## ASX/Media Release



3 May 2018

# Venturex to drill outstanding "near-mine" copper-zinc targets at Sulphur Springs

Ground EM underway to refine targets ahead of drilling planned to commence by mid-May 2018

#### **Highlights:**

- 2018 exploration program underway at the Sulphur Springs Copper-Zinc Project (Pilbara, WA)
- Initial focus on three high-priority EM targets (X6, X8 and DHEM target) located on western flank of the Sulphur Springs VMS deposit (Indicated and Inferred Resource: 13.8Mt at 1.5% Cu, 3.8% Zn)
- Outstanding potential to host a new VMS discovery
- Targets were identified by the highly successful heliborne electromagnetic (HEM) survey completed in 2017, which continues to demonstrate the highly prospective nature of the Sulphur Springs Project
- Follow-up ground-based electromagnetic (EM) surveys have been completed with results pending
- Track establishment completed and drilling planned to commence shortly
- A further ten high-priority HEM targets have been identified along the 27km Panorama VMS trend, located directly along strike from Sulphur Springs

Venturex Resources (ASX: VXR) is pleased to advise that it has embarked on a pivotal new exploration program to test a series of "near-mine" electromagnetic targets located immediately adjacent to the key VMS deposits at its 100%-owned **Sulphur Springs Copper-Zinc Project**, located south-east of Port Hedland in WA's Pilbara (Figure 1).

The 2018 exploration program will test for new discoveries and extensions to existing mineralisation on the western side of the current Sulphur Springs Resource (Indicated and Inferred Resource of 13.8 million tonnes grading 1.5% Cu and 3.8% Zn – refer ASX announcement, 21 March 2018).

This program continues to build upon the highly successful 2017 drilling completed last year and the results of the HEM survey completed in late 2017 (see ASX release dated 27 November 2017 and Figure 2).

When viewed together, Venturex believes the 2017 drill results and HEM survey represent an exciting development for the project, highlighting the strong potential to discover new VMS deposits along the 27km long Panorama VMS trend – a highly prospective corridor located directly along strike from the Sulphur Springs Project.

VMS deposits typically occur in clusters and Venturex has already identified at least ten new drill targets from the recent HEM survey. Any new copper-zinc discoveries will be highly leveraged to Venturex's plans to develop a new long-term mine and processing plant at Sulphur Springs, where it is on track to deliver a final Feasibility Study.

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### **Outline of 2018 Exploration Program**

The current Sulphur Springs exploration program is designed to test for new discoveries and extensions of the current Resource to the west and down-dip of the known mineralisation.

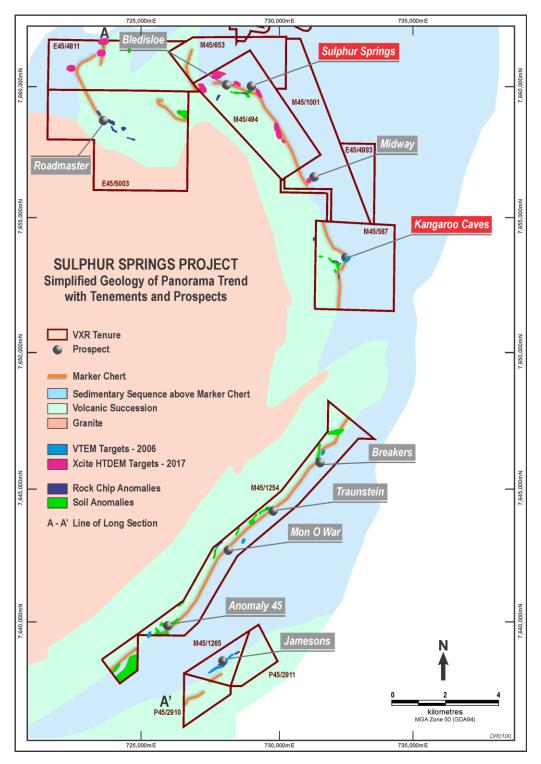


Figure 1: Sulphur Springs Project area and tenement holdings.

The recent HEM survey identified 10 targets and Venturex plans initially to drill-test anomalies XA6 and XA8 (see Figure 2). The current program will also test a previously identified off-hole anomaly from drill hole SSD044A (see ASX release dated 23 May 2017 and Figure 3).



