

ASX Announcement
17 September 2020

Kingsrose Mining Announces Update of Talang Santo Resource

Kingsrose Mining Ltd (ASX: KRM) (“Kingsrose” or “the Company”) advises that a recently updated Mineral Resource estimate has been completed and is reported here in accordance with the JORC Code (2012) (see Table 1). This estimate comprises Indicated and Inferred Resources of :

850,000 tonnes @ 5.1 g/t Au and 13 g/t Ag for 140,000 ounces of gold and 352,000 ounces of silver)

This is the first update of the Talang Santo Resource estimate by Kingsrose since that reported in 2015 and incorporates additional data from the Company’s increased geological understanding and updated interpretations of the deposit (gained through recent operating experience), “mine to mill” reconciliation, significant additional diamond drilling and mining depletion.

TABLE 1. Talang Santo Mineral Resource – As at 30 June 2020

Category	Tonnes (kt)	Gold g/t Au	Au Ounces (koz)	Silver g/t Ag	Ag Ounces (koz)
Measured	-	-	-	-	-
Indicated	244	6.1	48	13	102
Inferred	606	4.7	92	13	250
Total	850	5.1	140	13	352

Note: - Small discrepancies may have occurred due to rounding

Kingsrose Managing Director Karen O’Neill commented *“This updated resource statement includes results of our recent drilling programmes. We believe there is potential to expand this resource as mineralisation remains open at depth and along strike. We plan to recommence drilling at Talang Santo in the near future”.*



FIGURE 1: Diamond Drilling at Talang Santo

EXPLORATION TARGET

KingsRose considers that this Mineral Resource has expansion potential in the area shown as an “Exploration Target” in green in Figure 2. This exploration target potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource in this area of the deposit, and it is uncertain if further exploration will result in the estimation of a Mineral Resource in this area of the deposit.

The Exploration Target is stated as **1,000,000 to 1,500,000 tonnes at 3 to 5 g/t Au for 100,000 to 200,000 oz contained Au.**

The basis of this exploration target statement is the projection of the modelling laterally, and down dip, into areas that are insufficiently well sampled for the tonnes and grade to be estimated as a Mineral Resource.

