

Table 2: Summary of Mineral Resource Estimate and Reporting Criteria

Drilling techniques	<p>All drillholes were diamond drill cored and drilled from surface (mostly NQ) at angles of between -60° and -75°. The drillholes were drilled from east to west along section lines spaced 50m apart.</p> <p>21 PQ sized holes from a metallurgical drilling campaign were included that were drilled in three clusters approximately 25 m apart.</p>
Logging	<p>All of the drillholes were geologically logged by qualified geologists. The logging was of an appropriate standard for grade estimation.</p>
Drill sample recovery	<p>Core recovery in the mineralised zones was observed to be very good and was on average greater than 95%. Five of the shallow drillholes intersected artisanal workings and so recovery of the high grade mineralisation was poor and therefore the data from these holes were not used for grade estimation.</p>
Sampling methods	<p>Half core samples were collected continuously through the mineralised zones after being cut longitudinally in half using a diamond saw. Drillhole samples were taken at nominal 1 m intervals, which were adjusted to smaller intervals in order to target the vein zones. Lithological contacts were honoured during the sampling. MSA's observations indicated that the routine sampling methods were of a high standard and suitable for evaluation purposes.</p>
Quality of assay data and laboratory tests	<p>The assays were conducted at ALS Chemex in Johannesburg where samples were analysed for tin using fused disc ME-XRF05 conducted on a pressed pellet with 10% precision and an upper limit of 5000 ppm. Over limit samples were sent to Vancouver for ME-XRF10 which uses a Lithium Borate 50:50 flux with an upper detection limit of 60% and precision of 5%.</p> <p>ME-ICP61, HF, HNO₃, HCL04 and HCL leach with ICP-AES finish was used for 33 elements including base metals. ME-OG62, a four acid digestion, was used on ore grade samples for Pb, Zn, Cu & Ag.</p> <p>External quality assurance of the laboratory assays for the Alphamin samples was monitored by the insertion of:</p> <ul style="list-style-type: none"> Blank samples, certified reference materials and duplicate samples were inserted with the field samples accounting for approximately 10% of the total sample set. 150 Pulp duplicates were sent to SGS (Johannesburg) in 2013 for confirmation assay. These formed approximately 6% of the total data set at that time. Included with the pulp duplicates were 15 CRM's. <p>The QAQC measures used by Alphamin revealed the following:</p> <ul style="list-style-type: none"> The high grade CRM (31.42% Sn) indicated that an over-assay of approximately 8% may have occurred. The lower grade CRMs (<2% Sn) indicated that the Sn and Cu assays were accurate and unbiased consistently within two standard deviations of the accepted CRM value. The field duplicates confirmed the nuggetty nature of the tin mineralisation. The majority of the duplicate assays were within 20% of the field sample. Blank samples indicated that no significant contamination occurred for most of the programme. Seven blank assays returned Sn values of between 0.005% and 0.02%, which is not considered material to the project. The pulp duplicates assayed by SGS showed excellent correlation with the

