ASX Announcement

8 August 2016

Updated Bird-in-Hand

Gold Resource Estimate

Summary

- **Resource Estimate of 588,000 tonnes at 13.3g/t gold for 252,000 ounces of gold (an increase of 19,000 ounces)**
- **Includes Indicated Resource of 167,000 tonnes at 16.16g/t gold for 87,000 ounces of gold**
- **Potential to add additional mineralisation to the Resource as orebody is open down plunge**

Terramin Australia Limited (Terramin) (ASX:TZN) is pleased to announce a revised Bird-in-Hand Gold Project Resource Estimate. As a result of the recently completed 2016 drill campaign, Terramin has achieved an 8% increase in contained gold ounces to 252,000 ounces of gold.

The focus of the 2016 drilling campaign was to provide hydrological, geotechnical and metallurgical data about the Bird-in-Hand deposit. A number of drill holes have also allowed an upgrade of the Resource to the Indicated classification between the levels 200mRL and 325mRL. The grade of this portion of the orebody was increased by 15% to 16.16g/t. As this area is the shallowest part of the orebody and supports the early years of the operation, it should result in a significant improvement in early project cash flow. This result also indicates the potential for further resource upgrades as the infill drilling progresses.

The Bird-in-Hand Gold Project lies within Exploration Licence 5469 and is located approximately 30 km north of Terramin's existing mining and processing facilities at the Angas Zinc Mine. (Figure 1).

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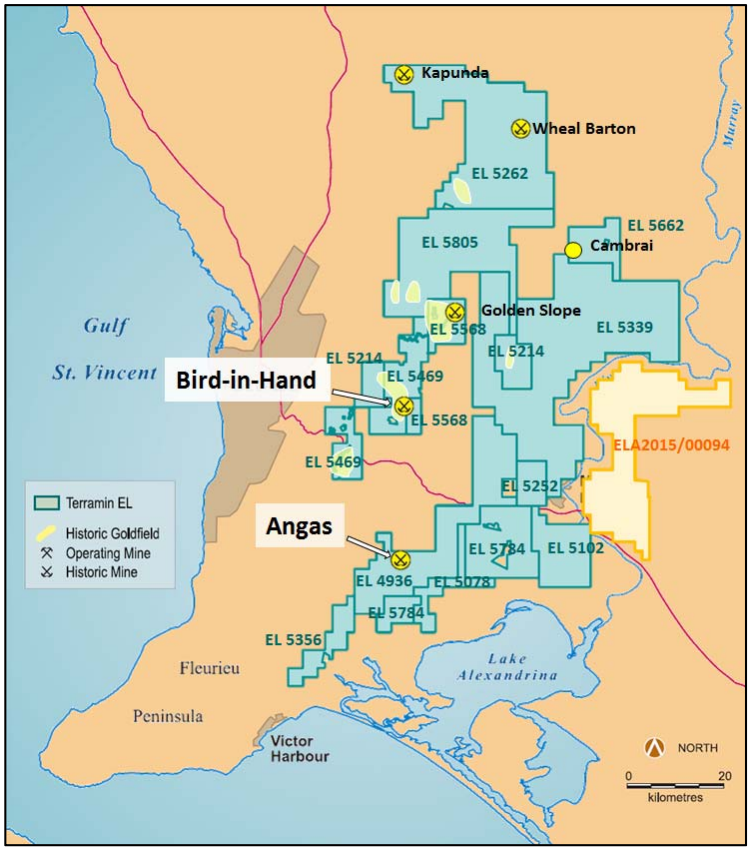

Figure 1. Bird-in-Hand Gold Project located in Terramin's Adelaide Hills tenement package.

The 2016 Resource Estimate of 588kt @ 13.3g/t gold for 252,000 ounces of gold is comparable both in grade and tonnage to the 2013 Resource Estimate of 557kt @ 13.0g/t gold for 233,000 ounces (see Table A). Both models were created in house by Terramin using Vulcan™ into a 3-D block model utilising ordinary kriging estimation and reported at a 1g/t gold cut-off. The increase in grade is solely attributed to the new drillholes. Increase in tonnes is the result of minor changes to the geological model based on the new drilling data.

