SALU BULO SUMMARY REPORT

Regional Geology

The Masmindo Mining Corporation ("**Masmindo**") CoW is situated on the southern side of the Central Sulawesi Metamorphic Belt within a 50 km long, north-northeast trending fault bounded block of basement metamorphic rocks and younger sediments. The western margin of this block is represented by an easterly dipping thrust, whereas the eastern margin is defined by a major basement structure. Imbricate faulting has complicated the internal morphology of the block.

The CoW is dominated by the late Cretaceous Latimojong Formation consisting of phyllites, slates basic to intermediate volcanics, limestone and schist representing a platform and/or fore arc trough flysch sequence. The Latimojong Formation overlies basement metamorphic rocks dominated by phyllites and slates. Both sequences have been intruded by late-stage plugs and stocks of diorite, monzonite and syenite. To the east of the metamorphic block, basic intermediate intrusives, pyroclastics and volcanogenic sediments comprising the Mesozoic Lamas Ophiolite Complex appears to have been obducted into a position effectively overlying the younger flyschoid sequence and basement metamorphics during continental accretion.

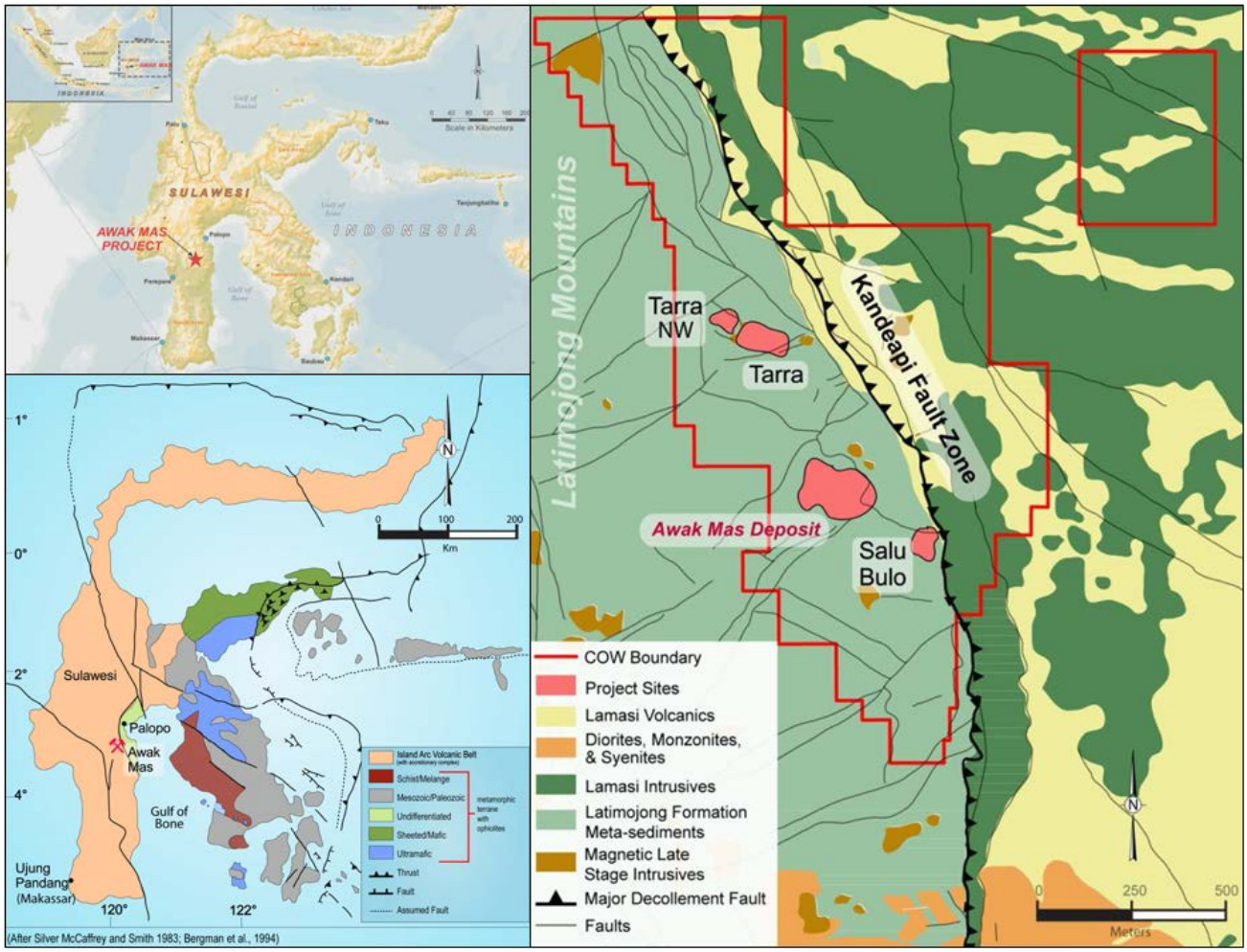

Figure 1 SALU BULO - Project Location and Regional Geological Setting

History of Exploration on the CoW

PT Asminco Bara Utama and New Hope Consolidated Industries Pty Ltd, through P.T. Masmindo Eka Sakti, were the first to initiate exploration activities in the area. This mainly involved reconnaissance surveys within Bajo River and Ulusalu areas.

From 1988 to 1989, a regional reconnaissance survey was undertaken by Battle Mountain Gold Company, which resulted in the discovery of the Awak Mas Deposit.

From 1996 to 1998, Masmindo conducted infill and follow-up stream sediment sampling, Wacka drill soil sampling, float and rock chip/channel sampling in the CoW area.

From September 1998 to June 1999, Placer Dome Pacific ("**Placer Dome**") conducted geochemical surveys, consisting of trenching and surface traverse sampling, coupled with prospect testing by diamond drilling in the Salu Bulo area. Placer Dome completed a core drilling program based on the surface exploration results with holes oriented due west.

