge are respectively 200m and 400m to the south(Figure 3). These mines were last worked in the 1890's. The Ridge has a recorded (incomplete) production of 517 ounces of gold from 2,766 tonnes at an average grade of 5.8g/t gold from 5 shafts and >500m of drives. The recorded retreatment of 6,266 tonnes of The Ridge tails by cyanide leach gave an additional 977 ounces. Bird-in-Hand Extended had 1 shaft sunk to 30m and at least 80m of drives were developed. The lode was up to 6m wide and is reported to have averaged 25-31g/t gold (H.Y.L. Brown, 1908)¹.

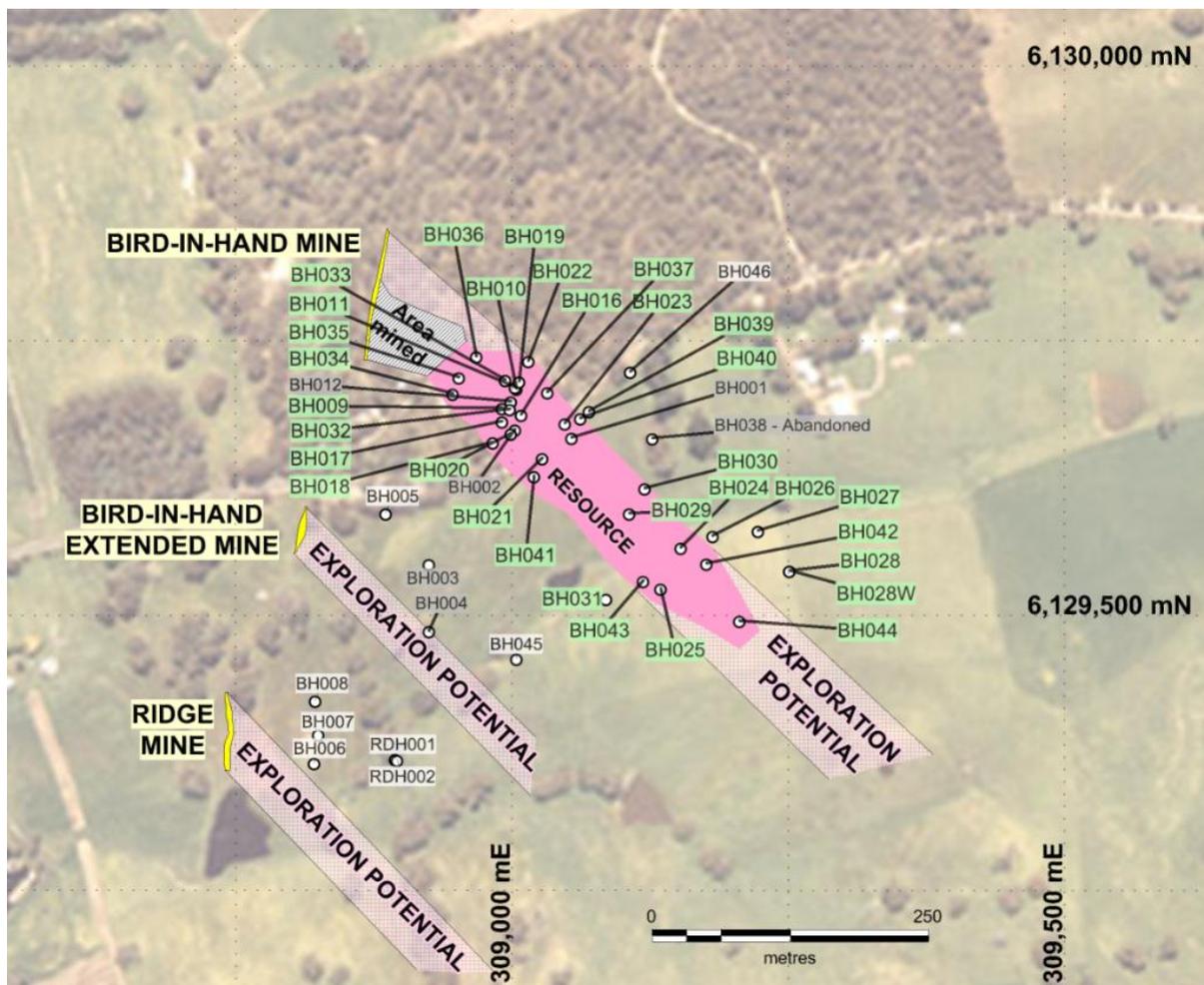


Figure 3. Location of historic mines and surface projection of the Bird-in-Hand Resource.

