

ASX/Media Release 17 December 2020

THICK HIGH-GRADE VMS INTERCEPT SIGNIFICANTLY EXPANDS POTENTIAL OF BREAKERS SATELLITE PROSPECT AT SULPHUR SPRINGS

Significant greenfields intercept with grades of up to 19.4% Zn and 2.37% Cu extends high-grade zone downplunge and points to increasing copper grades at depth

HIGHLIGHTS:

- Thick zone of high-grade Volcanogenic Massive Sulphide (VMS) mineralisation intersected in exploration drilling at the greenfields Breakers Prospect, 15km south of the Sulphur Springs deposit.
- High-grade zinc with associated copper and silver intersected at Breakers Main Gossan target:
 - o 20m @ 8.54% Zn, 0.31% Cu, 0.72% Pb and 16.2g/t Ag from 180m down-hole in BKR013, including:
 - o 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.
- New intercept located 50m down-plunge from the high-grade intercept reported in hole BKR005 in July last year (refer ASX announcement, 17 July 2019):
 - 18m at 7.75% Zn, 0.25% Cu, 2.03% Pb and 22.8g/t Ag from 155m down-hole
- High-grade zone remains open with indications of increasing copper grades at depth.
- Further drilling planned to target extensions beneath and along strike of the known mineralisation.
- Additional assays expected in late December/early January.
- DHEM and DHMMR geophysical surveys planned to guide follow-up drilling.
- Excellent potential to add additional resources to the Sulphur Springs Project.

Australian base metal developer Venturex Resources Ltd ("Venturex" or "the Company") (ASX: VXR) is pleased to announce that recent Reverse Circulation (RC) exploration drilling at its 100%-owned Sulphur Springs Copper-Zinc Project, located 144km south of Port Hedland in WA, has intersected additional intervals of thick, high-grade zinc with additional copper and silver mineralisation at the satellite Breakers Prospect.

The new results have further upgraded the Breakers Prospect as a potentially significant emerging VMS discovery located just 15km from the Sulphur Springs deposit, further reinforcing the large-scale exploration opportunity along the 27km long Panorama VMS trend located along strike from the known deposits at Sulphur Springs and Kangaroo Caves.

The recently completed exploration programme comprised six RC drill-holes (BKR010-015) at the Breakers Prospect and a single hole (SSR011) at the XA8 Prospect for a total of 1,886m. The Breakers programme was designed to systematically test geochemical and geophysical anomalism identified at the Breakers Main Gossan and Breakers North targets following the successful 2019 drilling that intersected several zones of massive sulphide mineralisation.

Assay results have now been received from the first five holes of the programme (BKR010-014), including:

- 20m @ 8.54% Zn, 0.31% Cu, 0.72% Pb &16.2g/t Ag from 180m within BKR013, including:
 - o 6m @ 19.4% Zn 0.75% Cu, 0.63% Pb & 36.0g/t Ag, from 186m, including:
 - 1m @ 16.1% Zn, 2.37% Cu &114.0g/t Ag, from 187m.
- 8m @ 0.51% Zn & 2.2g/t Ag from 202m within BKR012, and
 - o 28m @ 0.3% Zn from 136m.
- 6m @ 1.10% Zn & 19.0/t Ag from 198m within BKR014.

Breakers Main Gossan Prospect

The exceptional results in hole BRK013 have successfully extended VMS mineralisation at the Breaker Main Gossan target over a strike length of 175m and 170m plunge extent. The mineralisation forms a broad, low-to-moderate grade envelope around a linear, elongate high-grade core of uniform thickness (averaging 18-20m in width).



The high-grade mineralisation intersected in BKR013 is located approximately 50m down-plunge from the 2019 drill-hole BKR005 (18m @ 7.75% Zn, 2.03% Pb, 0.25% Cu and 22.8g/t Ag – see ASX release 17 July 2019), and has extended the high-grade core of zinc mineralisation over a plunge extent of more than 100m (Figures 1 and 2).

