

## Final EM Survey results confirm Priority Targets for immediate Drill Testing at Thor VMS Prospect, Western Australia

Venture Minerals Limited (**ASX code: VMS**) ("Venture" or the "Company") is pleased to announce that the final results (Refer Figures One and Two) of the recently completed EM (Electromagnetic) survey have **confirmed multiple Priority VMS (Volcanogenic Massive Sulfide) Targets. Drill testing will now commence immediately with results soon to follow.**

The Company continues to focus exploration efforts at Thor, following the **recent discovery of massive and semi-massive sulfides in reconnaissance drilling** targeting a large historic EM anomaly. Final processing of the new detailed EM survey shows that the **strongest responses sit outside of the areas drilled** by the first two reconnaissance holes targeting the Thor VMS style sequence, consequently the **next phase of drilling will test, the highest ranked targets** based on the new, high resolution survey results (Refer Figures One and Two).

### Recent highlights at the Thor prospect include:

- Final results from the recently completed NRG's high-resolution Xcite™ Airborne EM survey over Thor delivered **Priority VMS style drill targets**;
- Confirmation of **large VMS style target sequence extending over 20 km** of strike (Refer announcement 8 August 2018, and Figures Three and Four);
- Maiden drill program intersects **17m zone of disseminated, semi-massive and massive sulfides** with portable XRF confirming the presence of zinc and copper (Refer announcement 8 August 2018);
- Recent assays confirm the **presence of zinc and copper** with core samples containing up to 0.3% zinc and 0.2% copper (Refer to ASX announcement 30 August 2018).

**Venture's Managing Director commented** *"The Company is excited about the next phase of work at Thor, which will see a number of highly ranked, massive sulfide targets drill tested over the coming weeks. The drilling contractor has been engaged and the rigs are scheduled to be mobilised in the coming days. The fact that the maiden drill program intersected large zones of sulfides in areas that the final EM data does not rank amongst the strongest responses, significantly elevates the Company's confidence in the next phase of drill testing."*

### Venture Fast Facts

ASX Code: VMS  
 Shares on Issue: 520.6 million  
 Market Cap: \$12 million  
 Cash: \$1.8m (30 Sept 18)

### Recent Announcements

Quarterly Activities Report  
 (31/10/2018)

Quarterly Cashflow Report  
 (31/10/2018)

Venture Acquires Golden  
 Grove North Project, WA  
 (30/10/2018)

Notice of Annual General  
 Meeting  
 (26/10/2018)

EM Survey Identifies Nine  
 Priority Drill Targets at Thor  
 (11/10/2018)

Annual Report to  
 Shareholders  
 (26/09/2018)

Appendix 4G and Corporate  
 Governance Statement  
 (26/09/2018)

RIU Resources Roadshow  
 Investor Presentation  
 (24/09/2018)

Major EM Survey to  
 Commence at the Thor VMS  
 Prospect  
 (30/08/2018)

Drilling intersects massive  
 sulphides at Thor confirming  
 VMS system  
 (08/08/2018)

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The Company engaged NRG who recently completed a major EM program over the entire 281 km<sup>2</sup> of the Southwest tenement package. Final results from this program have confirmed multiple Priority VMS style drill targets at the Thor VMS Prospect. All of the nine priority VMS drill targets that was identified by the preliminary results (Refer to ASX announcement 11 October 2018) have been confirmed plus a further four new targets in the Thor area have also been identified. The final thirteen targets are a combination of previously generated surface soil anomalies interpreted by Venture and EM anomalies interpreted by independent geophysical consultants Core Geophysics from the final results of the Xcite™ Airborne EM survey. The new high-resolution EM survey has not only confirmed the historical EM anomalies with significantly enhanced definition but has also generated new anomalies not previously identified.

Some of the priority drill targets generated by the final EM results at Thor are accessible from previously permitted drill sites, therefore affording Venture the opportunity to commence drilling preparations immediately. The final EM results have further clarified some of the other EM features within the 20 km VMS target zone and the remainder of the tenure, but cultural features are masking some of the target zone particularly on the recently granted northern tenement (E70/5067) (Refer Figures Three and Four). The recently started surface geochemical sampling program on E70/5067 which holds 14 strike kilometres of the Thor VMS target zone will be important for delineating drill targets in those affected areas.

