

# SULPHUR SPRINGS EXPLORATION UPDATE

Final assays received from 2020 exploration drilling programme at the Breakers and XA8 Prospects

**HIGHLIGHTS:** 

- Further Volcanogenic Massive Sulphide (VMS) mineralisation intersected in final exploration drill hole at the greenfields Breakers Prospect, 15km south of the Sulphur Springs deposit.
- Final assays confirm geological interpretation of a broad zone of sulphide mineralisation at Breakers Main which represents a priority exploration target for 2021.
- Further drilling planned to target extensions beneath and along strike of the known mineralisation.
- Both DHEM and DHMMR geophysical surveys planned to guide follow-up drilling.

Further to its ASX release of 17 December 2020, Australian base metal developer Venturex Resources Ltd ("Venturex" or "the Company") (ASX: VXR) advises that it has now received all remaining assay results from the 2020 exploration drilling programme completed late last year at its 100%-owned Sulphur Springs Copper-Zinc Project, located 144km south of Port Hedland in WA.

Assay results from the remaining two drill-holes (BKR015 and SSR010) of the programme at Breakers and the XA8 Prospects have now been received.

Hole BKR015 is located 80m down-plunge of the exceptional intercept reported prior to Christmas at the Breakers Main Prospect (*see ASX release, 17 December 2020*) of **20m @ 8.54% Zn, 0.31% Cu, 0.72% Pb and 16.2g/t Ag from 180m down-hole** in BKR013, including **6m @ 19.4% Zn, 0.75% Cu, 0.63% Pb and 36.0g/t Ag from 186m**, including **1m @ 16.1% Zn, 2.37% Cu and 114.0g/t Ag from 187m**.

BRK015 intersected ten metres of semi-massive VMS mineralisation hosting low-grade zinc (10m @ 0.15% Zn from 201m down-hole). This intersection supports the current geological model which suggests that the base metal mineralisation discovered at the Breakers Main Gossan comprises a broad, low-to-moderate grade massive sulphide envelope surrounding several high-grade zones.

The continued discovery of widespread sulphide mineralisation at the greenfields Breakers Prospect is extremely encouraging and confirms the potential of this early-stage Prospect to substantially expand the resource base by discovering additional mineralisation both along strike and at depth.

The variable zones of high-grade copper-zinc-lead-silver mineralisation within a broader sulphide body is very similar in style to that seen at the Sulphur Springs and Kangaroo Caves Resources, and further supports the highly prospective exploration upside at the Breakers Prospect and wider Sulphur Springs Project.

As previously reported (*see ASX release, 17 December 2020*), drilling at the XA8 Prospect (SSR010) intersected only minor disseminated sulphide mineralisation at the Mafic-Ultramafic contact, followed by a fault zone. Assay results received for SSR010 have confirmed that no significant mineralisation is associated with this zone.

While the low-level mineralisation and associated fault are interpreted to represent the likely source of the target EM anomaly, DHEM is still planned to be completed on the hole.

Drill-holes from the 2020 exploration programme will now serve as important platforms for deep Down-Hole Electromagnetic (DHEM) and Down-Hole Magnetometric Resistivity (DHMMR) surveys, with these scheduled to be completed at the conclusion of the Pilbara wet season.



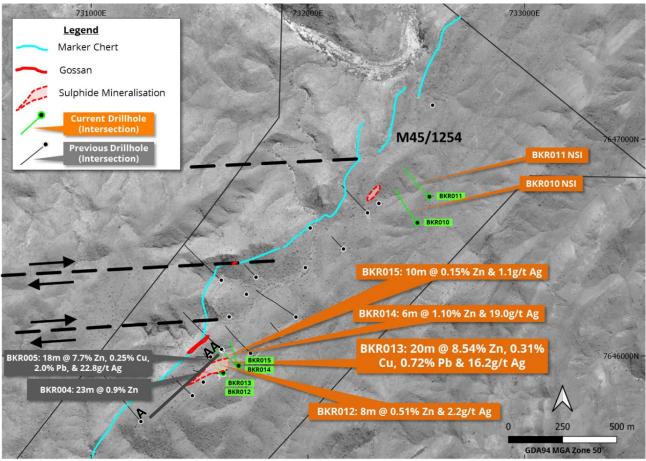


Figure 1: Plan view of Breakers exploration drilling.