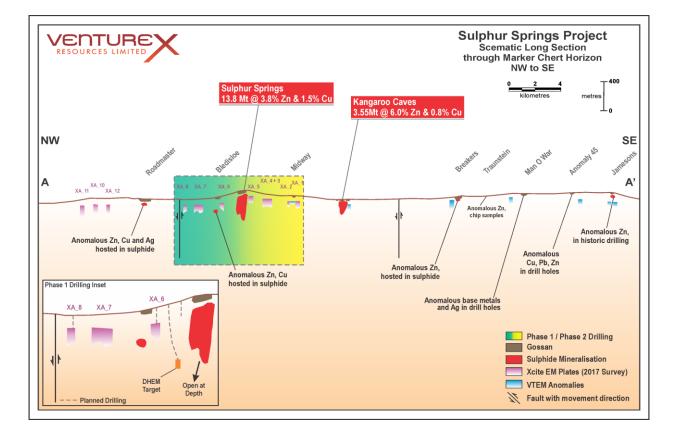


Figure 2: Schematic long section through the Marker Cert Horizon showing the 11 HEM anomalies and the historical VTEM anomalies.

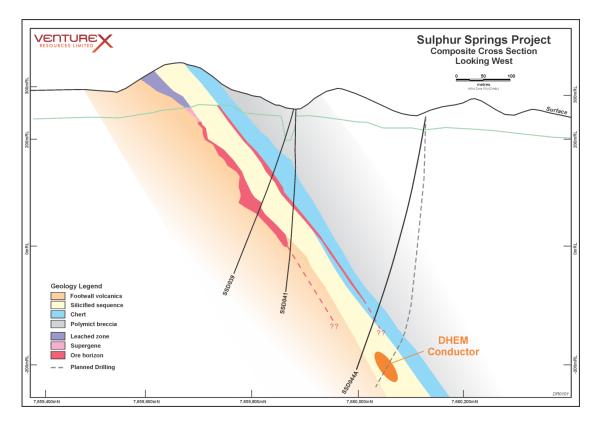


Figure 3: Off-hole EM anomaly identified in drill hole SSD044A.



### **Next Steps**

A ground-based electromagnetic (EM) survey of the XA6 and XA8 areas has been completed with results pending, to better define the targets from the HEM that will facilitate optimal drill-hole design. Earthworks to establish access for drilling have been completed with drill rigs anticipated to be mobilised to site around the middle of May.

#### **Implications for Sulphur Springs Exploration**

The 2018 program is the first phase of a renewed, staged focus on exploration at the broader Sulphur Springs Project. The immediate focus during 2018 will be to test for extensions and assess the potential for new discoveries in the immediate vicinity of the western flanks of the current Sulphur Springs Resource. Venturex believes that the 2017 drill results and geophysical survey results continue to demonstrate the high prospectivity for further discoveries in the project area.

Beyond the immediate 2018 work program, the second phase of exploration will test the prospective contact between the Marker Chert and the footwall felsic volcanic sequence that runs between the Sulphur Springs and Kangaroo Caves Resources. The key area of interest with identified EM anomalies is shown on Figure 2.

A further third phase of exploration will be undertaken to further evaluate and extend existing prospects and hopefully make new discoveries in the southern leases of the Panorama trend, south of the Kangaroo Caves Resource (see Figure 1).

Venturex's Managing Director, AJ Saverimutto said the upcoming drilling program marked the beginning of an exciting new growth phase for the Sulphur Springs Project.

"We are really excited to be back in the field to test the concepts we have formulated over the past few months, building on the success of the drill program completed in late 2017. The discovery of additional copper-zinc mineralisation in close proximity to our planned plant and infrastructure at Sulphur Springs and will significantly enhance the value of both the Project and the Company "

"Sulphur Springs is the first of what we believe will be multiple centres of VMS mineralisation in this under-explored region and we are really looking forward to opening up a major new copper-zinc province, where we see the potential to be operating for many decades to come."

you for the

AJ Saverimutto 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 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. Our strategy is to work with our partners Blackrock Metals to expand and extend the existing 4 tonne per day oxide copper heap leach and SXEW operation at Whim Creek, identify other near term production options at Whim Creek, Mons Cupri and Sulphur Springs and fully optimise the Sulphur Springs Project have it shovel ready to take advantage of forecast improvements in base metal prices.

#### **Competent Person Statement**

- The Company confirms that: a. The form and context of the material in this release has not been materially modified from the above previous announcements; and
  - b. It is not aware of any new information or data that materially affects the information included in the announcements and that all material assumptions and technical parameters underpinning the announcements continue to apply and have not materially changed.