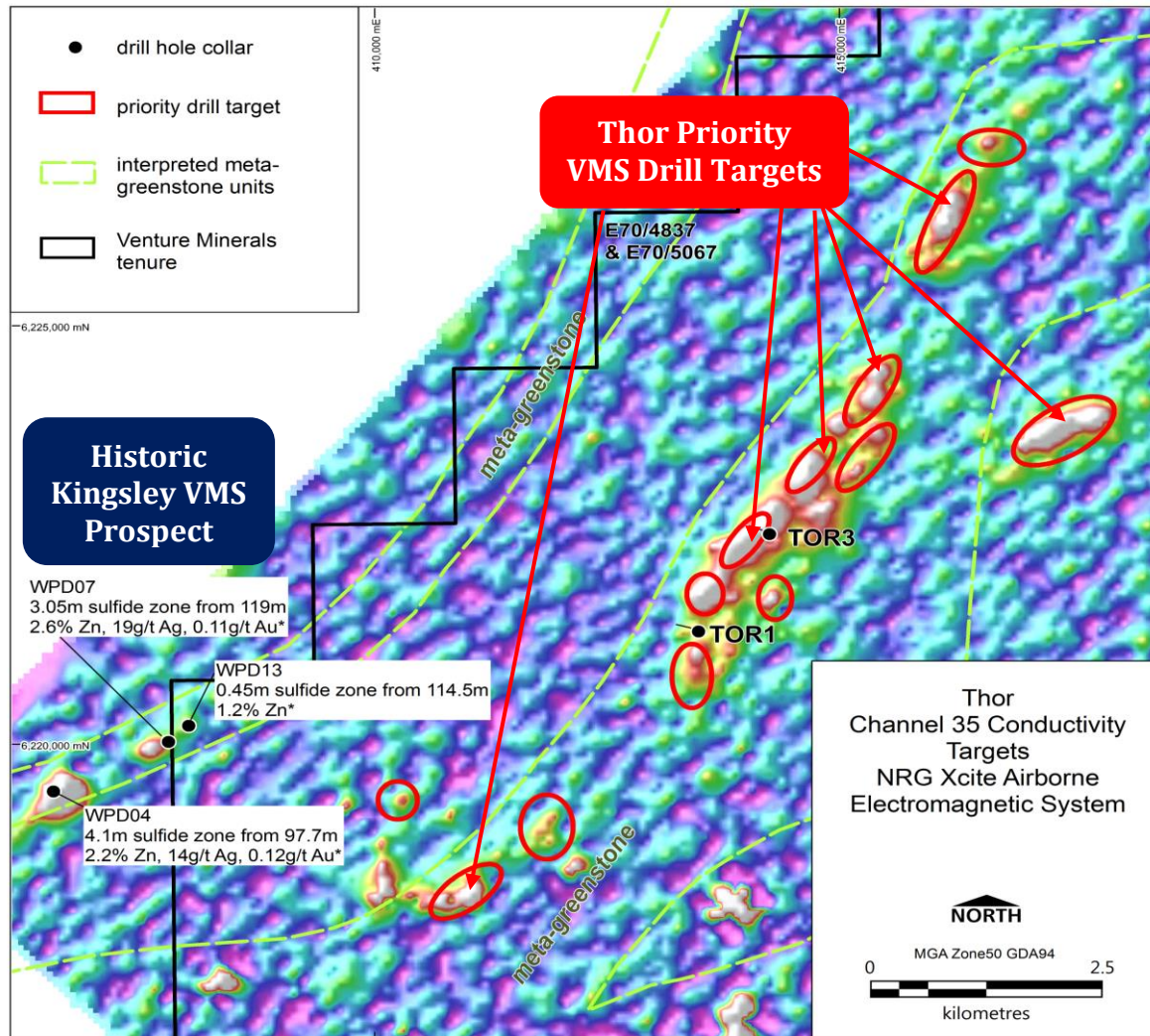
The Company recently intersected a 17m zone of disseminated, semi-massive and massive sulfides (Refer announcement 8 August 2018) in Venture's maiden drill program at the Thor VMS Prospect. Assays have been received from the two holes that intersected the Thor VMS target confirming the presence of Zinc and Copper with up to 0.3% Zinc and 0.2% Copper along with anomalous values of gold, silver, lead, arsenic, bismuth, cobalt and tin (Refer to ASX announcement 30 August 2018) therefore verifying the VMS style mineralisation.