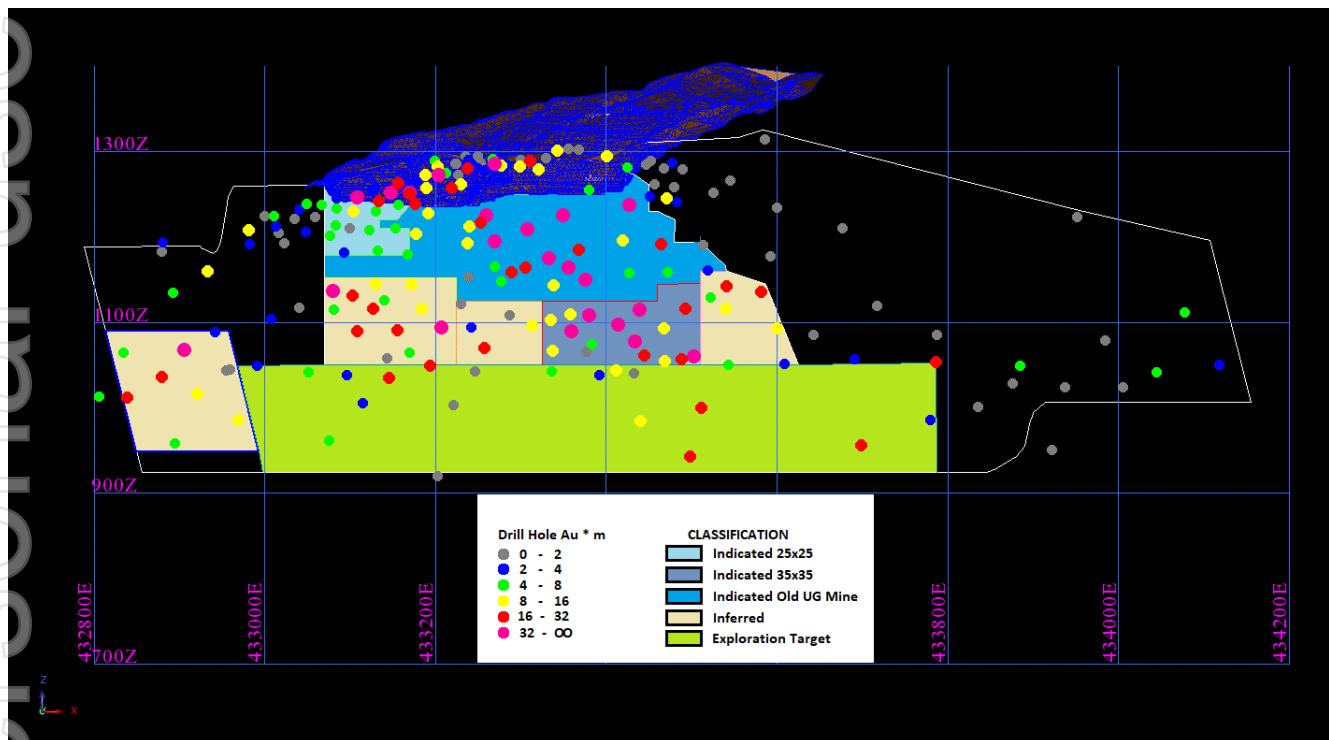


FIGURE 2. Talang Santo Main Zone Long Section Showing Drill hole pierce points, 2020 Resource Classification and Exploration Target (Shown in Green).

RESUMPTION OF DRILLING

The Board has approved the immediate recommencement of the Talang Santo Phase 2 Deep drilling programme, which was suspended towards the end of April 2020 as part of the Company’s response to the COVID-19 pandemic (refer to ASX Announcement dated April 9, 2020).

The objective of this drilling programme is to infill the current Mineral Resource estimate and test the exploration target.

RESOURCE ESTIMATION METHODOLOGY

Geology and Geological Interpretation

The Talang Santo deposit is centred on an extensive epithermal quartz vein system, which has been modelled over a strike of approximately 1400 m, with the best mineralisation occurring within a zone of 550 m of this strike length.

The main interpreted domain for estimation is an individual continuous structural zone, modelled over the entire 1400 m strike length. Within this zone, there are multiple mineralisation styles including banded epithermal veining, breccia, stockwork, clay alteration and fault gouge. These related mineralised styles within the same structural corridor have been combined for estimation as a single package.

Subordinate mineralised zones, 'splays' to the main structure, have also been modelled. These are similar mineralisation style to the main zone but intersect it at an angle of around 30 degrees.

Drilling, Sampling, Subsampling and Sample Analysis

The samples informing this Mineral Resource estimate are from a mixture of diamond drill holes (drill core) and underground face sampling. Drilling diameters from NQ to PQ have been used. Face samples were taken from underground development headings using standard industry practice. These channel rock chips were manually hammer-chipped horizontally across the face. Sample intervals for drill core and face sampling were nominal 1 m intervals, however for both core and face sampling in the mineralised zones sample length was modified according to geological contacts. Diamond drill core was cut by diamond saw and half core used for sampling, the remaining half was archived. For gouge, soft and friable core a manual knife (or similar device) was used to approximately halve the core.

Preparation of the core and face samples for analysis was undertaken at the minesite laboratory, under the management of PT Geoservices, using industry standard sample preparation techniques (crushing, splitting, followed by fine grinding, subsampling) and preliminary analysis. Gold and silver concentrations in face/trench samples was determined by aqua regia digestion with an atomic adsorption spectrometry finish. For diamond drilling prepared pulps from mineralised intervals were dispatched by courier to PT Geoservices laboratory in Jakarta for gold analysis by fire assay and atomic adsorption spectrometry, and analysis for silver by acid digestion of sample pulp followed by inductively coupled plasma optical emission spectrometry (ICPOES). PT Geoservices is an independent service company operating a commercial mineral analysis laboratory

The nature, quality and appropriateness of the sampling, sample preparation and analysis technique are typical for mineralisation and resource estimation of this type.

Resource Estimation

Modelling and estimation were undertaken utilising Surpac mining software. Mineralised intersections (Core and face samples) were individually flagged within the database and used as full width composites for estimation. Estimation, for gold and silver, was performed utilising a 2-dimensional (2D) block model methodology. Estimation of "Au multiplied by true width" and width was estimated for each block, by ordinary kriging. Au grade was then estimated for each block by the relationship $[Au = (Au * width) / width]$. Silver was estimated in an analogous manner to gold. The 2D estimate was then reprojected into 3-dimensional (3D) space using mathematical functions. Several estimates, representing different mineralised zones, are then combined together to form a 3D conventional block model of the deposit. The block model was corrected for mining depletion from historical underground and open pit mining. The Mineral Resource estimate was then classified and is reported as at the date 30 June 2020.