Competent Person's Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Eric Whittaker, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Whittaker is an employee and Principal Resource Geologist of Terramin Australia Limited. Mr Whittaker has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Whittaker consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

¹ Brown, H., 1908. Record of the Mines of South Australia, 4th Edition. C.E.Bristow, Government Printer, North Terrace, Adelaide.

1. APPENDICES

1.1. Checklist of Assessment and Reporting Criteria (JORC Code Table 1)

1.1.1. Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>This deposit is sampled by 29 diamond core and 2 RC drillholes. Core is typically sampled on 1 metre intervals but modified to honour geological boundaries. RC drilling was sampled at 1 metre intervals.</p>
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<p>Core was aligned and measured by tape, comparing back to down hole core blocks consistent with industry practice. Surface diamond and RC drilling was completed by previous operators to industry standard at that time. (RC - Capricorn 1997, Diamond - Maximus 2005 to 2008).</p>
	<ul style="list-style-type: none"> 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. 	<p>Diamond drilling was completed to industry standard and sampled at varying lengths based on geological intervals, which were then crushed and pulverised to produce a ~200g pulp sub sample to use in the assay process. Diamond core samples were fire assayed (50g charge). RC sampling was to industry standard at the time of drilling, with 3-4 kg samples from 1m intervals collected through mineralised zones. Pulp sub sampling procedures were not recorded by Capricorn.</p>

Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul style="list-style-type: none"> • <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> 	<p>Surface RC drilling, 2 holes, no records indicate whether a face sampling hammer was used, or the size of the bit. Surface drill core, 29 holes, majority of diamond core holes were drilled HQ in size with only 6 holes drilled NQ in size.</p> <p>Surface core was oriented where possible.</p>
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> 	Core recovery was measured for each drill run between the driller's marker blocks.
	<ul style="list-style-type: none"> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> 	Recovery to 0.01 m was recorded on all current diamond core. Core recovery exceeded 90% for 80% of all samples taken.
	<ul style="list-style-type: none"> • <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> 	Unknown, not enough data available to make an assessment.
Logging	<ul style="list-style-type: none"> • <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> 	Diamond drill holes were logged by experienced geologists who recorded geological intervals ranging from centimetres to several metres.
	<ul style="list-style-type: none"> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> 	Qualitative code logging was conducted for lithology, alteration, veining, tone and colour.
	<ul style="list-style-type: none"> • <i>The total length and percentage of the relevant intersections logged.</i> 	All drill holes are logged in full.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> 	<p>Core was half cut with a diamond core saw. The half to the right of the cut was sampled, to sample intervals defined by the Logging Geologist along geological boundaries. The half to the left of the cut was archived.</p> <p>All major mineralised zones were sampled, plus associated visibly barren material, including >2m of hangingwall/footwall. As well, quartz veins and sulphide zones encountered outside the known ore zone were sampled and ± 1m on either side.</p>
	<ul style="list-style-type: none"> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> 	Sub sampling methods used by Capricorn were not documented.
	<ul style="list-style-type: none"> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> 	Sample preparation is deemed adequate. Further improvement is proposed for infill drilling.
	<ul style="list-style-type: none"> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> 	For drill core the external lab's coarse duplicates were used.
	<ul style="list-style-type: none"> <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> 	There are no records of field duplicates being taken.
	<ul style="list-style-type: none"> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	Sample sizes are considered appropriate.