Thor has the same EM and geochemical signature as Teck's adjacent VMS Kingsley discovery (Refer Figure One), which is one of a number of VMS occurrences in the Archean Yilgarn Craton of Western Australia with the Golden Grove Camp (Mine), 370 kms north-northeast of Perth, being the prime example with over nine VMS deposits spread over 13 kms of strike. At the end of 2002, Golden Grove had an endowment (resources and production) of 40.2Mt @ 1.8% Cu, 0.9% Pb, 7.6% Zn, 103 g/t Ag & 0.8 g/t Au<sup>1</sup>. In February 2017, EMR Capital purchased Golden Grove for US\$210M and states that after 27 years of production there is over 10 years of mine life in reserve for the 1.3Mt per annum operation<sup>2</sup>.

1. Department of Mines and Petroleum Report 165, VMS Mineralization in the Yilgarn Craton, Western Australia: A review of known deposits and prospectivity analysis of felsic volcanic rocks by SP Hollis, CJ Yeats, S Wyche, SJ Barnes and TJ Ivanic 2017.

2. [www.emrgoldengrove.com](http://www.emrgoldengrove.com)

Figure One | Plan View of Final Xcite AEM Survey Channel 35 Results at the Thor Prospect.



\* GSWA Record 2017/9: Metamorphosed VMS Mineralization at Wheatley, Southwest, Western Australia by LY Hassan.



**Figure Two | Oblique View of Final Xcite AEM Survey Channel 35 Results superimposed on an electrical conductivity model represented by 20,50,100 siemens/metre shells at the Thor Prospect.**