Lode	2013 Estimate				2016 Estimate			
	Tonnes	Au (g/t)	Ag (g/t)	Ounces	Tonnes	Au (g/t)	Ag (g/t)	Ounces
Red Reef - Indicated					167,000	16.16	13	87,000
Red Reef - Inferred	430,000	14.0	6	193,000	319,000	14.2	4	146,000
Red Reef - Combined	430,000	14.0	6	193,000	485,000	14.9	7	232,000
White Reef - Inferred	127,000	9.7	2	40,000	103,000	6.1	1	20,000
Total	557,000	13.0	5	233,000	588,000	13.3	6	252,000

Table A: Comparison between the 2013 and 2016 Resource estimates.

Over a third of the 2016 Resource Estimate tonnes has been classified as Indicated, whereas 100% of the 2013 Resource was classified as Inferred. The change in the resource classification resulted from the

improved drill density between 325mRL and 200mRL and increased confidence in the geological model. All significant changes and their implications are listed in Table B.

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. 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 Red Reef (also historically referred to as Main Reef).

Terramin's revision has been estimated and reported in accordance with the guidelines of the 2012 edition of the Australasian Code for the Reporting of Exploration results, Mineral Resources and Ore Reserves ("2012 JORC Code").

Change	2013	2016	Comment
Red Reef/White Reef Join	Volume split equally between the two reefs	Full height assigned to Red Reef.	Reassigned tonnes from White Reef to Red Reef.
Modelled Lodes	Red Reef, White Reef and Yellow Reef.	Red Reef and White Reef.	Yellow Reef referred to a down-plunge equivalent to the White Reef.
Parent block size	30m by 30m by 2m.	20m by 20m by 2m.	Smaller block size chosen based on drill spacing and preferred mining method of "cut and fill".
Resource Classification	All Resource classified **Inferred**.	Red Reef Mineral Resource classified **Indicated** between 200mRL and 325mRL (equates to approx. a third of contained metal) and **Inferred** below 200m RL	Six additional drill holes between 325mRL and 200mRL. BH051, BH054 and BH056 to BH059.

Table B: Significant changes between 2013 and 2016 Resource Estimates.