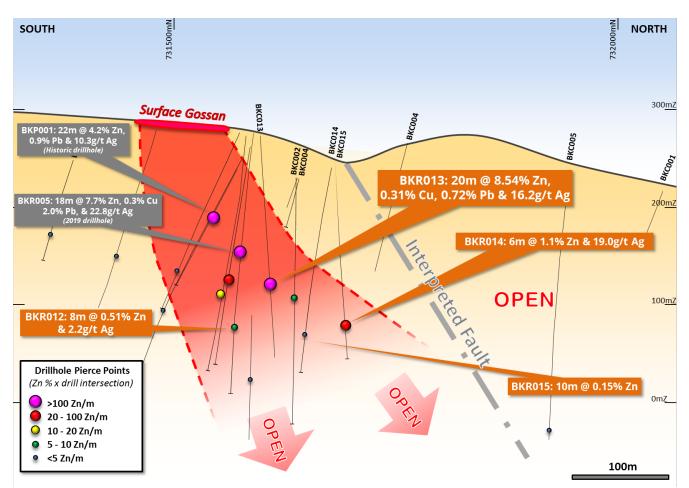


Figure 2: Breakers Main Gossan oblique exploration long-section (northwest view, +/-40m).



### Management Comment

Venturex's Managing Director, Anthony Reilly, said: "Final assays from the pre-Christmas regional exploration program have confirmed our view of the Breakers Main Prospect as a priority exploration target for 2021 with a clear opportunity to grow our resource base in close proximity to the planned processing infrastructure at Sulphur Springs. While the assays for the down-plunge intercept in BKR015 were lower in grade and tenor, this is not unexpected within the variable sulphide bodies that we encounter in the Sulphur Springs district.

"We are looking forward to building on these solid results with further geophysical surveys and a drilling program targeting extensions of the mineralisation at Breakers in parallel with a planned deep drilling program at the main Sulphur Springs resource."

### For further information, please contact:

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\*This announcement is authorised by the Board of Directors for release to the ASX.

#### **About Venturex Resources Limited**

Venturex Resources Limited (ASX: VXR) is an exploration and development company with two advanced Copper-Zinc Projects near Port Hedland in the Pilbara region of Western Australia. The two projects are the Sulphur Springs Project which includes the Sulphur Springs Project, Kangaroos Caves Resource plus 27km of prospective tenements on the Panorama trend. and a Joint Venture at the Whim Creek Project which includes the Resources at the Whim Creek, Mons Cupri and Salt Creek mines together with the Evelyn project and 18,100 ha of prospective tenements over the Whim Creek basin.

#### **Competency Statements**

The information in this announcement that relates to Exploration Results is based on information compiled or reviewed by Mr Luke Gibson who is an employee of Venturex. Mr Gibson is a member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Gibson consents to the inclusion in the report of the results reported here and the form and context in which it appears.

#### **No New Information or Data**

This announcement contains references to exploration geophysical exploration results and Mineral Resource and Ore Reserve estimates, which have been cross referenced to previous market announcements. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and that all material assumptions and technical parameters underpinning those estimates in the relevant market announcements continue to apply and have not materially changed.



|        | Table 1. Tabulation of Drin Results |          |     |      |      |     |          |      |     |      |      |      |           |           |
|--------|-------------------------------------|----------|-----|------|------|-----|----------|------|-----|------|------|------|-----------|-----------|
| Hole   | Easting                             | Northing | RL  | Azi° | Dip° | EOH | Interval | From | То  | Cu%  | Pb%  | Zn%  | Au<br>g/t | Ag<br>g/t |
| BKR015 | 731680                              | 7645955  | 260 | 300  | -70  | 244 | 10m      | 201  | 211 | 0.00 | 0.02 | 0.15 | 0.00      | 1.10      |
| SSR010 | 727368                              | 7659852  | 283 | 235  | -85  | 260 | NSI      | -    | -   | -    | -    | -    | -         | -         |

### Table 1: Tabulation of Drill Results

Note. Reported intercepts are determined using averages of contiguous mineralisation downhole. The lower cut-offs for zinc are 0.05%. Significant intercepts may include samples below the cut-off values if the interval is less than or equal to 2m down hole.