Classification

Inferred: Inferred Resources are those for which there is limited geological evidence. Geological and grade continuity are implied. Confidence in the estimate is low. The estimate is not sufficiently confident for financial analysis. Inferred mineral resources were reported based on the face sample and drill spacings shown below:

- Inferred: Old Mine Remnants, not main zone: Inferred Mineral Resource based on face sample data. This spacing, while variable, is approximately equivalent to 5m*5m.
- Inferred: All other Inferred Areas: Inferred Mineral Resource is based on drilling. This spacing, while variable, is approximately equivalent to 45m*45m.

Indicated: Indicated Resources are those for which there is adequately detailed and reliable geological evidence. Geological and grade continuity are assumed. Confidence in the estimate is medium. The estimate is of sufficient confidence for preliminary financial analysis. Indicated mineral resources were reported based on the fac sample and drill spacings shown below:

- Indicated: Old Mine Remnants Main Zone: Indicated Mineral Resource based on face sample data. This spacing, while variable, is approximately equivalent to 5m*5m.
- Indicated: Near Surface Well Drilled Main Zone: Indicated Mineral Resource is based on drilling. This spacing, while variable, is approximately equivalent to 25m*25m.
- Indicated: Immediately Below Historical Mine Main Zone: Indicated Mineral Resource is based on drilling, however the Indicated mineral resource is also supported by face sampling immediately adjacent to the drilling. The drill spacing, while variable, is approximately equivalent to 35m*35m.

Measured: No Measured Mineral Resources were reported in this public release.

Cutoff Grade

A cutoff grade of 2.0 g/t Au was used, presumed to be reflective of the marginal cost of operation for a typical narrow vein underground operation.

Mining and Processing

For the purpose of estimating this Mineral Resource it has been assumed that the Mineral Resource is mineable using conventional underground mining techniques. There is a milling operation based at the nearby Way Linggo mine site, and metallurgical performance has been demonstrated circa 95% recovery for gold and circa 90% for silver. It is assumed these metallurgical recoveries will continue. This Mineral Resource Estimate contains no further allowance for Modifying Factors.

-ENDS-

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This announcement has been authorised for release to the ASX by the Board.

Competent Persons Statement

The information in this report that relates to the Mineral Resource Estimates and Exploration Targets is based on and fairly represents information compiled under the supervision of Mr Bill Rayson, who is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Rayson is a consultant to the Company and is an employee of "The Trustee for TES Trust". Mr Rayson has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves." Mr Rayson consents to the inclusion in this report of the matter based on his information in the form and context in which it appears.

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APPENDIX 1

JORC CODE, 2012 EDITION – TABLE 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<p>Sampling techniques</p> <p>Drilling techniques</p> <p>Drill sample recovery</p>	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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 (e.g. 'reverse circulation drilling is used to obtain 1 m samples from which 3 kg is 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 (e.g. submarine nodules) may warrant disclosure of detailed information. Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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). Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> This Table 1 relates to sampling by diamond drilling, face sampling and trench sampling. <p>Face sampling and trench sampling are samples taken from lines, treated geometrically as pseudo-drillholes (collar position, orientation, intervals noted) using a geological rock pick.</p> <p>Sampling is according to geological intervals.</p> <ul style="list-style-type: none"> Diamond Core, where used is aligned and measured by tape, referenced to downhole core blocks. Sampling is according to geological intervals. <p>Face-Sampling and Trench-Sampling, where used is measured by tape.</p> <ul style="list-style-type: none"> Diamond drilling, face sampling and trench sampling were performed to industry standards. Samples were taken by geological intervals, taken in such a way the sample length is generally targeting 1m or smaller. Diamond core is split onsite and half submitted for crushing, pulverisation and ultimately analysis at commercial assay laboratories. Face/Trench samples are submitted, in entirety, for crushing, pulverisation and ultimately analysis at commercial assay laboratories. In both diamond and face/trench sampling : Initial weight is variable due to core size and variable interval length effects. The samples informing this Mineral Resource estimate are from a mixture of diamond drill holes (drill core) and face/trench sampling. Drilling diameters (from NQ to PQ) are known to have been used and these core sizes are recorded in the database against individual intervals. Similarly, a range of drilling configurations (Wireline Q-Type variants) are known to have been used and the recording of this information against individual drillholes is not available. Face/Trench sampling is taken from an insitu rock face into a sample bag using a standard geological hammer according to typical industry practice. Diamond drill recoveries are recorded as a percentage of measured core against downhole drilled run length intervals in industry standard way. <p>The competent person believes that this method of assessing and recording recoveries does not provide ideal information on localised core loss and discing/grinding in mineralised zones. Selective review of core photos with regard to this concern shows intervals of poor presentation and discing within mineralised unit. The Mineral Resource classification, capped at "Indicated", addresses this concern.</p> <ul style="list-style-type: none"> A relationship between core recoveries and grade has not been established. However, it is postulated that core loss occurred in