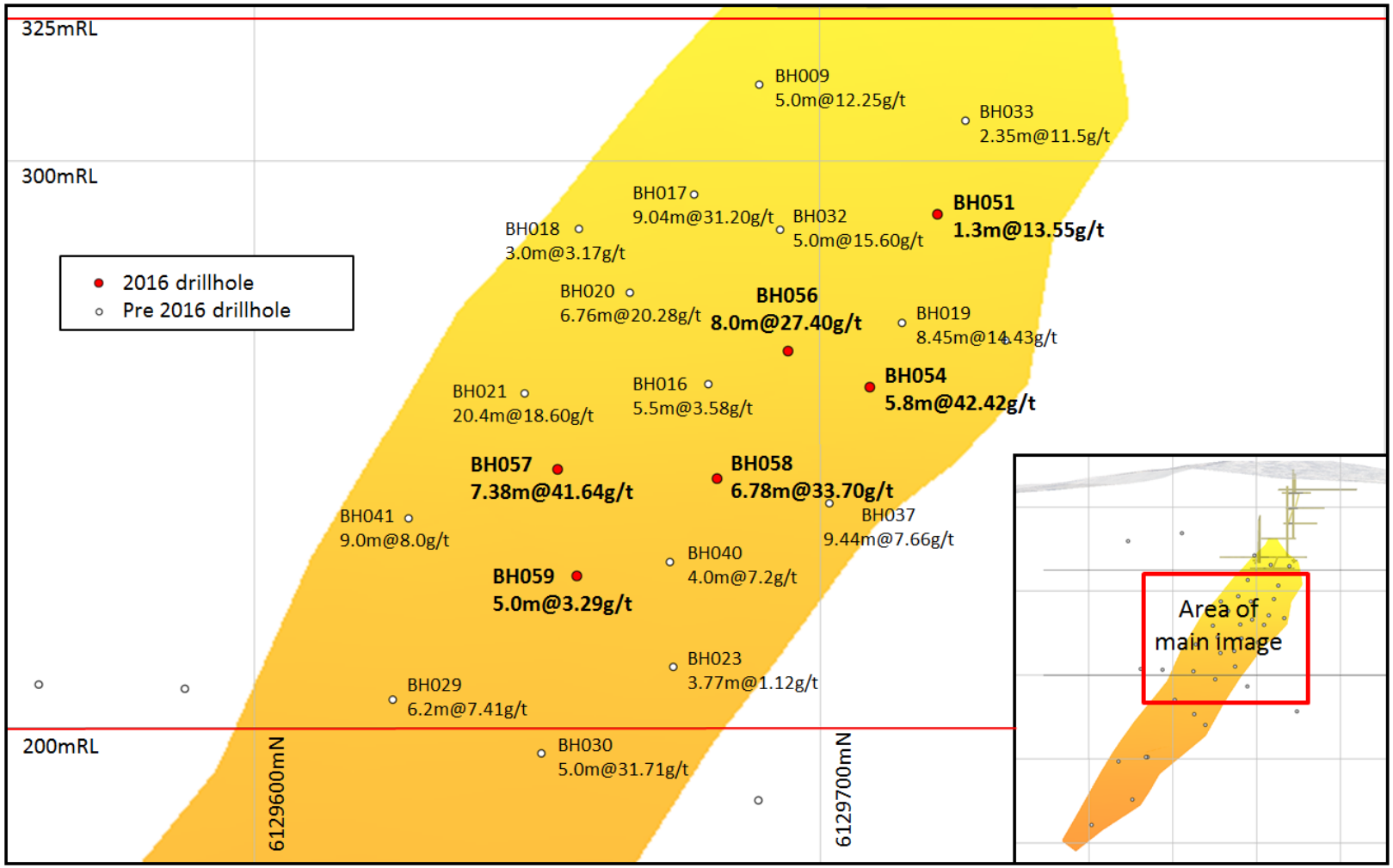

Figure 2. Bird-in-Hand longitudinal section (looking west) showing Red Reef Resource outline. Drillhole pierce points with summary intersections shown within the Indicated Resource (shaded yellow).

Potential to discover additional high grade mineralisation immediately along strike is highlighted by the presence of two historic mines; Bird-in-Hand Extended and The Ridge, respectively located 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].