	<p>ALS assays at both high and low grade ranges.</p> <p>MSA carried out an assessment of the impact of the possible over-assaying of the high grade samples indicated by the high grade CRM assays. The impact may result in the Mineral Resource grade being overstated by as much as 5%. Work is ongoing in order to resolve this issue.</p>
Verification of sampling and assaying	<p>MSA observed the mineralisation in the cores and compared it with the assay results. MSA found that the assays generally agreed with the observations made on the core. MSA took ten quarter core field duplicates for independent check assay, which confirmed the original sample assays within reasonable limits for this style of mineralisation.</p> <p>The nature of the mineralisation intersected since the site inspection in July 2013 was observed to be consistent with that intersected in the previously drilled 37 drillholes. Since the last site visit in May 2104, Alphamin has completed 28 drillholes at Mpama North. The results of these holes are consistent with those drilled up until the previous site inspection by the Qualified Person.</p>
Location of data points	<p>All of the Bisie surface drillhole collars have been surveyed. Down-hole surveys were completed for all of the holes drilled at Mpama North.</p>
Tonnage factors (in situ bulk densities)	<p>Specific gravity determinations were made for a selection of the drillhole samples using the Archimedes principal of weight in air versus weight in water. These were applied to the sample data using a demonstrated linear regression of tin grade with specific gravity. The assigned specific gravity was interpolated into the block model using Ordinary Kriging.</p>
Data density and distribution	<p>The drillholes were drilled from east to west along section lines spaced 50m apart. Along the section lines the drillholes intersected the mineralisation between 25 m and 50 m apart in most of the Mineral Resource area with drilling being sparser, up to 100 m apart, in the deeper northern area.</p> <p>21 PQ sized holes from a metallurgical drilling campaign were included that were drilled in three clusters approximately 25 m apart. Within the clusters, the PQ holes were drilled approximately 5 m apart.</p> <p>In the Mineral Resource area, 62 of the 74 NQ drillholes completed were used for the grade estimate. Seven of the holes intersected mineralisation outside of the area currently defined as a Mineral Resource and five of the shallow drillholes intersected artisanal workings. The data from these twelve holes were not used for grade estimation.</p>
Database integrity	<p>Data were stored in an Access database. MSA completed spot checks on the database and is confident that the Alphamin database is an accurate representation of the original data collected.</p>
Dimensions	<p>The area defined as a Mineral Resource extends approximately 550 m in the down plunge direction. It extends for between approximately 200 m and 300 m in the plane of mineralisation perpendicular to the plunge. The main zone of the Mineral Resource, which accounts for 94% of the Mineral Resource, is on average approximately 9 m thick, although is narrower (less than 1 m) at the margins and up to 20 m thick in the central areas.</p> <p>The zones that occur several metres above and below the main zone are generally narrower than the main zone and cover areas of between 100 m and 200 m in the dip and strike directions.</p>

Geological interpretation	<p>The mineralised intersections in drill core are clearly discernible. The Mineral Resource is interpreted to occur as tabular mineralised zones, dipping 65° to the east, containing several narrow veins, blocks and disseminations of cassiterite. The mineralised zones are hosted in chlorite schist that is the result of intense alteration that may originally have been a distinct stratigraphic interval. The Mineral Resource may be affected by a number of faults that are sub-parallel to the mineralisation causing local displacement. The precise locations of faults have not been determined.</p> <ul style="list-style-type: none"> • The Main Vein mineralisation consists of a number of uncorrelated cassiterite veins within pervasively chloritised schist. This zone generally occurs over thicknesses of between 2 m and 22 m with an average thickness of approximately 9 m. This zone is generally the highest grade and most consistent overall. • Hanging Wall Vein mineralisation occurs within partly chloritised schist and micaceous schist between 4 m and 20 m above the Main Vein. This zone of mineralisation is generally between 0.5 m and 4 m wide and occurs in the northern area of the deposit although appears to taper out northwards. The middling between the Hanging Wall Vein and the Main Vein decreases from north to south and it is possible that this vein merges into the Main Vein in the central parts of the deposit. • Footwall Vein (FW Vein) mineralisation occurs within the micaceous schist and amphibolite schist between 2 m and 12 m below the Main Vein. This zone is restricted to the southern areas, is very narrow (<50 cm) and high grade in its most northern occurrences but thickens to the south to over 10 m but of low grade where it likely consists of several narrow cassiterite veins with waste zones between. It is possible that this vein merges into the Main Vein in the central parts of the deposit. <p>A three dimensional wireframe model was created for the three zones of mineralisation based on a grade threshold of 0.30% Sn. The main zone is the most consistent zone occurring within chlorite schist. Narrower less continuous zones occur above and below the main zone within chlorite-mica schists.</p>
Domains	<p>The mineralisation was modelled as three tabular zones containing irregular vein style mineralisation. A hard boundary was used to select data for estimation in order to honour the sharp nature of vein boundaries.</p>
Compositing	<p>Sample lengths were composited to 1 m. Composites of less than 1 m occurred in the narrow vein areas, which were retained. Accumulations of Sn%-density-composite length were calculated for grade estimation.</p>
Statistics and variography	<p>Two populations of Sn mineralisation occur, a high grade population of cassiterite veins and a lower grade population containing disseminated cassiterite as vein fragments and blebs. The data were separated into the two statistical populations, which resulted in the coefficient of variation for the Sn accumulation composites in the high grade population being 0.65 and for the lower grade population being 1.24. The histograms are positively skewed.</p> <p>Normal Scores variograms were calculated in the plane of the mineralisation, down-hole and across strike. Variogram ranges for the Sn accumulation in the main zone were modelled at 70 m down-plunge, 48 m dip and 4 m across strike. Reliable variograms could not be produced for either the hangingwall or footwall zones and the main zone variogram was used to estimate these areas.</p>
Top or bottom cuts for grades	<p>Top cuts were applied to outlier values that were above breaks in the cumulative probability plot for metals other than Sn. The high grade Sn values occur as a distinct population with a low coefficient of variation and no top-cuts were considered</p>