In 2009 One Asia undertook resource definition drilling on a grid spacing of 50m x 50m with infill drilling on 25m x 25m grid spacing.

Prospect Geology

At Salu Bulo historic exploration work has been characterized by surface geochemical studies and geological mapping, which has identified a series of steeply dipping mineralised targets, striking approximately north-south.

The geological setting and mineralisation style at Salu Bulo is considered to be analogous to that at the Awak Mas deposit, but with a more dominant sub-vertical structural control.

A high level, low sulphidation hydrothermal system has developed at Salu Bulo overprinted by a strong sub-vertical fracture control which has channelled the mineralising fluids. The mineralising fluids have exploited these pathways and migrated laterally along foliation parallel shallowly dipping favourable strata (hematitic mudstone) and along low angle thrusts.

The mineralisation is related to the two primary structural orientations being dominant sub-vertical N-S anastomosing structures, and foliation parallel low angle thrusts.

The multi-phase gold mineralisation is characterised by milled and crackle breccias, vuggy quartz infill, and stockwork quartz veining with distinct sub-vertical feeder structures. The host lithologies for the mineralisation are a sequence of chloritic and intercalating hematitic meta-sedimentary rocks metamorphosed to greenschist grade.

Drilling

In 1999 Placer Dome completed 30 drill holes for 3,172m. In 2009 One Asia drilled 102 drill holes for 9,738m (Figure 2). The complete dataset of 132 drill holes (historic and current) was used in the mineral resource estimate.

All diamond drilling used the triple tube recovery method with drill hole depths vary from 15.5m to 199.5m. Drill deviation was typically measured in holes deeper than 25m with a Reflex Camera system. Core orientation was determined by using a spear marking by coloured "pencil" set at the base of the drill string.