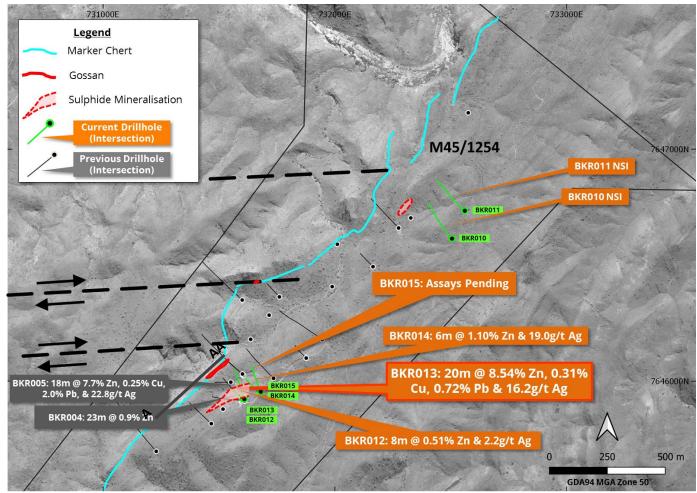


Figure 1: Plan view of Breakers exploration drilling.

Geological interpretation suggests that the geometry of the high-grade mineralisation intersected at the Prospect is structurally controlled and potentially associated with a felsic intrusive. The mineralisation is interpreted to be open both along strike and down-plunge.

The increasing copper mineralisation intersected within BKR013 (including 1m @ 2.37% Cu) and associated 'high-temperature' pathfinder mineralisation also suggests that the current drilling may have only intersected the upper zinc-rich peripheries of a larger system at depth.

The mineralisation at the Breakers Main Gossan target is also interpreted to be structurally bound to the north by a primary growth fault, with the off-set continuation of the target horizon currently untested with drilling.



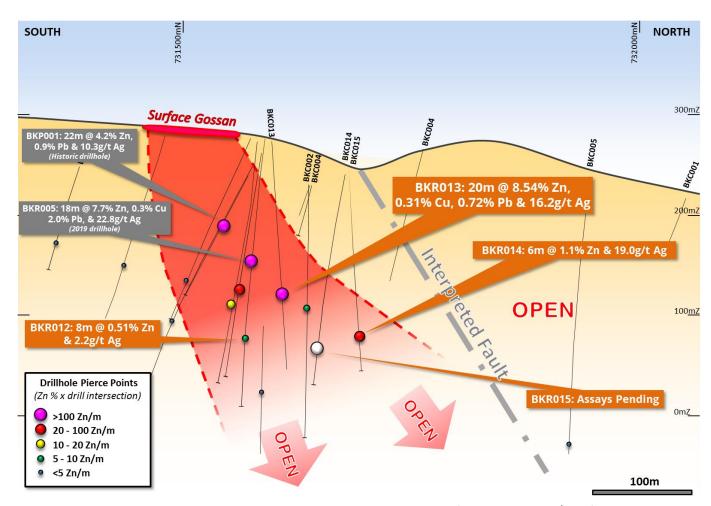


Figure 2: Breakers Main Gossan oblique exploration long-section (northwest view, +/-40m).

Breakers North Prospect

At Breakers North, drill-holes BKR010 and BKR011 were drilled north-east along strike from high-grade mineralisation intersected within 2019 drill-hole BKR007 (8m @ 3.4% Zn, 0.3% Pb, and 6.5g/t Ag, including 1m @ 20.9% Zn, 1.8% Pb and 34.7 g/t Ag, see figure 1).

BKR010 intersected a discrete zone of disseminated sulphide mineralisation associated with strong silica-sericite alteration and highly anomalous proximal VMS pathfinder elements including Ag, As, Ba, Cd, Co, In, Mo, Sb, Tl, Pb and Zn on the upper contact of the marker Chert horizon, including 2m @ 0.2% Zn. BKR011 intersected a thin felsic-chert unit with minor sulphide mineralisation at the target depth followed by a significant fault zone to end-of-hole.

Geological interpretation at Breakers North indicates that several structural offsets are present, and these may have bifurcated the mineralised Marker Chert resulting in multiple potential target horizons.