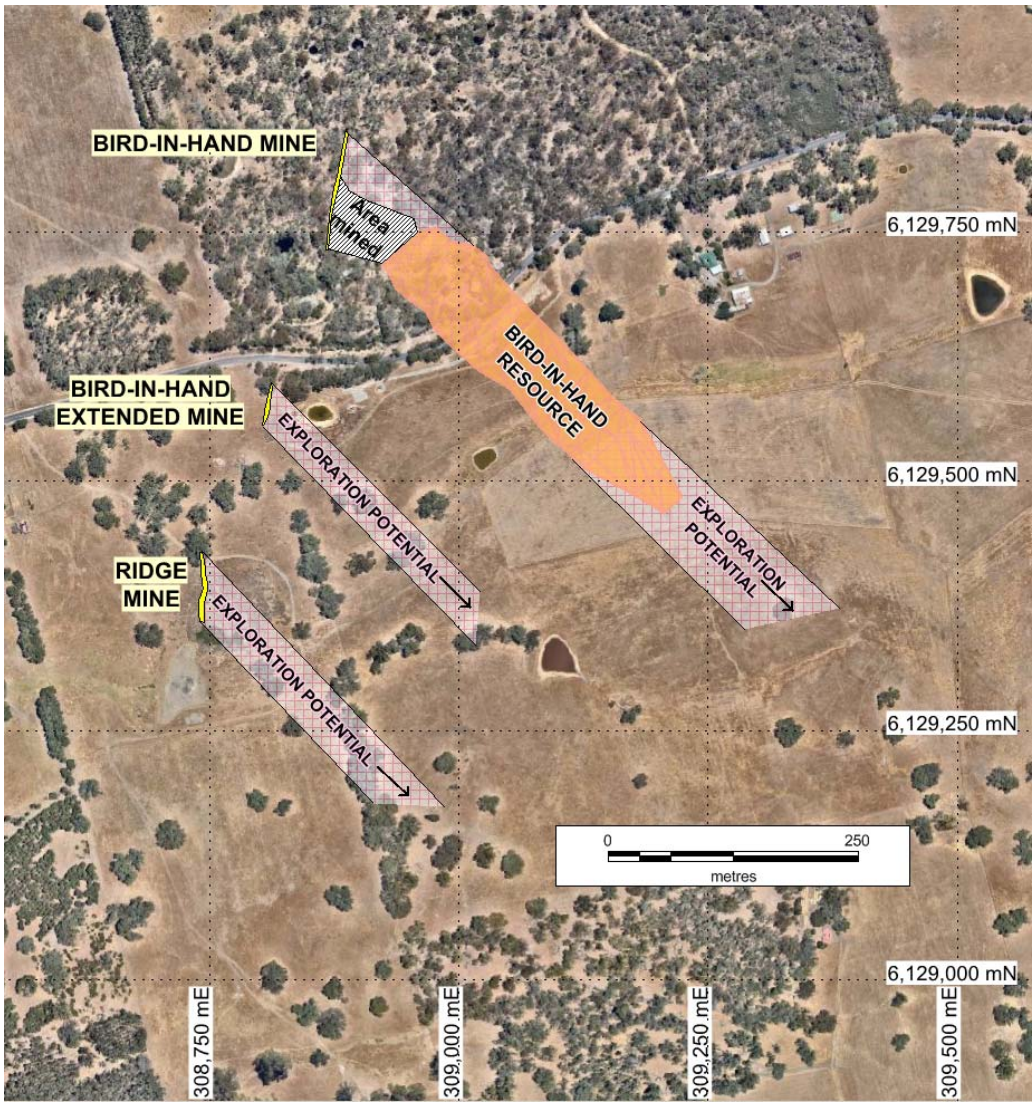

Figure 3. Location of historic mines and surface projections of the Bird-in-Hand Resource and areas of exploration potential.

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

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.

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 thee '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.

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1. APPENDIX

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	• *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.*	The Bird-in-Hand deposit is sampled by 35 diamond holes and 2 RC holes. Maximus Resources Limited (Maximus) drilled 29 core holes between 2005 and 2008 and an additional 6 core holes were drilled by Terramin in 2016. The 2 RC holes were drilled by Capricorn Resources Pty (Capricorn) in 1997. Core was typically sampled on 1 metre intervals but modified to honour geological boundaries. RC drilling was sampled at 1 metre intervals.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	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 Terramin and previous operators to industry standard at that time.
	• *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.*	Diamond drilling was completed to industry standard and sampled at varying lengths based on geological intervals. Samples were crushed and pulverised to produce a pulp sub sample to use in the assay process. Diamond core sample pulps were fire assayed. Terramin resubmitted all +8g/t gold samples identified by fire assaying to the more accurate screen fire assay method. 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.