The information in this announcement that relates to Exploration Results is based on information compiled or reviewed by Mr Stefan Gawlinski who is employed as a Consultant to the Company. Mr Gawlinski is a member of the Australian Institute of Geoscientists. Mr Gawlinski has sufficient experience with the style of mineralisation and the type of deposit under consideration. Mr Gawlinski consents to the inclusion in the report of the results reported here and the form and context in which it appears.



## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling 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>	A high-resolution helicopter borne time domain electromagnetic & magnetic survey was completed at the Sulphur Springs Project using the Xcite <sup>™</sup> system during early September 2017. 100-200m spaced lines were flown at a survey altitude of 40 to 80m (Tx-Rx array) and 70 to 110m (helicopter). Surveying is completed using an 18.4m diameter transmitter with 4 turns, 235A current, 250,000NIA peak dipole movement, and 25Hz base frequency, and receiver – diameter 0.613m (effective) (X), 1.0m (Z) with 200 (X), 100 (Z) turns recording dB/dT and integrated B-field digitally at 624kbps.
	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.).	Not applicable as no drilling was undertaken.
Drill sample 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>	Not applicable as no drilling was undertaken.
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>	Not applicable as no drilling was undertaken.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <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>	Not applicable as no drilling was undertaken.



Criteria	JORC Code explanation	Commentary
Quality of assay data and 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>The geophysical equipment used:</li> <li>Xcite<sup>™</sup> system with coincident Tx-Rx sensor configuration.</li> <li>Transmitter: 18.4m diameter transmitter with 4 turns, 220A current, 250,000NIA dipole movement, and 25Hz base frequency.</li> <li>Receiver: 0.613m (effective) (X), 1.0m (Z) diameter with 200 (X), 100 (Z) turns recording dB/dT and integrated B-field digitally at 624kbps.</li> <li>Acquisition System: NRG RDAS II.</li> </ul>
Verification of sampling and assaying	<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> </ul>	Results detailed in this report have been processed by Southern Geoscience Consultants and reviewed by Alliance geologists. Primary geophysical data was captured electronically in the field and transmitted to Southern Geoscience Consultants on a daily/regular basis.
Location of data points	<ul> <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>	All data has been collected in GDA94 MGA Zone 50 grid system. Data points were located using a Novatel DL-V3L1L2 Real Time GPS (recording rate: 20Hz) and SF-01 laser altimeter.
Data spacing and distribution	<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> </ul>	100m spaced NE-SW lines – East Block, 200m spaced E-W lines – West Block - flown at a survey altitude of 40 to 80m (Tx-Rx array) and 70 to 110m (helicopter). No infill surveying was completed.
Orientation of data in relation to geological structure	<ul> <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> <li>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.</li> </ul>	The orientation of the geophysical survey was designed to be best suited to provide coverage perpendicular to the general geological strike direction.
Sample security	The measures taken to ensure sample security.	Not applicable as no drilling was undertaken.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No audits or reviews of the sampling technique or data have been completed.



## **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> <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 Sulphur Springs deposit is located within M49/ 494. The registered owner of the tenements are 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 tenement is a granted Mining Lease in good standing and no known impediments exist. Anomaly XA1 is located on tenement E45/4993 which is a pending exploration licence. E45/4993 was applied for on 28th August 2017. There is also an overlapping pending exploration licence (E45/5005) which was applied for on 1st September 2017. Until E45/4993 has been granted by the relevant Government Department there is a risk that full tenure may not be secured.
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 Sulphur Springs deposit and associated prospects are related to Volcanogenic Massive Sulphide systems.
Drill hole 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>	Not applicable as no drilling is being reported.
Data aggregation 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>	Not applicable as no drilling is being reported
Relationship between mineralisation widths and 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>	Not applicable as no drilling is being reported



Criteria	JORC Code explanation	Commentary
Diagrams	<ul> <li>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.</li> </ul>	See plans and cross-sections within this announcement
Balanced reporting	<ul> <li>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.</li> </ul>	
Other substantive exploration data	<ul> <li>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.</li> </ul>	The prospects along the Panorama Trend have had significant bodies of work completed on them, including geophysical studies, geochemical studies, metallurgical test work, geotechnical and ground water studies.
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>	Continued review and assessment of the XCITE survey results. Some of the anomalies have been field checked. Ground based EM surveys and follow up drill testing are planned for selected anomalies