Criteria	JORC Code explanation	Commentary
		<p>some of the mineralised diamond drilling intersections due to the friable nature of some material. It is further postulated that this effect may cause some level of under call in the diamond core drilling.</p>
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Core logging is conducted by PT. Natarang Mining ("PTNM") geologists, who delineate intervals on geological, structural, alteration and/or mineralogical boundaries, to industry standard. Logging is qualitative and most core is photographed. Rock types, veining and alteration/sulphidation are all recorded. All drill core is logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Core is cut by diamond saw and half core used for sampling, the remaining half is archived. For gouge, soft and friable core a manual knife (or similar device) is used to approximately halve the core. Face chips are nominally chipped horizontally across the face/trench, sub set by geological features. Sample collection is manual via a geological hammer. Samples were collected damp with natural moisture. The nature, quality and appropriateness of the sample preparation technique is typical for mineralisation and resource estimation of this type. The competent person is not aware of any work taken to maximise the representivity of the sample. Duplicate samples are not routinely sampled. The sample size far exceeds the grain size of the precious metals, which are generally microscopic. Sample sizes are appropriate.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Gold concentration in diamond drilling samples is determined by fire assay: fusion with lead collection, aqua regia prill digestion, followed by atomic adsorption spectrometry(AAS). Analysis for silver in diamond drilling is acid digestion of sample pulp followed by inductively coupled plasma optical emission spectrometry (ICPOES). Gold and silver concentrations in face/trench samples is determined by aqua regia digestion with an AAS finish. Analysis is considered total for fire assay and near total for all other assay types of both silver and gold. Accordingly, no treatment (i.e. factoring or similar) has been performed to the raw assay to allow for incomplete digestion, if any. Geophysical tools etc are not applicable to this report. None Used. Recent drilling shows acceptable QAQC - blanks and standards have been routinely inserted into assay batches and interlab checks have been performed. Note, independent QAQC is not available for drilling before 2019 and the estimation has been classified with this in mind.

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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. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intersections were reviewed by senior exploration geology and mining geology managers from PTNM. Twinned holes have not been used. Talang Santo is best described as a working, manually administered, database. It has evolved from a MS-Access database with manual entry into a more automated custom database for the 2019/2020 drilling. Hardcopy data, and/or PDF equivalent, is available for review. No adjustment is made to 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Drillhole collars are surveyed using industry standard survey techniques and equipment. Drillholes have been downhole surveyed with digital downhole camera at average fifty metre intervals, however historically this could get up to over 100m survey intervals, whereas 2019-2020 drilling is generally at 25m intervals. The downhole survey shows evidence of intermittent magnetic interference. Mine workings locations are recorded to industry standard accuracy using reliable survey instruments. Face samples are georeferenced by the geologist using the assistance of known point survey pickups and where necessary tape measure and bearing. The Talang Santo deposit operates on a local grid utilising total station methods and conventional baseline control. This grid is nominally aligned to UTM WGS 84 -48S, with unknown veracity. The Talang Santo deposit is within and proximal to a recently operating open cut mine. Topographical control is provided by conventional modern survey techniques and is adequate for purpose.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Data spacing is variable. In the centre, previously mined portions of the deposit have face sampling at an effective density of circa 5x5m, in the plane of the structure. At the periphery of the Mineral Resource estimate, exploration spacing is circa 50mx50m, in the plane of the structure. Data spacing and distribution is considered sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation and classifications applied. Sampling is based on geological intervals. Compositing is not applied until estimation stage.
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. 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. 	<ul style="list-style-type: none"> The orientation of the vein system is known, and drilling intercept angles are generally of suitable orientation to the vein system to provide unbiased sampling results. Face and Trench samples, by their nature, tend to be perpendicular to the strike of the sampled structure. The drilling and sampling orientation are not considered to introduce a sampling bias.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples retrieved from drilling are stored securely in a locked facility patrolled by onsite security. Samples are then logged, cut and stored in numbered sample bags for transported by PTNM employees to the onsite assay laboratory.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> PTNM has worked with various independent consultants to design its drilling and sampling methodologies and continually reviews and improves its processes and procedures.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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. 	<ul style="list-style-type: none"> Tenure is occasioned via a fourth generation Contract of Work (CoW) held by PTNM. PTNM is 85% owned by KRM with the remaining 15% interest held by an Indonesian national. The mine, mill and camp area are all currently constructed and operating within a mixed agricultural and national park setting. Standard Indonesian divestment provisions exist against the COW. KRM is obliged to pay royalties to various parties on its production, including government royalties of between 3.75% - 5% for gold bullion, on a scale related to the prevailing gold price, and 3.25% on silver bullion. The corporate structure, divestment provisions and royalty obligation are described in detail in the company's annual report. The COW is valid till 2034. The mine is recently operating. The mill is currently operating. Community relations are cordial. There are no known impediments to continued operation.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> All exploration at the Talang Santo Project has been completed by PTNM.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Talang Santo lies in the trans Sumatran fault fore-arc to intra-arc and is classified as low sulphidation epithermal quartz vein gold and silver deposits.
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. 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. 	<ul style="list-style-type: none"> No new drillhole information is being presented in this release
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> No new drillhole information is being presented in this release
Relationship between mineralisation	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. 	<ul style="list-style-type: none"> No new drillhole information is being presented in this release.