	necessary.
Data clustering	21 PQ sized holes from a metallurgical drilling campaign were included that were drilled in three close clusters approximately 25 m apart. Within the clusters the PQ holes were drilled approximately 5 m apart. Outside of the metallurgical sampling area is the grid is approximately regular.
Block size	20 mN by 2 mE by 10 mRL three dimensional block models, as optimised using a Kriging Neighbourhood Analysis. The blocks were divided into sub-cells to better represent the interpreted mineralisation extents. The blocks were rotated into the plane of mineralisation prior to estimation.
Grade estimation	<p>The accumulation of grade, density and composite length were estimated using Ordinary Kriging. Estimation parameters were optimised using a Kriging Neighbourhood Analysis.</p> <p>The Sn%-density-composite length accumulations were divided into a high grade population (>30 %t/m) and a lower grade population (<30 %t/m). The probability of a block containing values above and below this threshold was estimated by Indicator Kriging. The high and low grade populations were estimated separately using Ordinary Kriging and the block model grade was then assigned based on the estimated grade of the high and low grade and their proportion in each block.</p> <p>A minimum number of 6 and a maximum of 24 one metre composites were required for each Sn-accumulation population. For the subordinate zones, this was reduced to a minimum of 4. Search distances and orientations were aligned with the variogram range.</p> <p>Estimates were extrapolated in the plane of the mineralisation for a maximum distance of 40 m from the nearest drillhole intersection, this being considered by MSA to be the limit of reasonable geological interpretation for this style of mineralisation, it being possible that the mineralisation could terminate abruptly. Should a barren drillhole intersection occur that constrains the limit of the Mineral Resource, the limit was taken as half the distance between the mineralised and un-mineralised drillhole intersections up to a maximum of 40 m.</p>
Resource Classification	<p>The mineralisation was classified as Indicated Mineral Resources if block estimates were achieved with the required minimum number of samples within the variogram range. This was generally where the drilling was within the 50 m spaced section lines and drilling was closer than 40 m apart in the dip direction. The remainder of the interpreted model within the sparser drilled area was classified as Inferred Mineral Resources with a maximum extrapolation from a drillhole of 40 m.</p> <p>The high grade mineralisation of reasonable tonnage leads no doubts as to reasonable potential for economic extraction, it being one of the highest grade undeveloped tin deposits in the world.</p>
Mining Cuts	The thickness of the mineralisation was honoured in the estimate and as a result some areas will be more sensitive to dilution than others. The thickness, grade and steep dip implies that the Mineral Resource can be extracted using established underground mining methods.
Metallurgical factors or assumptions	The tin mineralisation occurs as cassiterite, an oxide of tin (SnO ₂). The Cu, Zn and Pb mineralisation occurs as sulphides. Each of these minerals is amenable to standard processing techniques for each metal.
Legal Aspects and Tenure	Alphamin through its wholly owned DRC subsidiary, Mining and Processing Congo

	Sprl, has a Mining License PE 13155 which covers a portion of its wholly owned PR5266 and includes the Bisie Tin Prospect.
Audits, reviews and site inspection	<p>The following review work was completed by MSA:</p> <ul style="list-style-type: none"> • Inspection of approximately 25% of the Alphamin cores used in the Mineral Resource estimate • Database spot check • Inspection of drill sites • Independent check sampling