XA8 Prospect

A single hole (SSR011) was also completed at the XA8 Prospect, designed to follow-up low-level Ni-Cr+/-Co mineralisation associated with a layered mafic/ultramafic unit. Assays for hole SSR011 are still pending, however the hole intersected only minor disseminated sulphide mineralisation at the Mafic-Ultramafic contact, followed by a fault zone. The low-level mineralisation and associated fault are interpreted to represent the likely source of the EM anomaly, however DHEM is still planned to be completed once the assay data are received.

Future Work

Final assays from the remaining two drill-holes (SSR010 and BKR015) of the programme are expected in late December/early January. Additional Down-Hole Electromagnetic (DHEM) and Down-Hole Magnetometric Resistivity (DHMMR) surveys are also currently planned to be completed at the conclusion of the Pilbara wet season (Q2 2021).



Detailed assessment of the combined assay and (planned) geophysical results will allow refinement of the geological model for the Breakers Main and Breakers North Prospects, which will be undertaken over the in the coming months.

The recent discoveries at Breakers and continued high-grade results confirm the Panorama region as an emerging copperzinc province and validate Venturex's strategy to unlock the potential of its >27km of highly prospective strike, within its 100%-owned licence holding.

The Company intends to resume drilling at the Breakers Prospect as soon as possible after the Pilbara cyclone season, while also expanding its exploration activities along the Panorama Trend with exploration planned at EM targets XA10, XA11 and XA12, as well as the Anomaly 45 and Man O'War prospects during the 2021 season.

Management Comment

Venturex's Managing Director, Anthony Reilly, said: "Breakers is continuing to emerge as a potentially significant high-grade VMS discovery with outstanding potential to grow further. The recent drilling has reinforced its status as one of our leading exploration opportunities outside of the known deposits at Sulphur Springs and Kangaroo Caves, particularly given its location just 15km from the proposed mining and processing infrastructure.

"The recent drilling has defined what appears to be a new high-grade zinc-copper zone beneath the discovery intercept. This zone remains wide open and appears to have significant plunge potential with strong potential for increasing copper grades at depth. Further success at Breakers has potential to enhance the already robust economics of the Sulphur Springs Project."

Anthony Reilly Managing Director

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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 the Joint Venturex 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 Drill Results

														1
Hole	Easting	Northing	RL	Azi°	Dip°	ЕОН	Interval	From	То	Cu%	Pb%	Zn%	Au g/t	Ag g/t
BKR010	732505	7646615	202	318	-55	280	NSI	-	-	-	-	-	-	-
BKR011	732560	7646735	192	311	-55	280	NSI	-	-	-	ı	1	ı	-
BKR012	731603	7645924	283	303	-75	280	28m	136	164	0.00	0.00	0.29	0.00	0.10
							8m	202	210	0.01	0.01	0.51	0.00	2.20
BKR013	731609	7645923	283	339	-60	280	20m	180	200	0.30	0.72	8.54	0.02	16.20
							Inc. 6m	186	192	0.75	0.63	19.38	0.03	36.00
							Inc. 1m	187	188	2.37	0.16	16.10	0.05	114.00
BKR014	731677	7645959	260	338	-60	244	6m	198	204	0.01	0.03	1.10	0.20	19.00