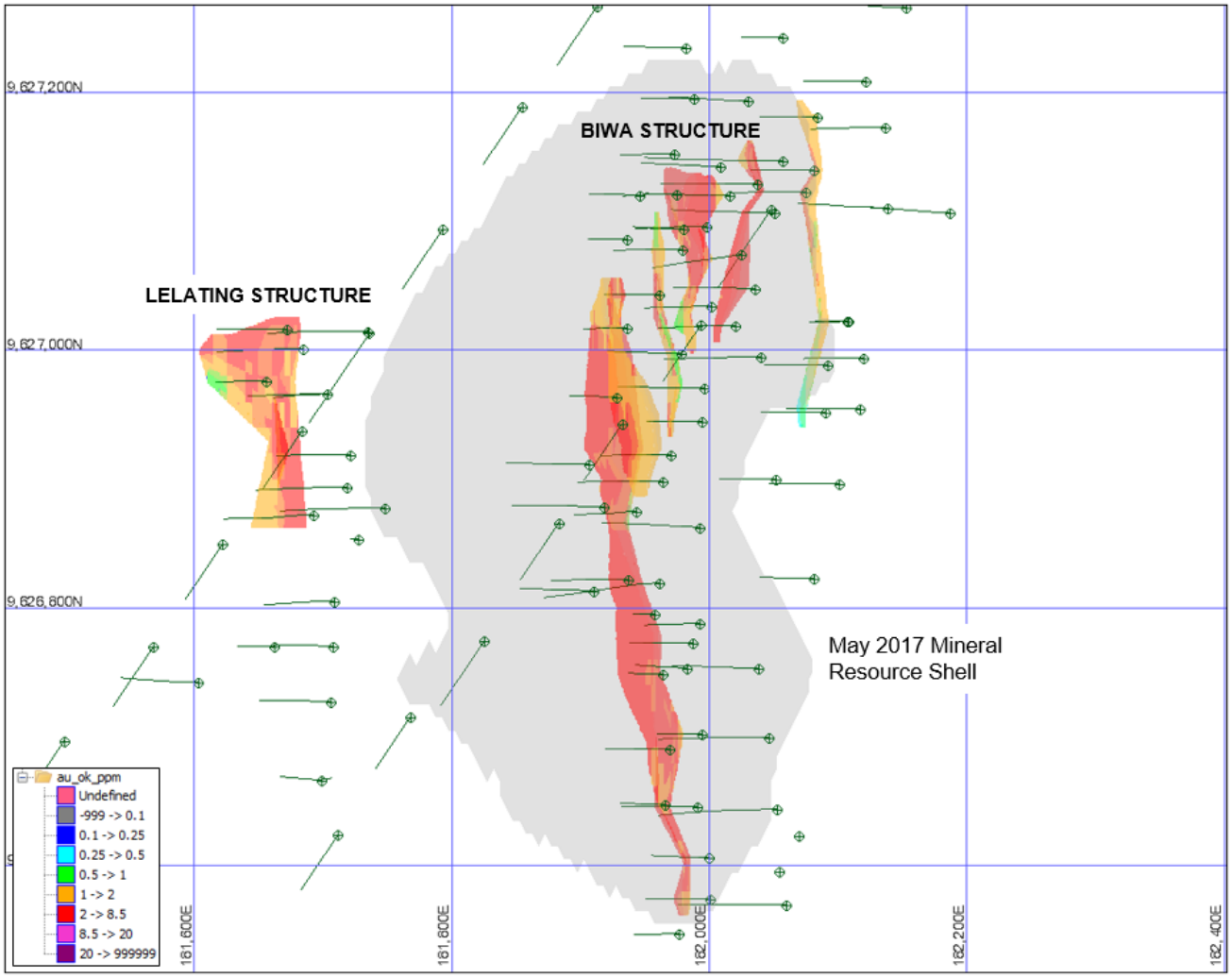

Figure 2 SALU BULO - Drillhole Location Plan and Mineralised Domains

Sampling and Sub-Sampling Techniques

Drill core (HQ) was generally sampled in 1m to 1.8m intervals, contingent on geology and core recovery with the core collected directly from the core barrel into core boxes. Core samples were split in half, with half core sent for assay and other half retained as reference core in the tray on site in a secure purpose built shed.

Sample Analysis Method

Gold mineralization typically occurs with minor disseminated pyrite (<3%) within sub-vertical quartz veins, breccias, and stockwork zones. The assay samples were crushed in their entirety, and a 200-500g split was pulverised for a 40-50g fire assay with AAS finish. The fire assay gold analyses undertaken are considered a total assay method. Fire assay gold analysis is an appropriate assay method for this type of deposit.

The Placer Dome assay samples were composited to 2m by combining the pulp splits with the samples sent to Intertek in Jakarta.

One Asia used Geoservices Ltd at Cikarang – Bekasi, Indonesia for assaying. At Geoservices (primary laboratory), samples are prepared using their "Total Sample Preparation Package", which includes samples dried at 105°C, jaw crushed (to nominal 4mm) if required and the whole sample pulverized via LM5 ring mill pulverisers prior to assay.

Laboratory Quality control procedures included the submission of standards, blanks and duplicates to the primary lab, as well as the use of an external umpire laboratory. 308 pulp duplicate and 118 quarter core samples from the drilling were selected and sent to the umpire laboratory, PT Intertek Utama Services by One Asia.

Geological Interpretation

The mineralised domains are orientated north-south, have an overall combined strike length of approximately 600m, dip steep to the east and sub-vertical. Individual interpreted mineralisation domains are between 150 to 500m in strike length (Figure 2. and Figure 3).