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *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).*	Surface RC drilling, 2 holes, no records indicate the size of the bit or whether a face sampling hammer was used. Surface drill core, 35 holes, majority of diamond core holes were drilled HQ in size with only 9 holes drilled NQ in size. Drill core was oriented where possible.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	Core recovery was measured for each drill run between the driller's marker blocks. Core loss was then assigned to specific sample intervals.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	Recovery to 0.01 m was recorded on all 2016 diamond core. Core recovery exceeded 90% for 93.5% of all mineralised samples taken. For the 2016 drilling core recovery was maximized by the selection of experienced drillers, short coring runs, drilling muds and the preference of HQ core.
	• *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.*	Where core loss is in excess of 90% the grade is factored down using the assumption the material lost graded 0g/t gold. Not enough data is available to make an assessment on whether a relationship exists between sample recovery and grade. Only one set of twinned holes exist, BH028 and BH028W. These holes potentially show a positive bias with increased core recovery but may also reflect natural variation within the mineralisation. BH028W was wedged from BH028 with the holes only 3.3m apart within the mineralisation. Hole BH028W was drilled after poor core recovery was achieved in a fractured zone. BH028W was also adversely affected by the fractured zone. BH028 from 359m intersected 12.0m @ 3.65g/t

Criteria	JORC Code explanation	Commentary
		gold with 40.2% core recovery whereas BH028W from 361.0m intersected 11m@ 25.65g/t gold with 62.9% core recovery.
Logging	• *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.*	Diamond drill holes were logged by experienced geologists who recorded geological intervals ranging from centimetres to several metres.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	Qualitative code logging was conducted for lithology, alteration, veining, tone and colour. All drill core has been photographed.
	• *The total length and percentage of the relevant intersections logged.*	All drill holes were logged in full.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	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. All major mineralised zones were sampled, plus associated visibly barren material, including >2m of hanging wall/footwall. As well, quartz veins and sulphide zones encountered outside the known ore zone were sampled and ±1m on either side.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	Sub sampling methods used by Capricorn were not documented.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	Sample preparation is deemed adequate. Further improvement is proposed for infill drilling.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	For drill core the external lab's coarse duplicates were used.

Criteria	JORC Code explanation	Commentary
	• *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.*	No “second-half” sampling has been undertaken. There are no records of field duplicates being taken of the RC samples.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Sample sizes are considered appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Samples from Capricorn's 1997 RC drillholes were analysed by Analabs Pty. Ltd at Glynde, South Australia. Gold was analysed by GG313 fire assay digestion. Samples from Maximus' 2005 to 2008 drilling were prepared by Genalysis Laboratories in Adelaide and analysed by Genalysis in Perth for gold by fire assay digestion. Samples from Terramin’s 2016 drilling were analysed by Intertek - Genalysis, Wingfield (NATA accreditation number: 3244, ISO/IEC 17025:2005 which includes 7.03.18 – precious metal ores). Samples were pulverized to 85% passing -75um. Except for samples with visible gold and their adjacent samples, which were submitted to Intertek-Genalysis for 100um gold screen fire assay, routine samples were submitted for analysis using fire assay (FA25/AA). Fire assay samples which returned values greater than 8g/t gold were resubmitted for analysis by screen fire (SF100/OE).
	• *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.*	Terramin utilised hand held XRF analyses to aid geological interpretation.No geophysical tools were used by Terramin to estimate mineral or element percentages. Terramin utilises hand held XRF analyses to aid geological interpretation. Geophysical tools, spectrometers, handheld XRF instruments, etc were

Criteria	JORC Code explanation	Commentary
		not used by either Maximus or Capricorn to estimate grade.
	• *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.*	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. For analyses undertaken by Terramin certified standards, sourced from Geostats Pty Ltd, were inserted in the drill sample sequence equivalent to 1 in 10 samples. Standards were selected to mimic the expected grade distribution, including the high gold values.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections from Maximus drill core only have been visually reviewed by Terramin staff.
	• *The use of twinned holes.*	At this stage twin holes have not been used to verify sampling and assaying. Due to core loss the twinned holes BH028 and BH028W are not considered suitable for this purpose.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	A Terramin geologist is assigned the task of monitoring QC of drill results. Assay quality was monitored on a batch by batch basis by Terramin's Database Manager to identify and rectify problems immediately as well as on a six-monthly basis to monitor long term trends. The QC data is stored in Terramin's Maxwell Geoservice's DataShed database and accessed through a linked program QAQCR also from Maxwell Geoservices. All QAQCR reports are stored on the Terramin server. The QC implemented by Terramin for drilling programs includes the following:

Criteria	JORC Code explanation	Commentary
		1. Review lab analyses of Terramin's certified standards and Intertek – Genalysis' internal checks. 2. Grind sizing checks. In addition to QAQCR analyses, further checks were carried out using: 1. Standardised Response Mean (SRM) plots for assays of standards submitted. 2. Comparison of the analytical results for the original and duplicate samples by use of scatter and Mean Absolute Paired Difference (MAPD) plots. Primary data was collected using a standard set of templates. Data were verified before loading to the database. Geological logging of all samples is undertaken. Features logged include colour, structure, alteration and lithology. No adjustments or calibrations were made to any assay data reported. Terramin has compiled and validated past exploration data. Capricorn and Maximus primary data sighted, Maximus QAQC data sited. Maximus data was stored in Excel spreadsheets. All data upon validation has been transferred by Terramin to a secure Maxwell DataShed database.
	• *Discuss any adjustment to assay data.*	No adjustments are made to reported summary intersections. The resource calculation does make allowances for core loss. Where core loss is in excess of 90% the grade is factored down using the assumption the material lost graded 0g/t gold.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other*	Terramin drillholes collars were surveyed using a Trimble Pro XRT differential GPS. Downhole surveys were taken using a Ranger Downhole Survey Tool. Hole BH057 was also

Criteria	JORC Code explanation	Commentary
	locations used in Mineral Resource estimation.	gyroscopically surveyed by Borehole Wireline whose results correlated well with the Ranger surveys. Maximus drillhole collars were surveyed using a DGPS. All Maximus drillholes used in the Resource Estimate were surveyed using either a digital or single shot film camera at intervals of approximately 30m. A survey was also undertaken at the end of each hole.
	• *Specification of the grid system used.*	The grid system is MGA GDA94 Zone 54 .
	• *Quality and adequacy of topographic control.*	Topographic control is based on the collar surveys and DGPS pickup of the surrounding area.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	Sample sizes are generally considered appropriate. Approximately 1% of the sample lengths are sub 30cm.
	• *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 intercept/sample spacing between 325m RL and 200m RL has been completed predominantly on a 25 m or better pattern. Beneath the 200m RL drillhole intercept spacing is in the order of 60m.
	• *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.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Overall Bird-in-Hand mineralisation dips 45 degrees towards 100 (grid azimuth) and plunges 40 degrees towards 125 (grid azimuth). Intercept angles are predominantly moderate (45 to 65 degrees) relative to the plane of the mineralisation.
	• *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.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	Chain of custody for drilling undertaken by Terramin was managed by Terramin's geological staff. Drill samples selected for analysis were initially stored on site and then transported by Terramin staff to Intertek-Genalysis at Wingfield, South Australia. At the laboratory samples were stored in a locked yard before being processed and tracked through preparation and analysis (Lab-Trak system). Chain of custody management was not documented by Capricorn or Maximus. Core samples are stored in a secured shed.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	No external audits or reviews of modelling techniques and data have been undertaken. Work was internally cross checked internally by experienced geologists. 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 DataShed database and validated. Mineralisation was then visually checked and modelled using Maptek's Vulcan.