Criteria	JORC Code explanation	Commentary
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> 	<p>Samples from Capricorn's 1997 RC drillholes were analysed by Analabs Pty. Ltd at Glynde, South Australia. Au was analysed by GG313 fire assay digestion of a 50 gram charge with a 0.01ppm Au detection limit. Additional elements assayed using GA101 were Cu, Pb, Zn, As, Fe and Mn.</p> <p>Samples from Maximus' 2005 to 2008 drilling were prepared by Genalysis Laboratories in Adelaide and analysed by Genalysis in Perth, those analysed for gold being subjected to fire assay digestion of a 50g charge. Gold determinations were done via FA50/AAS, detection level 0.01ppm. In addition to gold a range of other elements was also assayed for to assist in gaining a better understanding of the deposit. These include, but are not limited to, Ag, As, Pb, Zn, Cu, Mo, Mn, Fe and Bi by AT/OES.</p>
	<ul style="list-style-type: none"> <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> 	<p>Geophysical tools, spectrometers, handheld XRF instruments, etc were not used by either Maximus or Capricorn to estimate grade.</p>
	<ul style="list-style-type: none"> <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> 	<p>The QAQC protocols used by Maximus included insertion of certified standards (includes certified blanks) ~ every 11th sample submitted for analysis, and monitoring of laboratory (Genalysis) standards and cross lab checks by ALS Limited and Amdel Limited.</p>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. 	Significant intersections (drill core only) have been visually reviewed by Terramin staff.
	<ul style="list-style-type: none"> The use of twinned holes. 	At this stage twin holes have not been used to verify sampling and assaying.
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	Terramin has compiled all past exploration data. Capricorn and Maximus primary data sighted, Maximus QAQC data sighted. Maximus data was stored in Excel spreadsheets. All data upon validation has been transferred by Terramin to a secure Maxwell Datashed database.
	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	No adjustments are made to any assay data.
Location of data points	<ul style="list-style-type: none"> 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. 	Maximus drillhole collars were surveyed using a DGPS. All drillholes used in the 2013 Resource Estimate were surveyed using either a digital or single shot camera at intervals of approximately 30m. A survey was also undertaken at the end of hole.
	<ul style="list-style-type: none"> Specification of the grid system used. 	The grid system is MGA_GDA94 Zone 54.
	<ul style="list-style-type: none"> Quality and adequacy of topographic control. 	Topographic control is based on the collar surveys.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 	Sample sizes are generally considered appropriate. Approximately 1% of the sample lengths are sub 30cm.
	<ul style="list-style-type: none"> 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. 	Drillhole sample spacing between 325m RL and 225m RL has been completed predominantly on a 30 m or better pattern. Beneath the 225m RL drillhole spacing is in the order of 60m.
	<ul style="list-style-type: none"> Whether sample compositing has been applied. 	Field sample compositing was not undertaken on any of the diamond or RC drilling. Sample sizes are considered appropriate.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	Intercept angles are predominantly moderate (45 to 65 degrees) relative to the plane of the mineralisation.
	<ul style="list-style-type: none"> 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. 	Intersections are not creating any known bias.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	Chain of custody management was not documented by Capricorn or Maximus. Core samples are stored in a secured shed.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	Prior to acquiring the project from Maximus, –Terramin audited the Maximus database against original laboratory files, reviewed core and validated density measurements. All available data was loaded into a Dashed database and validated. Mineralisation was then visually checked and modelled using Maptek's Vulcan version 8.1.4.

1.1.2. Section 2: Reporting for Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 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. 	<p>The Bird-In-Hand Project is contained within both EL4303 and an area under application for a retention lease to replace Mining Claim MC4113. The process of transferring EL4303 from Maximus Resources to Terramin has commenced and currently awaits DMITRE's consent. Retention leases and applications for retention leases are not transferable in South Australia. Consequently the application for the retention lease will be held in trust for the benefit of Terramin until a new title is issued.</p> <p>In addition to State royalties, Terramin will pay Maximus a 0.5% royalty if the average sale price for gold is greater than A\$1000 per ounce on bullion production after production of the first 50,000 ounces.</p>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>Data relevant to this resource was collected by Capricorn Resources (2 RC holes in 1997) and Maximus Resources (29 diamond drillholes 2005-2008). All relevant work by these two companies is believed by Terramin to have been to have been carried out to industry standard at that time.</p>
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>Bird-In-Hand is a zoned vein deposit where gold mineralisation is associated with quartz + carbonate (± pyrite, ± galena ± sphalerite) veining hosted by marble and surrounding sedimentary rocks. Veins are hosted within the Brighton Limestone</p>

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. 	Drill collar data for the 31 holes that are part of this resource estimation are listed in Appendix 2
	<ul style="list-style-type: none"> • 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. 	Holes drilled in the Bird-In-Hand area but not listed in Appendix 2 include: unsurveyed holes (BH001 to BH004 drilled in the 1930's and BH012), holes abandoned well above the mineralisation, and holes drilled to test surrounding prospects.
Data aggregation methods	<ul style="list-style-type: none"> • 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. • 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. 	No new exploration results have been reported in this release, and therefore, this section is not material to this report on Mineral Resources.
	<ul style="list-style-type: none"> • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	No metal equivalents are reported.

Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	No new exploration results have been reported in this release, and therefore, this section is not material to this report on Mineral Resources.
<i>Diagrams</i>	<ul style="list-style-type: none"> • <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	Figures 1, 2 & 3 in main text
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	No new exploration data reported

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul style="list-style-type: none"> • <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<p>The hydrogeology of the area is complex. Consequently, detailed hydrogeological investigations are required to accurately determine the expected rate of mine inflows, mine dewatering requirements and the likely drawdown impacts on existing groundwater users.</p> <p>Bird-In-Hand lies within the Western Mount Lofty Ranges. A moratorium under the Natural Resources Management (NRM) Act now applies to all new and potential users of water resources within this region. The mine dewatering activities and reinjection of the water to the aquifer will need to comply with the terms of the moratorium and will require approvals under the NRM Act. Approvals can be granted by the minister for Natural Resources via Section 128 of the Act. A preliminary model developed by Aquaterra Consulting Pty Ltd on behalf of Maximus estimated inflow rates may range from 100 l/s near the top (350mRL) to 200 l/s at 0 mRL. Australian Groundwater Technologies has been engaged by Terramin to carry out further groundwater studies.</p>
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> 	<p>Planned drilling is designed to upgrade the Inferred Resource to an Indicated Mineral Resource and to further hydrological and geotechnical studies.</p>
	<ul style="list-style-type: none"> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<p>Additional drilling may also take place to extend the existing Resource shown in Figure 2.</p>

1.1.3. Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> 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. 	<p>Laboratory assay files were imported into a Maxwell Geo Services' DataShed database and compared with the Maximus database provided. Selected sample intervals were checked and seen to match intervals marked on core. Original downhole survey data has not been sghited. Most drillhole collars have been rehabilitated and cannot be resurveyed.</p>
	<ul style="list-style-type: none"> Data validation procedures used. 	<p>Maxwell Geo Services' DataShed and QAQCR were used to validate the data viz; overlapping intervals, excessive hole deviation, assay QAQC. Secondary validation by Maptek's Vulcan software and visual validation.</p>
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. 	<p>Bird-In-Hand site has been visited on several occasions and drill core inspected at the Bird-In-Hand core farm.</p>
	<ul style="list-style-type: none"> If no site visits have been undertaken indicate why this is the case. 	<p>Site visits have been undertaken.</p>

Criteria	JORC Code explanation	Commentary
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. 	Historical mining and drilling, underground sampling and mapping by the South Australian Mines Department give confidence in the current geological interpretation and grade continuity.
	<ul style="list-style-type: none"> Nature of the data used and of any assumptions made. 	Two Capricorn RC holes and 29 Maximus diamond holes were used to define the resource. BH012 a 160m RC hole drilled by Capricorn was excluded from the estimation due to lack of down-hole surveys. Mapping, channel sampling and drilling from the 1930's were used as guides only.
	<ul style="list-style-type: none"> The effect, if any, of alternative interpretations on Mineral Resource estimation. 	No alternative interpretations have been completed or put forward for serious consideration.
	<ul style="list-style-type: none"> The use of geology in guiding and controlling Mineral Resource estimation. 	Gold mineralisation primarily occurs within quartz vein systems that are sub parallel to each other. The majority of the mineralisation is hosted by the Main Reef. Drill core logging and historic mine development are used to create 3D constrained wireframes.
	<ul style="list-style-type: none"> The factors affecting continuity both of grade and geology. 	Grade continuity is related to the quartz and sulphide occurrences within the boundaries.
Dimensions	<ul style="list-style-type: none"> 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. 	Strike length ~ 100m Length (plunge extent) ~ 525m Dip 55 degrees to 105 Plunge 45 degrees to 145