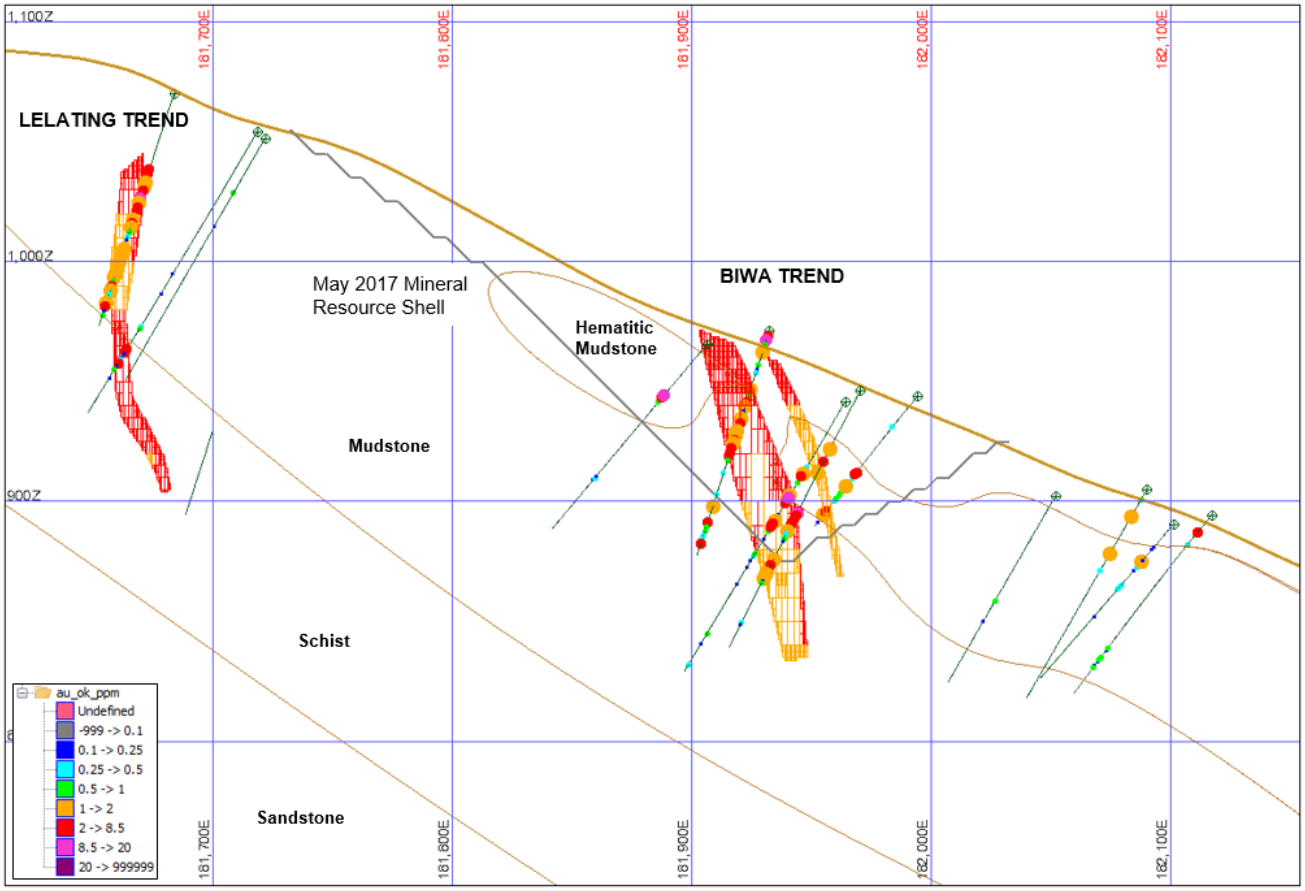

Figure 3 SALU BULO - EW Cross Section (9626925mN) Showing Block Model Grades, Drill Holes and Constraining $1,400 Shell.

The main factor affecting the continuity of grade and geology is the complex array of faulting and fracturing that is associated with the emplacement of mineralisation as well as possibly truncating it in places. With the wide spaced data defining the mineralisation, this structural complexity is poorly understood (Figure 4).