1.1.2. Section 2: Reporting for Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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.*	The Bird-In-Hand Project is contained within both EL5469 and an area under application for a retention lease to replace Mineral Claim MC4113. 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 Mineral Claim is issued, which is a prerequisite a Mining Lease application. In addition to State royalties, Terramin will pay Maximus a 0.5% royalty if the average sale price for gold is greater than $1000 per ounce on bullion production after production of the first 50,000 ounces.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	This Resource includes data collected by Capricorn (2 RC holes in 1997) and Maximus (29 diamond drillholes 2005-2008). All relevant work by these two companies is believed by Terramin to have been carried out to industry standard at that time.
Geology	• *Deposit type, geological setting and style of mineralisation.*	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 metasedimentary rocks. Veins are hosted within the Brighton Limestone
Drill hole Information	• *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:*	No new drill data reported. All drillholes prior to 2016 were reported in ASX release 2/12/2013. Drilling undertaken in 2016; BH051, BH054 and BH056 to BH059 were reported in

Criteria	JORC Code explanation	Commentary
	• *easting and northing of the drill hole collar*	ASX releases dated 8/6/2016 and 15/7/2016.
	• *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.*	
	• *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 previously listed in Appendix include: non-surveyed holes (BH001 to BH004 drilled in the 1930's, holes abandoned well above the mineralisation, holes drilled to test surrounding prospects, water bores and geotechnical drillholes.
Data aggregation methods	• *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.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No metal equivalents are reported.
Relationship between mineralisation widths and	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the*	No new exploration results have been reported.

Criteria	JORC Code explanation	Commentary
intercept lengths	*drill hole angle is known, its nature should be reported.* • *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').*	
Diagrams	• *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.*	Figures 1, 2 & 3 in main text
Balanced reporting	• *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.*	No new exploration data reported
Other substantive exploration data	• *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.*	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's water management 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. Understanding the hydrogeology of the area is critical to the project. Consequently, detailed hydrogeological investigations have commenced to accurately model potential project impacts. These models will allow Terramin to undertake design work to avoid fracture hosted aquifers where possible and identify areas that can be precondition using technologies such

Criteria	JORC Code explanation	Commentary
		as grouting and surface sealants that will allow ground water management to achieve Terramin's stated objective of operating the mine without compromising existing users water quality or ability to access water. Australian Groundwater Technologies has been engaged by Terramin to carry out further groundwater studies.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Further drilling is designed to upgrade the Inferred Resource below 200m RL to an Indicated Mineral Resource and to further hydrological and geotechnical studies.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Additional drilling may also take place to extend the existing Resource down dip as shown in Figure 3.

1.1.3. Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *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.*	Laboratory assay files were imported into a Maxwell Geo Services' DataShed database and compared with the Maximus database provided to Terramin. Selected sample intervals were checked and seen to match intervals marked on core. Original downhole survey data for Maximus holes has not been sighted. Terramin has resurveyed where possible the Maximus drillhole collars but many of the historic drillhole collars have been rehabilitated and cannot be located.
	• *Data validation procedures used.*	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.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Bird-in-Hand site has been visited on many occasions and drill core inspected at the Bird-in-Hand core farm.
	• *If no site visits have been undertaken indicate why this is the case.*	Site visits have been undertaken.
Geological interpretation	• *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.
	• *Nature of the data used and of any assumptions made.*	Two Capricorn RC holes and 29 Maximus and 6 Terramin 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.

Criteria	JORC Code explanation	Commentary
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	No alternative interpretations have been completed or put forward for serious consideration.
	• *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 Red Reef. Drill core logging and historic mine development are used to create 3D constrained wireframes.
	• *The factors affecting continuity both of grade and geology.*	Grade continuity is related to the quartz and sulphide occurrences within the boundaries.
Dimensions	• *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
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Compositing of drill-hole samples was completed within mineralised domains at 1m (downhole) intervals. Ordinary kriging estimation technique was used for estimation of gold grade in the prospect area. Estimations were performed for cut (to 80 g/t gold) and uncut values separately, demonstrating that there was minimal sensitivity to the top-cut. Sample selection honoured the interpreted mineralised domains. Statistical analysis by domain was completed. For Red Reef, normal scores variogram models for gold were developed and back transformed using Snowden Supervisor software. Variography models developed for Red Reef are applied and used to estimate White Reef and Yellow Reef.