Criteria	JORC Code explanation	Commentary
widths and intercept lengths	<ul style="list-style-type: none"> If the geometry of the mineralisation with respect to the 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 (e.g. 'down hole length, true width not known'). 	
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No new drillhole information is being presented in this release.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No new drillhole information is being presented in this release.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No new drillhole information is being presented in this release.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> No forward work plan has been identified.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> 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. Data validation procedures used. 	<ul style="list-style-type: none"> The database used for the estimation is provided by PTNM from its master copy. The database is best described as a working database, and validation errors are reported and fixed as they are found. No formal processes are in place to prevent transcription and/or keying errors. 3d review of drillhole traces and grades against known geology and review of primary data tables were conducted to highlight any anomalies. The competent person also ran a standard suite of automatic database checks on drilling prior to estimation.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. 	<ul style="list-style-type: none"> Due to the detailed exploration history, the broad mineralised envelopes representing the main estimation domains are reliably identified from hole to hole at similar downhole positions. Exposure in both open cut and underground mining operations has confirmed the position and orientation of the main mineralised zones. However,



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<p>there is some uncertainty of the internal configuration and continuity of individual mineralising lenses, and short scale packages of unmineralised wallrock inclusions, within the broader mineralisation envelopes and estimation domains.</p> <ul style="list-style-type: none"> For estimation purposes, geological and grade continuity at a scale suitable for mining is assumed to exist however is not conclusively confirmed. This is commensurate with the JORC 2012 definition on "Indicated" Mineral Resource. Due to the detailed exploration history and two phases of mining, no gross-scale alternative interpretations are currently considered viable. In all cases the local lithological and structural geology (where available) has been used to inform the interpretive process. All available information from drilling and mapping has been considered during interpretation. The broad mineralised envelopes representing the estimation domains are reliably identified from hole to hole at similar downhole positions. However, there is some uncertainty of the internal configuration and continuity of individual mineralising lenses and short scale packages of unmineralised wallrock inclusions.
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. 	<ul style="list-style-type: none"> The best understood portion of the deposit showing best continuity and grade is a single modelled zone 550m along strike, extends to 275m below surface, and is around 5m width. All "Indicated" Mineral Resource is from this zone, and is the zone historically targeted by underground mining and open cut mining. Subordinate zones, typically of lesser continuity/grade/width, are also modelled.
Estimation and modelling techniques	<ul style="list-style-type: none"> 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 is chosen include a description of computer software and parameters used. 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 assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation is used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available 	<ul style="list-style-type: none"> Modelling and estimation were undertaken primarily utilising Surpac mining software. Drillhole mineralised intersections (and face samples treated as drillhole equivalents) are individually flagged within the database. These intersections are then used to composite the full width mineralised zone into a single pierce point per drillhole for estimation. Estimation, for gold and silver, is performed utilising a 2-dimensional (2D) methodology, and ordinary kriging in 2D is used (gold and silver estimates are performed using identical process, but for clarity only gold estimate will be detailed, below). Estimation is primarily focussed on directly estimating the Au*Width pseudo-grade, with width also being estimated, and Au being estimated by the inverse relationship $[Au = (Au*width)/width]$. The 2-D estimate is then reprojected into 3-dimensional (3D) space using mathematical functions. Several estimates, representing different mineralised zones, are then combined together to form a 3D conventional blockmodel of the deposit. The insitu estimate is then further coded by models of depletion, both historical underground and recent open cut. The model is then classified and reported at the date 30 June 2020. Previous estimates (2015), underground mining records (2012-2017), and open cut mining records (2018-2020) exist; and this estimate took suitable consideration of this information. Gold and Silver coproducts are assumed recovered in dore. No other byproducts are considered. No deleterious elements have been estimated. The original estimate is performed in 2D, into 5m*5m blocks. Average composite spacing for face sampling informed areas is around 5m*5m. Indicated drilling informed areas have composite spacing from 20*20m-35*35m. Inferred drilling