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> <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> 	<p>Compositing of drill-hole samples was completed within mineralised domains at 1m (downhole) intervals.</p> <p>Ordinary kriging estimation technique was used for estimation of gold grade in the prospect area. Estimations were performed for cut (to 80 g/t Au) and uncut values separately, demonstrating that there was minimal sensitivity to the top-cut.</p> <p>Sample selection honoured the interpreted mineralised domains. Statistical analysis by domain was completed.</p> <p>For Main Reef, normal scores variogram models for Au were developed and back transformed using Snowden Supervisor software. Variography models developed for Main Reef are applied and used to estimate White Reef and Yellow Reef.</p>
	<ul style="list-style-type: none"> <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> 	<p>Maximus' August 2008 polygonal resource estimate model - 598kt @ 12.3g/t - 237,000ozs Au is within 1% of contained metal of Terramin's 2013 estimate.</p> <p>Recent grade estimations are in keeping with historical production of 23kt @ 12.9g/t Au.</p>
	<ul style="list-style-type: none"> <i>The assumptions made regarding recovery of by-products.</i> 	No assumptions made.
	<ul style="list-style-type: none"> <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i> 	No deleterious elements are known within the mineralisation. Sulphur was modelled in the footwall to assess potential for acid mine drainage. Most footwall material modelled below 0.1% sulphur and at this stage this is not expected to be potentially acid forming material.
	<ul style="list-style-type: none"> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> 	Parent block size of 30m by 30m by 2m orientated to the plane of mineralisation.
	<ul style="list-style-type: none"> <i>Any assumptions behind modelling of selective mining units.</i> 	No assumptions made.
	<ul style="list-style-type: none"> <i>Any assumptions about correlation between variables.</i> 	No assumptions made.
	<ul style="list-style-type: none"> <i>Description of how the geological interpretation was used to control the resource estimates.</i> 	"Ore" wireframes are created within the geological shapes based on drill core logs and grade.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques (continued)	<ul style="list-style-type: none"> • Discussion of basis for using or not using grade cutting or capping. 	Composites were cut to 80g/t Au based on log distribution (95% percentile).
	<ul style="list-style-type: none"> • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	Visual and statistical checks were completed on the block model.
Moisture	<ul style="list-style-type: none"> • Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	The mineral resource estimate is based upon dry tonnages. Moisture content has not been included.
Cut-off parameters	<ul style="list-style-type: none"> • The basis of the adopted cut-off grade(s) or quality parameters applied. 	Based on a gold price of A\$1,550 per ounce, these figures confirmed that a 3 g/t Au breakeven cut-off was reasonable for variable costs.
Mining factors or assumptions	<ul style="list-style-type: none"> • 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. 	A complete mining design has been developed based on the use of mechanised cut and fill techniques. Mining has been designed to extract the full width of the orebody where possible out to a maximum width of 7m. A minimum mining width of 4m has been applied. No dilution factors have been applied in modelling as any expected dilution has been included in the development design. A mining recovery of 95% is expected of mined ore due to loss in the floor and other operational factors.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> • 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. 	No metallurgical test work has been completed at this stage. Expectation is that the processing will be done at Terramin's Angas mill after addition of a gravity circuit to recover free gold. Gold in sulphide will be extracted as a float concentrate after modifications to the lead circuit.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> 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. 	<p>No environmental factors or assumptions were used to modify or restrict the resource estimation. Assumption is that the ore from Bird-In-Hand will be treated at the Angas Zinc Mine where the double lined tailings storage facility has enough capacity to hold all of the tailings from the processing of the defined mineralisation.</p>
Bulk density	<ul style="list-style-type: none"> 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. 	<p>All 854 of Maximus' samples submitted for assay had their density determined by pycnometry. Maximus also collected a smaller set comprising 101 density measurements using the water immersion technique. On average pycnometry measurements were 5% higher than the Maximus immersion measurements. Validation measurements by Terramin of 33 of the original immersion samples using a process that included oven drying of the samples and using a modified immersion technique that allowed for porosity gave density values 3% lower than the Maximus immersion method.</p>
	<ul style="list-style-type: none"> 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. 	<p>Density was estimated using pycnometry measurements conservatively factored down 10%. Bulk density values were assigned to the blocks using the modified pycnometry density measurements then further reduced by percentage of void.</p>
	<ul style="list-style-type: none"> Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<p>Bulk density was modelled using the same domains and search parameters used for the gold mineralisation.</p>