Criteria	JORC Code explanation	Commentary
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	The Bird-in-Hand grade estimation is comparable to Maximus' August 2008 polygonal resource estimate model - 598kt @ 12.3g/t - 237,000ozs gold and Terramin's 2013 estimate of 557kt @ 13.0g/t – 233, 000oz and in keeping with historical production of 23kt @ 12.9g/t gold.
	• *The assumptions made regarding recovery of by-products.*	No assumptions made.
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	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 within marble and at this stage this is not expected to be potentially acid forming material.
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	Parent block size of 20m by 20m by 2m orientated to the plane of mineralisation with sub blocking down to 5m by 5m by 1m.
	• *Any assumptions behind modelling of selective mining units.*	The highly selective mining method of cut and fill is proposed as the most likely mining method.
	• *Any assumptions about correlation between variables.*	No correlation between variables assumptions is made.
	• *Description of how the geological interpretation was used to control the resource estimates.*	"Ore" wireframes are created within the geological shapes based on drill core logs and laboratory grades.
Estimation and modelling techniques (continued)	• *Discussion of basis for using or not using grade cutting or capping.*	Composites were cut to 90g/t gold based on log histogram and log probability plot distribution (~97% percentile).
	• *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 to demonstrate consistency between drillhole data and the block model.
Moisture	• *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.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	Based on a gold price of A$1,600 per ounce, these figures confirmed that a 3 g/t gold breakeven cut-off was reasonable for variable costs.
Mining factors or assumptions	• *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.*	The 2013 Scoping Study mining design was 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 6m. A minimum mining width of 4.5m 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 for mined ore due to losses in the floor of stopes and other operational factors.
Metallurgical factors or assumptions	• *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.*	Metallurgical test work has not 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 (Pb) circuit.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• *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.*	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 Bird-in-Hand mineralisation.
Bulk density	• *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.*	All 854 of Maximus' samples submitted for assay had their densities 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 on 33 of the original Maximus immersion samples, using a process that included oven drying of the samples and a modified immersion technique that allowed for porosity, gave density values 3% lower than the Maximus immersion method. From the 2016 drill core a further 444 density measurements were collected using the modified immersion technique.

Criteria	JORC Code explanation	Commentary
	• *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.*	Density was estimated using both pycnometry measurements conservatively factored down 8.5% and water immersion measurements.
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Bulk density was modelled using the same domains and search parameters used for the gold mineralisation.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	Red Reef Mineral Resource has been classified Indicated between 200m RL and 325m RL and classified as Inferred above the 325m RL and below 200m RL. All of the White Reef is classified as Inferred. The Red Reef between 200m RL and 325m RL has been classified as Indicated based on the density of drilling, integrity of the data, the spatial continuity and the style of the mineralisation. This portion of the Resource had previously been classified as Indicated in the Maximus' 2008 Bird-in-Hand Resource Estimate.
	• *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).*	Maximus data input is considered reliable. Distribution of data and continuity is good above 200m RL, but moderate beneath this depth. Where core loss is in excess of 90% the grade is factored down using the assumption the material lost graded 0g/t gold. This process equates to a 4.8% reduction in the gold grade, from 14.0g/t gold to the reported 13.3g/t gold.
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The result appropriately reflects the Competent Person's view of the deposit

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	The 2016 Mineral Resource Estimate has been reviewed internally.
Discussion of relative accuracy/ confidence	• *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.*	The Mineral Resource estimate is considered robust and representative. The additional (2016) drillholes have helped to model the short range variability and increase the confidence of the model. This model is intended only for use in aiding pre-feasibility study investigations. A more detailed review of the mineralisation is planned, including infill drilling of a significant portion of the defined resource. 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.
	• *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.*	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.
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	The grade of 13.3g/t gold of the current resource estimate is in keeping with previous resource estimates and the average grade of 12.9g/t gold (recovered) from historical production.