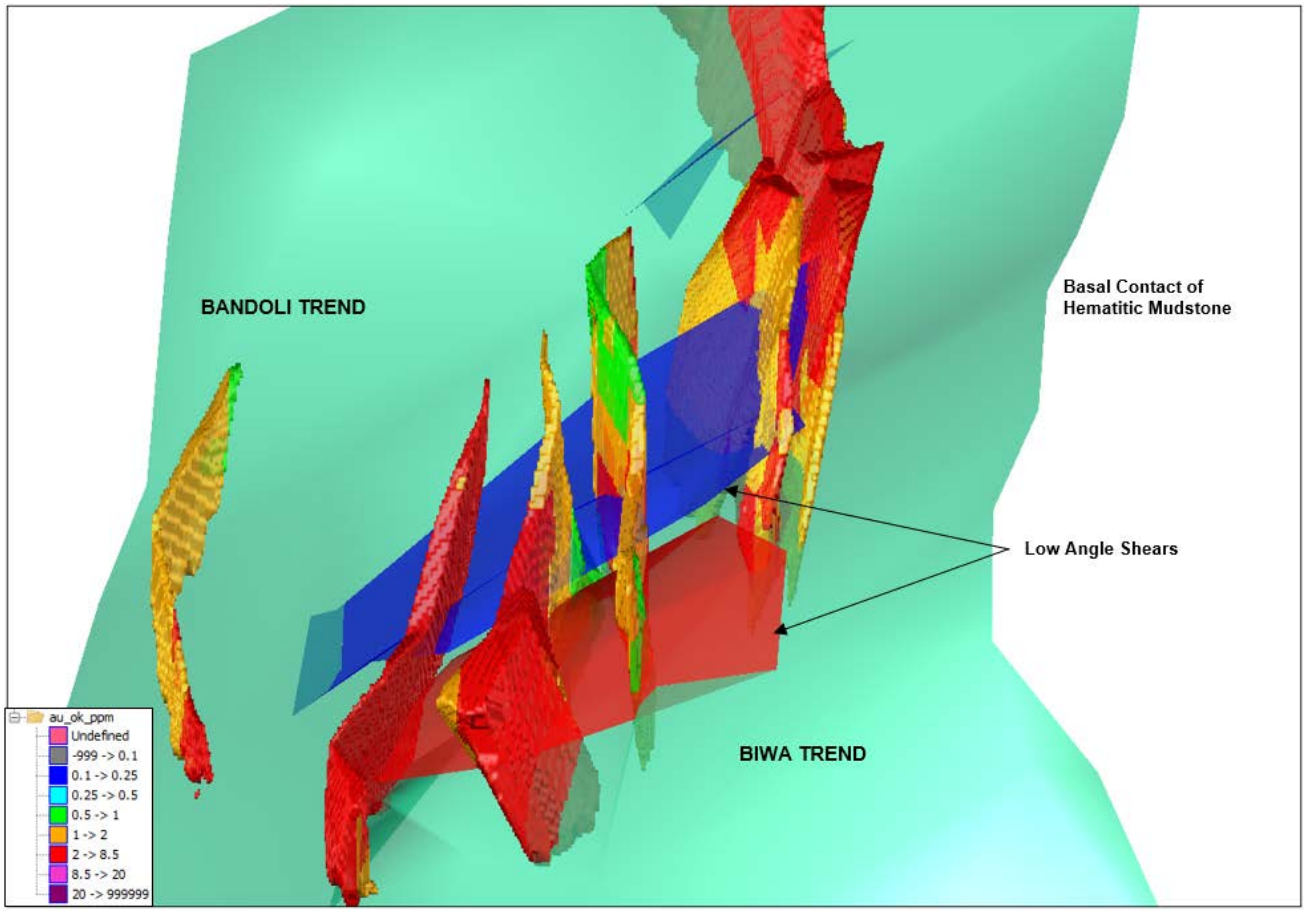

Figure 4 SALU BULO – Low Angle Shears Faults, Hematitic Mudstone Basal Contact and Mineralised Domains looking south.

Mineralised zones vary from 1.5 to 15m in thickness, however are more commonly between 3 to 10m in thickness. A minimum downhole length of 2m (which equates to 1.5m true width) was employed in the interpretation of the estimation domains. Mineralisation extends from the near surface to 200m below the surface. The top of the mineralisation is capped by a cover of colluvium.

A structural and lithological interpretation was made to provide a guiding framework for the modelling of the estimation domains. The mineralisation was primarily defined by diamond drill core supported by limited surface mapping and sampling. The assay results from the surface mapping and sampling have not been used to inform the grade estimate.

Estimation Methodology and Cut-off Grade Including Basis for Selection

Ordinary Kriging ("**OK**") methodology was used to estimate gold from 2m composited data into seven estimation domains. OK is considered to be an appropriate method taking into account the style and nature of the mineralisation. Geological interpretation guided the creation of constraining mineralised domains. Mineralised domains were used as hard boundaries and were informed only by composited samples lying within those domains.