Criteria	JORC Code explanation	Commentary
Classification	<ul style="list-style-type: none"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> 	<p>The resource has been classified as an Inferred Mineral Resource based on the integrity of the data, the spatial continuity and the style of the mineralisation.</p> <p>Variograms demonstrate that a drill spacing of 35 m down plunge by 25 m along strike is required for Indicated Mineral Resource classification. To achieve this density of drill spacing an additional 2 holes are required above the 225m RL and approximately 18 holes beneath the 225m RL.</p>
	<ul style="list-style-type: none"> <i>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 the data).</i> 	<p>Maximus data input is considered reliable.</p> <p>Distribution of data and continuity is good above 225m RL, but moderate beneath this depth.</p> <p>Average core recovery from mineralised intersections was 88%.</p>
	<ul style="list-style-type: none"> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<p>The result appropriately reflects the Competent Person's view of the deposit</p>
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<p>The 2013 Mineral Resource Estimate has been reviewed internally by Angas Zinc Mine's geology team.</p>

Criteria	JORC Code explanation	Commentary
<p><i>Discussion of relative accuracy/ confidence</i></p>	<ul style="list-style-type: none"> <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> 	<p>The Mineral Resource estimate is considered robust and representative. The application of geostatistical methods has helped to increase the confidence of the model and quantify the relative accuracy of the resource on a global scale.</p> <p>This model is intended only for use in aiding scoping study investigations. A more detailed review of the mineralisation is required, including infill drilling of a significant portion of the defined resource.</p> <p>Aspects of concern for the estimate include irregular sample spacing, lack of appropriate density measurements that take into account the porosity, nature of material lost in the drilling process and the split between cavity and true core loss estimates.</p>
	<ul style="list-style-type: none"> <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> 	<p>This resource report relates to the Bird-In-Hand mineralisation where it is likely to have local variability. The global assessment is more of a reflection of the average tonnes and grade estimate.</p>
	<ul style="list-style-type: none"> <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<p>Grade of 13.0g/t Au of the current resource estimate is in keeping with the average grade of 12.9g/t Au from historical production.</p>

1.2. Mineral Resources Drillhole Collar Details

Hole ID	East	North	RL	Azimuth	Dip	Max. Depth	Date Completed
BH009	308991	6129689	457	264	-80	163	Jul-1997
BH010	309004	6129707	457	267	-85	160	Jul-1997
BH016	309008	6129683	457	0	-90	226	09-Dec-05
BH017	308991	6129677	457	0	-90	180	19-Dec-05
BH018	308983	6129658	455	0	-90	190.1	07-Jan-06
BH019	309006	6129713	456	0	-90	201.2	18-Feb-06
BH020	308999	6129666	458	0	-90	195.1	15-Feb-06
BH021	309028	6129644	453	288	-86	216.1	27-Feb-06
BH022	309015	6129732	458	0	-90	240.3	30-Mar-06
BH023	309048	6129675	455	0	-90	294	05-Apr-06
BH024	309153	6129562	435	288	-73	381.9	11-Oct-06
BH025	309134	6129525	436	288	-73	295.3	07-Nov-06
BH026	309182	6129573	436	292	-70	319.9	06-Dec-06
BH027	309223	6129577	439	296	-65	342	26-Jan-07
BH028	309251	6129541	444	288	-77	395	08-Mar-07
BH028W	309251	6129541	444	288	-77	380.5	18-Apr-07
BH029	309106	6129593	434	288	-73	267.2	23-Mar-07
BH030	309120	6129616	438	288	-72	273	08-May-07
BH031	309085	6129515	434	331	-70	333.2	04-Jun-07
BH032	308998	6129688	456	288	-85	182.8	19-Jul-07
BH033	308994	6129715	456	288	-82	175.6	16-Aug-07
BH034	308947	6129702	453	288	-90	144.2	25-Aug-07
BH035	308952	6129717	449	288	-90	162	01-Sep-07
BH036	308968	6129736	449	290	-86	132.55	06-Sep-07
BH037	309032	6129704	455	180	-90	231.2	13-Sep-07
BH039	309070	6129687	455	288	-90	283.8	12-Oct-07
BH040	309062	6129680	452	250	-82	249.3	23-Oct-07
BH041	309020	6129627	451	288	-90	240.5	06-Nov-07
BH042	309176	6129548	435	288	-90	421.6	02-Feb-08
BH043	309119	6129532	435	288	-90	365.3	05-Apr-08
BH044	309206	6129496	437	288	-90	470	02-Jul-08