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Criteria	JORC Code explanation	Commentary
		<p>informed areas have average composite spacing around 45m*45m. Estimation required the search to find 5 composites, no maximum search distance is specified</p> <ul style="list-style-type: none"> No assumptions have been made about the modelling of SMU. No assumptions have been made about the correlation between variables. The geological interpretation is used to categorise the deposit according to zonecode flagging. Then estimation is performed in 2D according to zonecode composites. Sorted assay values were inspected for consistency. No top cut is applied. The model is estimated in the previously mined areas, and model reconciliation is backcast against mill claim to validate the model performance. Final models were coloured and visualised against similarly coloured input data. Model outcomes were compared to summarised composite statistics.
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. 	<ul style="list-style-type: none"> Tonnages are estimated as dry tonnes. Samples are dried prior to analysis, therefore represent effectively zero moisture.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> A cutoff grade of 2.0 g/t Au is used, presumed to be reflective of the marginal cost of operation for a typical narrow vein underground operation.
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. 	<ul style="list-style-type: none"> For the purpose of estimating a Mineral Resource it has been assumed that the Mineral Resource is mineable using conventional underground mining techniques.
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. 	<ul style="list-style-type: none"> A processing plant is currently operating onsite. Current processing history provides confidence in the amenability of Talang Santo Mineral Resource to processing practices currently in use.
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible site 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. 	<ul style="list-style-type: none"> The Talang Santo deposit forms the basis of the recently operating Talang Santo mine. Processing of the mined ore is currently ongoing at the operating Way Linggo processing facility. It is assumed that all operations will continue to be allowed and permitted in line with current onsite practices.

Criteria	JORC Code explanation	Commentary
	<p>Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</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. 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. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Bulk densities of all mineralised domains have assumed 2.4. The basis of the assumption is a limited set of Archimedes measurements ranging 2.5-2.67 (typical for quartz and andesitic composition hosts), with a qualitative adjustment by the competent person due to the fact that poor quality rock tends not to be selected for measurement. This density is assumed (not measured). All materials reported have been assumed density of 2.4.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. 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). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> Resources are classified according to JORC 2012 guidelines. Inferred Resources are those for which there is limited geological evidence. Geological and grade continuity are implied. Confidence in the estimate is low. The estimate is not sufficiently confident for mine planning. <p>Indicated Resources are those for which there is adequately detailed and reliable geological evidence. Geological and grade continuity are assumed. Confidence in the estimate is medium. The estimate is of sufficient confidence for preliminary mine planning.</p> <p>Confidence in the Mineral Resource at Talang Santo is not sufficient to achieve a Measured Resource classification.</p> <ul style="list-style-type: none"> This approach considers all relevant factors. This result reflects the Competent Person's view of the deposit.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> This mineral resource estimate has not been audited.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> 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 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. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> The Mineral Resource classification applied to the deposit implies a confidence level and level of accuracy in the estimates. These levels of confidence and accuracy relate to the global estimates of grade and tonnes for the deposit. The model has been estimated in within historical mining envelopes, allowing model performance to be 'backcast' against mill claimed head grade. The results are acceptable for the Mineral Resource classifications applied.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
All	N/A	<ul style="list-style-type: none"> No Ore Reserves are currently estimated at Talang Santo. Section 4 is not applicable.

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