The necessity for grade cutting was based on basic exploratory data analysis, including the level of grade variability as expressed by the coefficient of variation ("**CV**"). Grade cutting completed on a domain basis using

log normal probability plots of the grade distribution to determine appropriate level of cutting to minimise the influence of extreme grade outliers with the high grade capping determined using metal at risk analysis.

Block size used is 20mN, 5mE and 20mRL and sub-blocked to 1.25mN x 0.625mE x 1.25mRL. The bulk of the drilling data was on 30m x 50m and 50m x 100m spaced sections.

Interpolation parameters were derived using standard exploratory data analysis techniques of statistical and continuity analysis. Appropriate interpolation strategies were developed on a domain basis using kriging neighbourhood analysis ("**KNA**"), which included an oriented ellipsoidal search radii ranged from 50 to 157m depending on the domain, minimum and maximum number of samples varying from 4 to 30 respectively and the maximum extrapolation distance from the last data point was less than 50m, which is the average drill hole spacing for most the deposit.

A value of 2.65t/m^3 was assigned to fresh rock and 2.5 t/m^3 was assigned for the oxide/transition material. Colluvium/Soil was assigned a density value of 1.8t/m^3.

The model was validated using the following techniques:

- Visual 3D checking and comparison of informing samples and estimated values;
- Global statistical comparisons of raw sample and composite grades to the block grades;
- Validation 'swath' plots by northing, easting and elevation for each domain; and
- Analysis of the grade tonnage distribution.

Mining and Metallurgy parameters and Modifying Factors

As the mineralisation is near surface, the grade of the mineralisation is amenable to conventional open pit mining methods. The assumed mining method would use drill and blast, utilising 2.5m mining flitches to a maximum vertical depth of 300m. An overall pit slope of 40° is assumed to be attainable based on the PFS (2015) update.

A minimum downhole length of 2m was used in the interpretation of the mineralisation, which equates to 1.5m true width. The mineralisation domains do not contain dilution other than the incorporation of low grade material into the interpreted domains to maintain continuity.

The PFS is based on carbon in leach ("**CIL**") processing of the known mineral resources with gravity and flotation circuits for an overall expected recovery of 88-91%.

Based on this and the updated PFS (2015), it is assumed that the deposit will be amenable to economic extraction.

Mineral Resource Statement and Classification

The Mineral Resource has been classified as Indicated and Inferred based on a range of qualitative criteria which include;

- data support as defined by drill spacing;
- confidence in the domain interpretation;
- data quality issues affecting particular zones;
- quality of the estimate (slope of regression), and

- reasonable prospects for economic extraction.

Areas classified as Indicated generally applied to regions of 50m or less drill intercept spacing, where the level of understanding of the mineralisation continuity and quality is considered to be sufficient to allow for mine planning and evaluation of the economic viability.

Indicated classification has been applied to parts of domains 1 and 7, where the steeply modelled geometry was backed up by surface outcrop and channel sampling. In addition, areas that are classified as Indicated have a slope of regression/conditional bias slope values of 0.6 or greater.

The adopted cut-off grade for reporting is 0.5g/t Au, based on preliminary economic considerations and in-line with the reporting of mineral resources and reserves from the updated PFS (2015). The basis for eventual economic extraction was the use of optimisation shells using Whittle software with all-in cost parameters and a base gold price of US$1,400. The Salu Bulo Mineral Resource Estimate ("**MRE**") has been reported inside this constraining pit shell as detailed in Table 1.

Table 1 – SALU BULO Mineral Resource Statement May 2017 – At a 0.5g/t Au Cut-Off, Inside US$1,400 Shell

Category	Tonnes (Mt)	Au (g/t)	Au (Moz)
Measured	-	-	-
Indicated	0.7	2.65	0.06
Inferred	0.6	2.39	0.05
TOTAL	**1.4**	**2.53**	**0.11**

The previous MRE estimate by Tetra Tech (2013) is detailed below in Table 2.

Table 2 - Previous MRE by Tetra Tech 2013 – At a 0.5g/t Au Cut-Off

Category	Tonnes (Mt)	Au (g/t)	Au (Moz)
Measured	2.2	2.33	0.17
Indicated	3.4	2.09	0.23
Inferred	0.5	1.10	0.02
TOTAL	**6.1**	**2.10**	**0.41**

The alternate interpretation and risk assessment associated with the current MRE has significantly impacted on the contained metal reducing the contained gold ounces by more than 70% when compared to the previous MRE (2013). The current MRE is considered to be a lower risk model which better reflects the likely outcome from selective mining.