## Table 2: Sulphur Springs Resources Table

| Mineral Resources |                     |                |      |      |      |        |
|-------------------|---------------------|----------------|------|------|------|--------|
| Location          | JORC Classification | Tonnes ('000t) | Cu % | Zn % | Pb % | Ag g/t |
|                   | Measured            | -              | -    | -    | _    | -      |
| Sulphur Springe   | Indicated           | 9,400          | 1.5  | 3.8  | 0.2  | 17     |
| Sulphur Springs   | Inferred            | 4,400          | 1.4  | 3.7  | 0.2  | 18     |
|                   | Sub-total           | 13,800         | 1.5  | 3.8  | 0.2  | 17     |
|                   | Measured            | -              | -    | -    | -    | -      |
| Kangaraa Cayaa    | Indicated           | 2,300          | 0.9  | 5.7  | 0.3  | 13.6   |
| Kangaroo Caves    | Inferred            | 1,300          | 0.5  | 6.5  | 0.4  | 18     |
|                   | Sub-total           | 3,600          | 0.8  | 6    | 0.3  | 15     |
|                   | Measured            | -              | -    | _    | -    | _      |
| TOTAL             | Indicated           | 11,700         | 1.4  | 4.2  | 0.2  | 16.3   |
| TOTAL             | Inferred            | 5,700          | 1.2  | 4.3  | 0.2  | 18.0   |
|                   | Total Resources     | 17,400         | 1.3  | 4.2  | 0.2  | 17.0   |

Note. Totals may not balance due to rounding. The resource is reported at a cut-off grade of 0.4% copper and then less than 0.4% copper and greater than or equal to 2% zinc (see ASX release 21 March 2018 & 22 September 2015).



# Section 1 Sampling Techniques and Data

| Criteria                 | JORC Code explanation  | Commentary  |
|--------------------------|--|---|
| Sampling<br>techniques   | <ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul> | Exploration RC drilling was used to test geochemical and geophysical targets at the Breakers<br>and XA8 Prospects within the Sulphur Springs Project.<br>The company used industry standard practices to measure and sample the drill chips.<br>A combination of four-metre composite and one-metre split samples, weighing nominally<br>between 1-2.5kgs were submitted to the laboratory for multi-element analysis.  |
|                          | <ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic,<br/>etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-<br/>sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>   | Reverse Circulation drilling was completed using a standard 5.5inch diameter hammer.  |
| Drill sample<br>recovery | <ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>   | Sample condition, including estimated recovery and moisture content were recorded for each sample by a geologist or technician. When poor sample recovery was encountered during drilling, the geologist and driller have endeavoured to rectify the problem to ensure maximum sample recovery. Insufficient data is available at present to determine if a relationship exists between recovery and grade.   |
| Logging                  | <ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>  | <ul> <li>RC chips were geologically logged for the total length of the hole using a long hand logging method. Logging routinely recorded weathering, lithology, mineralogy, mineralisation, structure, alteration and veining. Logs are coded using the company geological coding legend and entered into the company database.</li> <li>The following quantitative descriptions were used when logging, amongst others: <ul> <li>Trace less than 1% sulphides.</li> <li>Disseminated and stockwork 1-20% sulphides.</li> <li>Semi-massive 20-60% sulphides.</li> <li>Massive sulphides greater 60%.</li> </ul> </li> </ul> |
| Sub-sampling             | • If core, whether cut or sawn and whether quarter, half or all core taken.  |   |
| techniques and           | • If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.   | RC cuttings were split using an industry standard rig-mounted cone splitter.  |
| sample                   | • For all sample types, the nature, quality and appropriateness of the sample preparation  |   |
| preparation              | <ul> <li>technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>  | Four-metre composite samples were taken from the (split) bulk sample using a PVC tube through the hanging-wall and footwall sequences.  |
|                          | <ul> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>  | One-metre samples taken through mineralised (sulphide) zones were individually submitted for assay.   |



| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
| Quality of assay<br>data and<br>laboratory tests                          | <ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>  | <ul> <li>Samples from the current drilling program were assayed by Australian Laboratory Services Pty. Ltd. Composite and one metre RC samples were prepared and analysed by the following methods:</li> <li>Samples weighed, crushed and pulverised with the coarse residue retained in vacuum seal bags.</li> <li>Au, Au, Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr analysed by method ME-MS61 and Au by fire assay method Au AA23; over limit samples are analysed via ME-OG62.</li> <li>The company included certified reference material and blanks within the samples submitted at a frequency on 1:20.</li> </ul> |
| Verification of<br>sampling and<br>assaying<br>Location of data<br>points | <ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul> | The significant intersections reported have been prepared by geologists with relevant VMS experience. No twinned holes have been drilled. The company uses standard templates created in Excel to collate sample intervals, drill collar, downhole survey information which are emailed to the company main office where the information is loaded into a database. Geological descriptions are recorded in long hand prior to being summarised for digital data capture. Drill hole collars were located using a handheld GPS operated by company personnel. Drill holes are down-hole surveyed by a north-seeking gyro at the end of hole.   |
| Data spacing and<br>distribution<br>Orientation of<br>data in relation to | <ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>   | Data/drill hole spacing are variable and appropriate to the geology and historical drilling spacing.<br>4-metre sample compositing has been applied to RC drilling within the un-mineralised hanging-wall and footwall sequences for gold and multi-element assay.<br>Drill holes are designed to test the Marker Chert which plunges at ~30-80° to the Southeast.<br>Due to restricted access and topography all holes are drilled at an angle between -50° to -  |
| geological<br>structure   | <ul> <li>If the relationship between the drilling orientation and the orientation of key mineralised<br/>structures is considered to have introduced a sampling bias, this should be assessed and reported<br/>if material.</li> </ul>   | 85° to an azimuth of between 235-340°. The drill holes have been designed to test near surface potential of sulphide mineralisation and are considered appropriate for the geometry of the host sequence.  |
| Sample security   | • The measures taken to ensure sample security.  | <ul> <li>The chain of custody is managed by the on-site geologist who places calico sample bags in polyweave sacks. Up to 5 calico sample bags are placed in each sack. Each sack is clearly labelled with: <ul> <li>Venturex Resources</li> <li>Address of Laboratory</li> </ul> </li> <li>Detailed records are kept of all samples that are dispatched, including details of chain of custody.</li> </ul>  |
| Audits or reviews   | • The results of any audits or reviews of sampling techniques and data.  | No reviews have been undertaken.   |



# Section 2 Reporting of Exploration Results

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

| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
| Mineral tenement<br>and land tenure<br>status                                | <ul> <li>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.</li> <li>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.</li> </ul>  | The Breakers Prospect in located within M45/1254. The registered owner of the tenements is<br>Venturex Sulphur Springs Pty Ltd, a wholly owned subsidiary of Venturex Resources Ltd. The<br>prospects are held by Venturex Sulphur Springs Pty Ltd.<br>The tenements are within Njamal Native Title Claim (WC99/8) where native title has been<br>determined. The traditional owners of the land are the Njamal People. The grant of the<br>tenement predates native title and is not subject to native title claim.<br>The tenement is subject to two third party royalties on any production from the tenement.<br>The tenements are in good standing and no known impediments exist. |
| Exploration done<br>by other parties   | Acknowledgment and appraisal of exploration by other parties.   | Previous exploration has been undertaken by a number of parties going back over 30 years.<br>Modern exploration has been undertaken by Sipa Resources, CBH Resources, Homestake<br>Mining, and Venturex Resources.  |
| Geology  | Deposit type, geological setting and style of mineralisation.   | The Breakers Prospect and associated targets are related to Volcanogenic Massive Sulphide systems.  |
| Drill hole<br>Information  | <ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul> | Details of the drill holes are provided in Table 1 within the body of this report.  |
| Data aggregation<br>methods  | <ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>   | Results reported in this release relate to visual observations of RC chips, specifically the identification of common sulphide minerals. No estimate of grade or concentration of the minerals is provided. No length weighting or top - cuts have been applied. Any zones of cavity/no sample are assigned a grade of zero.<br>Results reported are determined by ALS Laboratories using method ME-OG 62, ME-MS61 (over limit samples) and fire assay AyAA-23.   |
| Relationship<br>between<br>mineralisation<br>widths and<br>intercept lengths | <ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>   | The regional geology at Breakers plunges 40-80° to the southeast; the drill holes are designed to intersect the Marker Chert unit at a nominal 60°, however the local access and topography required all holes to be designed taking these limitations into consideration to intersect the mineralisation. The geometry of the sulphide mineralisation intersected at Breakers is unknown. Only down hole intersections are reported.   |
| Diagrams   | • Appropriate maps and sections (with scales) and tabulations of intercepts should be included for<br>any significant discovery being reported These should include, but not be limited to a plan view<br>of drill hole collar locations and appropriate sectional views.   | See long-section and plans within this announcement   |
| Balanced<br>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.   | N/A   |



| Criteria                              | JORC Code explanation  | Commentary  |  |  |  |
|---------------------------------------|--|---|--|--|--|
| Other substantive<br>exploration data | <ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited<br/>to): geological observations; geophysical survey results; geochemical survey results; bulk samples         <ul> <li>size and method of treatment; metallurgical test results; bulk density, groundwater,<br/>geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul> </li> </ul> | The Breakers Prospect has had sporadic historic exploration activities completed dating back to the early 1990s, including geological mapping, surface geochemical sampling (soil and rock-chip sampling), reconnaissance drilling, and an airborne VTEM survey (2006). |  |  |  |
| Further work                          | <ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive</li> </ul>   | Follow-up downhole geophysical surveys are planned to be completed in early 2021.<br>Future drilling programmes are also being planned to target the depth/plunge extensions to<br>mineralisation intersect in the current drilling.                                    |  |  |  |