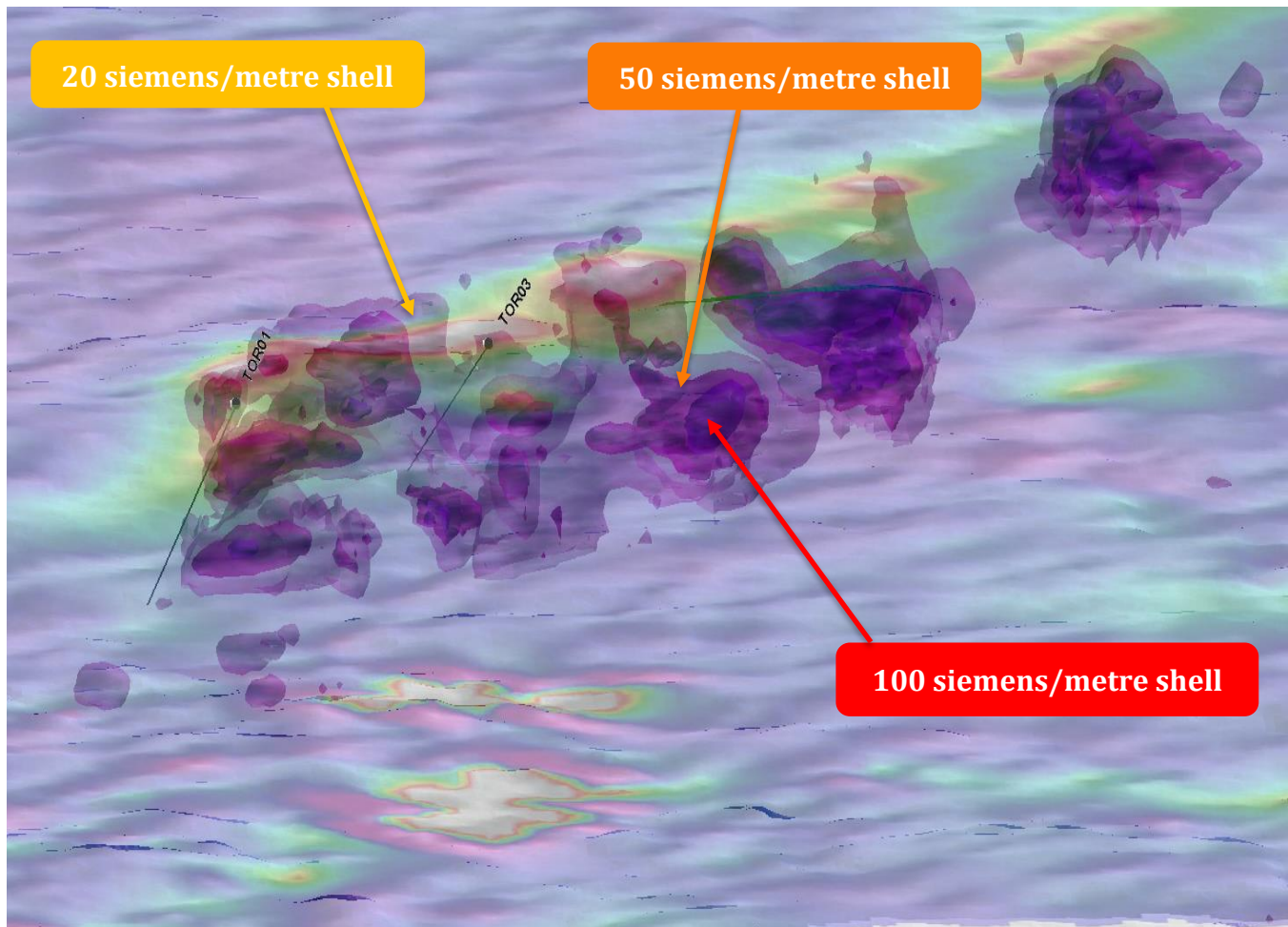
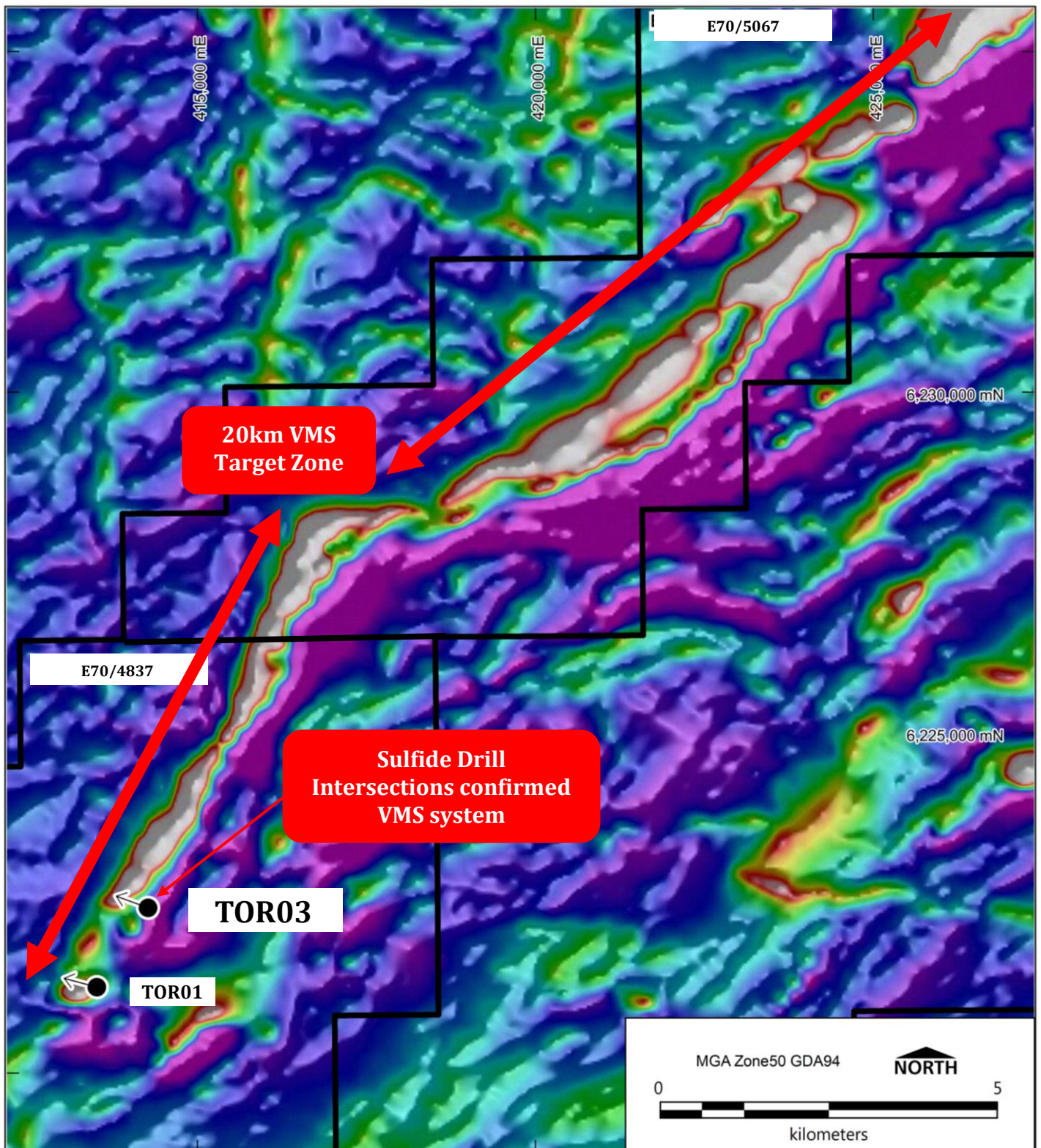