Estimation Methodology Comparison to Previous Estimate

The current MRE and the previous estimate by Tetra Tech (2013) are based on the same drill hole data with the differences being the result of an alternate interpretation philosophy and the assessment of risk associated with the data and geological understanding of the mineralisation.

Comparison of the estimate has been completed on a side by side basis to highlight the key differences in the estimation techniques (Table 3).

The salient differences are;

- The previous estimate has attempted to model most of the significant mineralisation, implying good continuity of thin intersections using wide spaced data. This has the result of increasing the volume of mineralisation beyond what would be practically achieved by mining. More
- 2m composites (Tetra Tech used 4m composites) were used for the current MRE to better represent the local grade variability, and reduce over-smoothing of grade,
- Grade capping was used to minimise the influence of isolated grade outliers. The previous estimate relied on the 4m composites to moderate the influence of any extreme grades,
- Estimation block size (5 x 20 x 20m (XYZ)) was chosen at approximately half the average drill hole spacing, to reduce the estimation error and the implied high mining selectively that is associated with an estimate using small blocks (4 x 4 x 4m (XYZ)) relative to the drill spacing,
- Classification of the MRE was based on qualitative factors which included data support, confidence in the interpretation and grade continuity, and estimation quality (using Slope of Regression). This method better reflects the risk associated with the MRE rather than relying solely on the rigid application of the estimation variance and number of octants on a block by block basis,
- The final classification of the MRE has resulted in the removal of the Measured category, with Indicated and Inferred categories constituting 57% and 43% of the MRE respectively, and
- The MRE has been reported inside a constraining US$1,400 optimisation shell to satisfy the reasonable prospects for eventual extraction, whereas the previous estimate was limited to the boundaries of the interpreted mineralisation envelopes only.

Table 3 - Estimation Methodology Comparison to Previous Estimate by Tetra Tech (2013)

Estimation Process	Cube 2017	Tetra Tech 2013
Compositing	2m composites	4m composites
Mineralisation Domains	Robust, geometrically simple and continuous estimation domains based on quartz vein percentage to define continuity. Nominal 0.5g/t Au lower threshold.	Deterministic geological interpretation which implies continuity of relatively thin individual mineralisation zones based on broad scale drilling. Nominal >0.5g/t Au cut-off
Grade Capping	Spatial location of outliers assessed on a domain basis. Ranged from 10 - 12g/t Au.	No grade capping applied, as 4m composites moderate any outliers
Density	Density assigned: • Colluvium/Soil - 1.8t/m^3 • Oxide/Transition - 2.5 t/m^3 • Fresh (Mineralised) - 2.62t/m^3. • Fresh (Waste) - 2.64t/m^3.	Density assigned: • Oxide – 1.85t/cm • Mineralised Zones – 2.61t/cm • Waste - 2.62t/cm.
Block Size	OK panel size 5 x 20 x 20m (XYZ)	OK panel size 4 x 4 x 4m (XYZ)
Estimation Technique	Ordinary Kriging into representing half the average drill hole spacing Check estimate by OK and ID2	Ordinary Kriging into small blocks.
Interpolation Parameters	Average nugget effect of 22 to 64% Average ellipsoidal search radii – 50 to 157m. Anisotropy 4:4:1 (major/semi/major). Min samples 4 Max samples 20 to 30 Max samples per hole 5 to 10	Average nugget effect of 41% Average ellipsoidal search radii – 60 to 171m. Anisotropy 1.5:1.5:1 (major/semi/major). Min samples 1 to 3 Max samples 40
Classification	Qualitative approach based on data support and grade continuity Indicated and Inferred categories only	Based on Kriging Variance and number of octants Mainly Measured and Indicated categories
Reasonable Prospects and Reporting	Reported at 0.5g/t Au cut-off Inside constraining US$1,400 shell Global estimate at SMU size	Reported at 0.5g/t Au cut-off No constraining pits shell used Global estimate
Model Accuracy Level	Used qualitative criteria and estimation quality (slope of regression) to determine that the model accuracy is of an acceptable level to support an Indicated/Inferred category.	Acceptable global accuracy based on comparison of model and sample grades.

Future Work

Additional areas have been identified for infill (to 25m x 25m) and extensional drilling, including targets at depth, down-plunge and outside of the current mineral resource limits.