## Section 3 Estimation and Reporting of Mineral Resources

Details on resources for the Sulphur Springs and Kangaroo Caves Deposits have previously been announced to the market, refer ASX announcements dated 21st March 2018 "Venturex Succeeds in Upgrading Supergene Copper Zinc-Resource at Sulphur Springs" and "Kangaroo Caves Resource Upgrade" dated 22 September 2015 for most recent update.

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

| Criteria           | JORC Code explanation   | Commentary                                   |
|--------------------|---|--|
| Database integrity | • Measures taken to ensure that data has not been corrupted by, for example, transcription or   | No new mineral resources are being announced |
|                    | keying errors, between its initial collection and its use for Mineral Resource estimation purposes.   |  |
|                    | Data validation procedures used.  |  |
| Site visits        | Comment on any site visits undertaken by the Competent Person and the outcome of those  | No new mineral resources are being announced |
|                    | visits.   |  |
|                    | • If no site visits have been undertaken indicate why this is the case.   |  |
| Geological         | • Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral  | No new mineral resources are being announced |
| interpretation     | deposit.  |  |
|                    | <ul> <li>Nature of the data used and of any assumptions made.</li> </ul>  |  |
|                    | <ul> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> </ul>  |  |
|                    | <ul> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>  |  |
|                    | The factors affecting continuity both of grade and geology.   |  |
| Dimensions         | <ul> <li>The extent and variability of the Mineral Resource expressed as length (along strike or</li> </ul>   | No new mineral resources are being announced |
|                    | otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral  |  |
|                    | Resource.   |  |
| Estimation and     | • The nature and appropriateness of the estimation technique(s) applied and key assumptions,  | No new mineral resources are being announced |
| modelling          | including treatment of extreme grade values, domaining, interpolation parameters and  |  |
| techniques         | maximum distance of extrapolation from data points. If a computer assisted estimation method  |  |
|                    | was 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.   |  |
|                    | <ul> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g.</li> </ul> |  |
|                    | <i>sulphur for acid mine drainage characterisation).</i>  |  |
|                    | <ul> <li>In the case of block model interpolation, the block size in relation to the average sample spacing</li> </ul>  |  |
|                    | and the search employed.  |  |
|                    | <ul> <li>Any assumptions behind modelling of selective mining units.</li> </ul>   |  |
|                    | Any assumptions about correlation between variables.  |  |
|                    | Description of how the geological interpretation was used to control the resource estimates.  |  |
|                    | <ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>  |  |
|                    | • The process of validation, the checking process used, the comparison of model data to drill hole  |  |
|                    | data, and use of reconciliation data if available.  |  |
| Moisture           | • Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of   | No new mineral resources are being announced |
|                    | determination of the moisture content.  |  |
| Cut-off            | The basis of the adopted cut-off grade(s) or quality parameters applied.  | No new mineral resources are being announced |
| parameters         |   |  |
| Mining factors or  | Assumptions made regarding possible mining methods, minimum mining dimensions and   | No new mineral resources are being announced |
| assumptions        | internal (or, if applicable, external) mining dilution. It is always necessary as part of the process   |  |



| Criteria  | JORC Code explanation   | Commentary                                   |
|---|---|--|
|   | 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.  |  |
| Metallurgical<br>factors or<br>assumptions        | <ul> <li>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.</li> </ul>  | No new mineral resources are being announced |
| Environmental<br>factors or<br>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 greenfield 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 new mineral resources are being announced |
| Bulk density                                      | <ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>   | No new mineral resources are being announced |
| Classification                                    | <ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>  | No new mineral resources are being announced |
| Audits or reviews                                 | The results of any audits or reviews of Mineral Resource estimates.   | No new mineral resources are being announced |
| Discussion of<br>relative accuracy/<br>confidence | <ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul> | No new mineral resources are being announced |