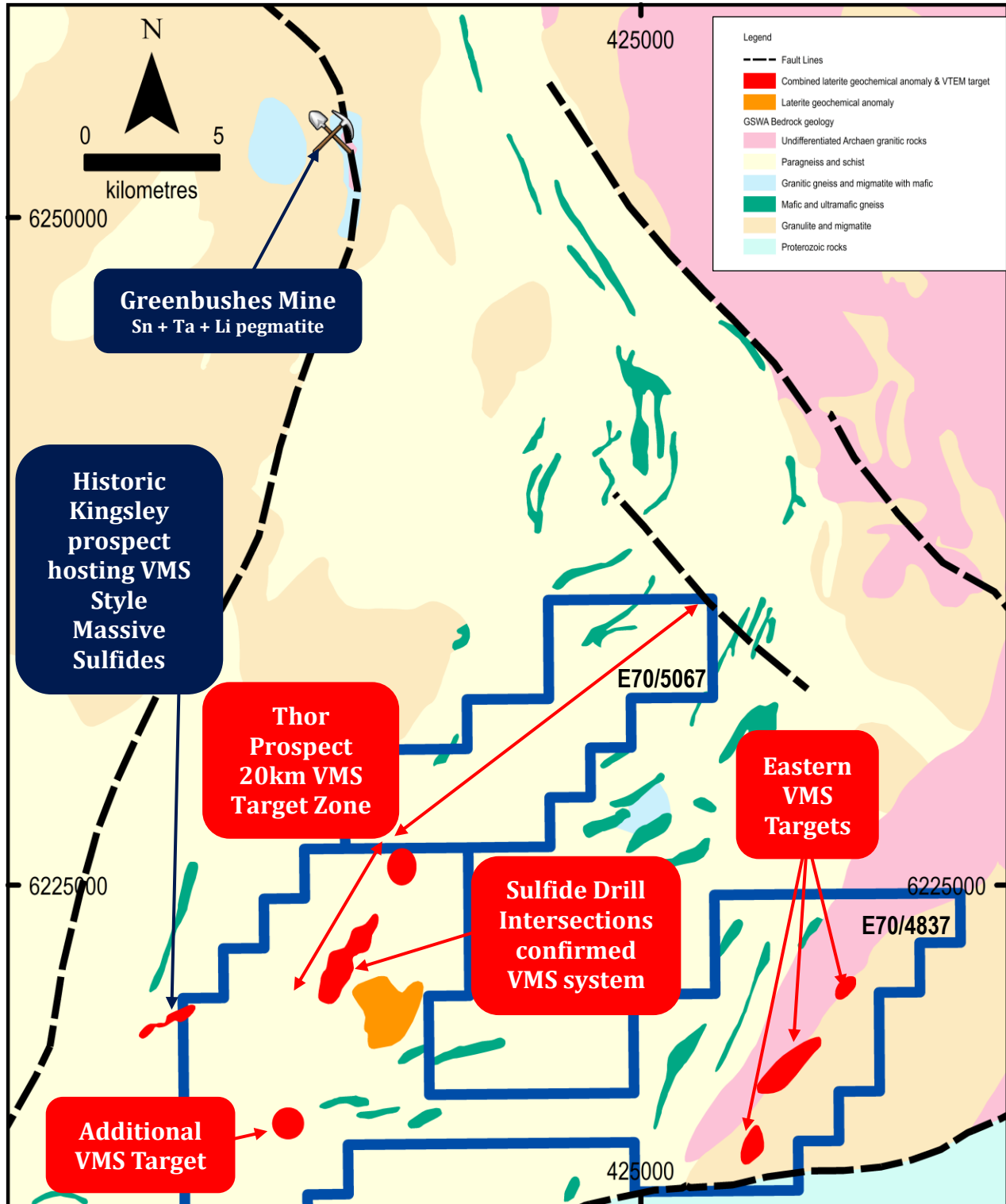