Note. Reported intercepts are determined using averages of contiguous mineralisation downhole. The lower cut-offs for zinc are 0.25%. 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 Springs	Indicated	9,400	1.5	3.8	0.2	17
Surpriur Springs	Inferred	4,400	1.4	3.7	0.2	18
	Sub-total	13,800	1.5	3.8	0.2	17
	Measured	_	-	-	-	-
Vangaraa 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	8.0	6	0.3	15
	Measured	_	_	-	-	-
TOTAL	Indicated	11,700	1.4	4.2	0.2	16.3
IOTAL	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 techniques	 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 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. 	Exploration RC drilling was used to test geochemical and geophysical targets at the Breakers and XA8 Prospects within the Sulphur Springs Project. The company used industry standard practices to measure and sample the drill chips. A combination of four-metre composite and one-metre split samples, weighing nominally between 1-2.5kgs were submitted to the laboratory for multi-element analysis.
	 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.). 	Reverse Circulation drilling was completed using a standard 5.5inch diameter hammer.
Drill sample recovery	 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. 	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	 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. 	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. The following quantitative descriptions were used when logging, amongst others: Trace less than 1% sulphides. Disseminated and stockwork 1-20% sulphides. Semi-massive 20-60% sulphides. Massive sulphides greater 60%.
Sub-sampling techniques and sample preparation	 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. 	RC cuttings were split using an industry standard rig-mounted cone splitter. Four-metre composite samples were taken from the (split) bulk sample using a PVC tube through the hanging-wall and footwall sequences. One-metre samples taken through mineralised (sulphide) zones were individually submitted for assay.



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 	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: Samples weighed, crushed and pulverised with the coarse residue retained in vacuum seal bags. 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. The company included certified reference material and blanks within the samples submitted at a frequency on 1:20.
Verification of sampling and assaying Location of data	 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. Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), 	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
points	trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	holes are down-hole surveyed by a north-seeking gyro at the end of hole.
Data spacing and distribution	 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. 	Data/drill hole spacing are variable and appropriate to the geology and historical drilling spacing. 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.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	Drill holes are designed to test the Marker Chert which plunges at ~30-80° to the Southeast. Due to restricted access and topography all holes are drilled at an angle between -50° to -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.	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: • Venturex Resources • Address of Laboratory Detailed records are kept of all samples that are dispatched, including details of chain of custody.
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 and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	The Breakers Prospect in located within M45/1254. The registered owner of the tenements is Venturex Sulphur Springs Pty Ltd, a wholly owned subsidiary of Venturex Resources Ltd. The prospects are held by Venturex Sulphur Springs Pty Ltd. The tenements are within Njamal Native Title Claim (WC99/8) where native title has been determined. The traditional owners of the land are the Njamal People. The grant of the tenement predates native title and is not subject to native title claim. The tenement is subject to two third party royalties on any production from the tenement. The tenements are in good standing and no known impediments exist.
Exploration done 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. Modern exploration has been undertaken by Sipa Resources, CBH Resources, Homestake 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 Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 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. 	Details of the drill holes are provided in Table 1 within the body of this report.
Data aggregation methods	 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. 	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. Results reported are determined by ALS Laboratories using method ME-OG 62, ME-MS61 (over limit samples) and fire assay AyAA-23.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. 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'). 	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 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.	See long-section and plans within this announcement
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	N/A



Criteria	JORC Code explanation	Commentary
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	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	 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 	Follow-up downhole geophysical surveys are planned to be completed in early 2021. Future drilling programmes are also being planned to target the depth/plunge extensions to 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.	
	Nature of the data used and of any assumptions made.	
	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.	
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or	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.	
	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 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 of a selective mining units.	
	Any assumptions about correlation between variables. Provided to a solution of how the production interpretable and the control the ground and the	
	Description of how the geological interpretation was used to control the resource estimates. Picquesian of hosis for using or not using grade putting or compiler.	
	Discussion of basis for using or not using grade cutting or capping. The process of validation, the charling process used the comparison of model data to drill help. The process of validation the charling process used the comparison of model data to drill help.	
	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
wioisture	determination of the moisture content.	No new mineral resources are being announced
Cut-off	The basis of the adopted cut-off grade(s) or quality parameters applied.	No new mineral resources are being announced
parameters	The busis of the adopted cut-off grade(s) of quality parameters applied.	No new minieral resources are being announced
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	The new mineral resources are being announced
	internal (or, i) applicable, external, mining anation, 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 factors or assumptions	 The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	No new mineral resources are being announced
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a 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	 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. 	No new mineral resources are being announced
Classification	 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. 	No new mineral resources are being announced
Audits or reviews Discussion of relative accuracy/ confidence	 The results of any audits or reviews of Mineral Resource estimates. 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 	No new mineral resources are being announced No new mineral resources are being announced
	 These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	