Planned drilling is focussed on upgrading the majority of the current Inferred Mineral Resource to the Indicated classification (11 holes for 1,000m), as well as growth of the Mineral Resource outside of the currently delineated mineralised domains (18 holes for 2,100m). The approximate position of the planned drilling is shown in Figure 5.

Detailed core re-logging and development of a structural model will help progress the current geological model and provide a drill targeting tool both for resource delineation and definition of new exploration targets within the CoW.

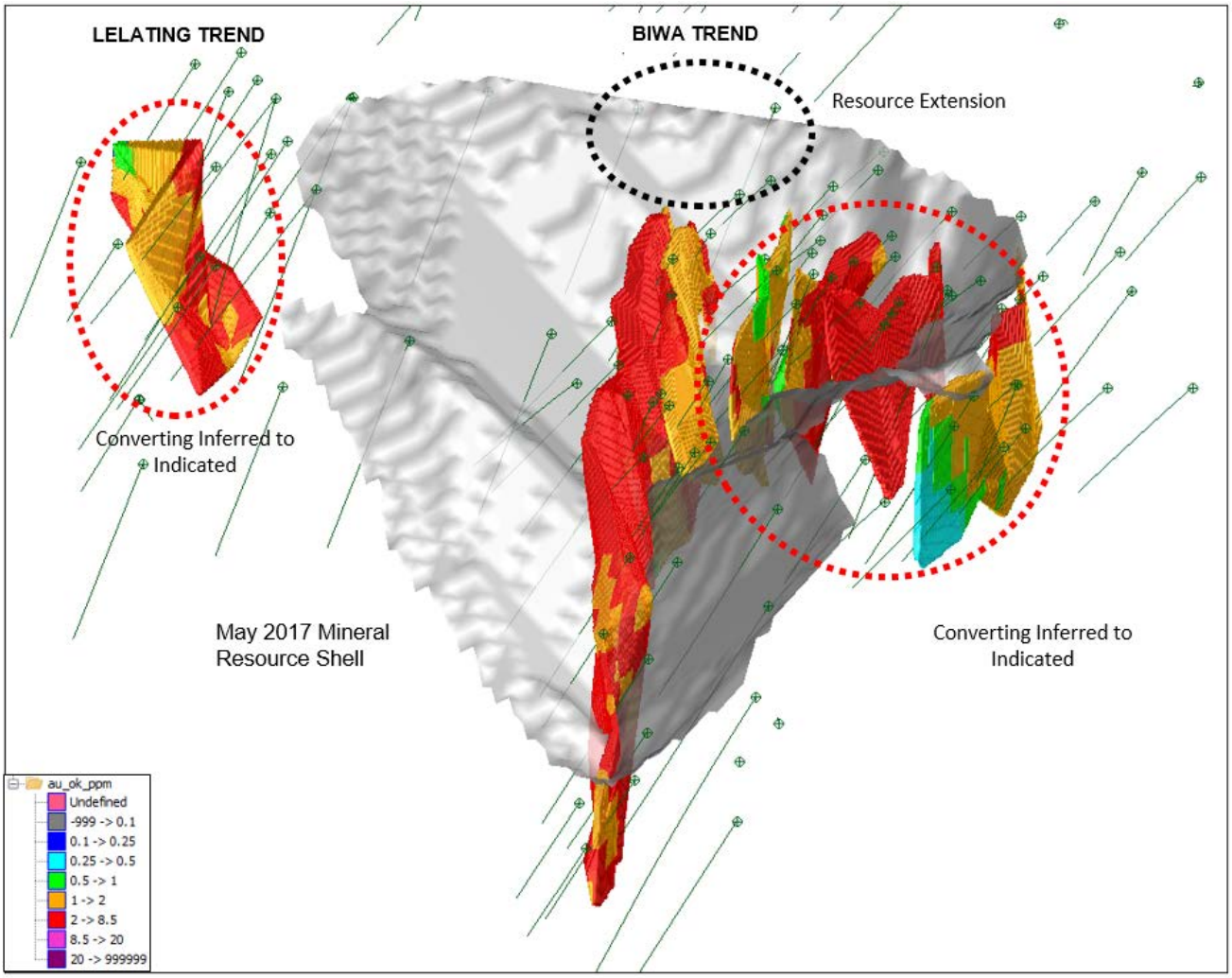

Figure 5 SALU BULO - Oblique View looking to the North Showing Mineralisation Domains, Constraining US$1400 Shell and Planned Drilling Areas