Figure Three | Thor VMS Target with drilling on aeromagnetic image





**Figure Four | Thor Prospect Location within Southwest Tenement Package**



## Project Overview

The Thor Prospect is located 240 km south of Perth, hosted within the Balingup Complex. The 2.8-2.1 Ga Balingup Complex comprises medium to high grade metamorphic rocks formed mainly from sedimentary protoliths and lesser granitoid rocks. Gneiss and amphibolite sequences derived from interlayered mafic and felsic volcanic units, banded iron formation, mafic and ultramafic intrusive rocks and carbonate protoliths area also present within the Balingup Complex and interpreted to represent meta-greenstone belts. The Greenbushes Tin-Tantalum-Lithium Pegmatite (Mine) is located within one such meta-greenstone belt in the northern part of the Balingup Complex, and the Kingsley meta-VMS Prospect a few kilometres west of the Thor Prospect is hosted by a sequence of high grade (garnet and staurolite) meta-volcanic rocks. Much of the Balingup Complex is covered by laterite and a thin veneer of Cenozoic sediments and is considered significantly under explored for lithium pegmatite and base metal deposits. A joint venture between Teck Cominco, BHP Billiton and Hampton Hill Mining NL (Teck JV), first identified the southern part of the Balingup Complex as being prospective for base and precious metals. The Teck JV completed surface sampling and airborne EM surveys which culminated in the discovery of the Kingsley base and precious metals meta-VMS prospect. There has been no significant exploration for VMS systems in the area since that of the Teck JV. Venture's Thor prospect consists of a series of coincident EM and base metal anomalies that are consistent with deeply weathered laterite covered VMS systems.

Yours sincerely



Andrew Radonjic  
**Managing Director**

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr Andrew Radonjic, a fulltime employee of the company and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Andrew Radonjic has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Andrew Radonjic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to AEM Survey Results is based on information compiled by Mr Mathew Cooper, who is employed as a Consultant Principal Geophysicist to the Company through Core Geophysics Pty Ltd. Mr Cooper 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 Cooper consents to the inclusion in the report of matters based on information in the form and context in which it appears

## Appendix One

### JORC Code, 2012 Edition | 'Table 1' Report

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <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>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. 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>	<ul style="list-style-type: none"> <li>An AEM survey was conducted over Venture Minerals Limited's exploration tenements of E70/4837 and E70/5067.</li> <li>The survey was commissioned by Venture Minerals Limited and flown by New Resolution Geophysics Australia with the Xcite system on flight lines oriented 135-315° on 250m spacings, with the system specifications summarised below:           <p><u>Xcite System</u></p>           Transmitter loop diameter – 18.4 meters            Number of turns – 4            Current – 235A            Peak dipole moment – 250,000NIA            Recording Time – 0.04 to &gt;11ms            Base Frequency: 25Hz            Receiver – Z,X,coils            Receiver Diameter – 0.613m(X) and 1m(Z) with 200(X) and 100(Z) turns            Magnetic Sensor: on Tx/Rx Loop            Flying Height – 60-70 meters            EM sensor Height- 30-40 meters            Magnetic sensor Height – 75 meters         </li> <li>Historic Teck Cominco holes were sampled using unknown techniques.</li> <li>Diamond core drilling was used to obtain samples representing 0.2m -1.5m downhole intervals, selected by lithological logging.</li> <li>Diamond drill core was collected in industry standard core trays, logged and photographed by suitably qualified geologists.</li> <li>Intervals were selected on the basis of geological logging for cutting by core saw and half core sampling for assay.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<ul style="list-style-type: none"> <li>Historic Teck Cominco holes were drilled with NQ2.</li> <li>Drill core was orientated wherever possible and all holes were downhole surveyed with a single-shot camera.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Historic Teck Cominco drill sample recovery calculations are unknown.</li> </ul>
Logging	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Historic Teck Cominco drill holes were geologically and structurally logged. Alteration and mineralisation mineral abundances were visually estimated.</li> <li>The detail of geological logging is considered sufficient for mineral exploration.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>The Xcite survey employed a Novatel DL-V3L1L2 receiver measuring up to 12 satellites, employing a 20Hz recording interval an accuracy of 1.2m and to &lt;1m with correction. and SF-01 laser altimeter with a 1cm resolution.</li> <li>Historic Teck Cominco drill holes were cut with a diamond saw and half core samples were collected in calico bags</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	and submitted to Genalysis Laboratories Perth. Sample preparation methods are not known.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Historic Teck Cominco Australia Pty Ltd (Teck Cominco) samples were assayed by Genalysis Laboratory Services, Perth for a wide suite of elements including Au and Ag by aqua regia digest and ICP-MS finish, with Zinc assayed by aqua regia digest and via Flame Atomic Absorption Spectrometry (AAS) finish.</li> <li>It is unknown what standards/quality control procedures were undertaken by Teck Cominco.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The historic assay results are compatible with observed mineralogy.</li> <li>Twinned holes were not used and not considered necessary at this early stage of exploration.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>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.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The spacing between the flight lines is approximately 250m. Readings sampled to locations every 1m along flight lines.</li> <li>The historic drilling was of reconnaissance nature and not conducted on a regular grid spacing.</li> <li>The reported drill results are not sufficient to establish mineral resources.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The flight path is perpendicular to strike direction of geological formations and is sufficient to locate discrete conductive anomalies.</li> <li>Fabrics in orientated drill core indicate drilling was at high angle (nearly perpendicular) to stratigraphy and observed sulphide zones.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable for Airborne geophysical survey.</li> <li>Historic Teck Cominco sample security procedures are unknown.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>The data were independently verified by Mathew Cooper of Core Geophysics.</li> <li>Historic Teck Cominco assay results agree well with the observed materials.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The Thor Project comprises granted Exploration Licences E70/4837 and E70/5067.</li> <li>The Exploration Licences are 100% held by Venture Lithium Pty Ltd, a wholly owned subsidiary of Venture Minerals Ltd.</li> </ul>

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Previous exploration in the area of interest most notably include Pancontinental Mining, Amerod Holdings Ltd, WA Exploration Services Ltd.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The exploration area is within the Balingup Metamorphic Belt which is considered prospective for pegmatite hosted lithium, tin and tantalum-niobium deposits including the world class Greenbushes tin-tantalum-lithium mine, and as the work of the Teck JV shows also prospective for metamorphosed VMS deposits. Ultramafic units to the north of E70/4837 have also been previously explored for ultramafic-hosted chromium and nickel, most notably by WMC and BHP Minerals during the 1980-1990s period.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <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:               <ul style="list-style-type: none"> <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> </ul> </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>	<ul style="list-style-type: none"> <li>Historic drillholes by Teck Cominco referenced:</li> <li>WPD04 collared at 406,545E/6,219,455N, 239m RL, Azimuth 300° MGA, dip -60°, 220.5m end of hole</li> <li>WPD07 collared at 407,781E/6,220,047N, 254m RL, Azimuth 320° MGA, dip -60°, 220.5m end of hole</li> <li>WPD13 collared at 408,000E/6,220,240N, 241m RL, Azimuth 300° MGA, dip -60°, 156.3m end of hole</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>No data aggregation methods have been applied.</li> <li>Metal equivalents have not been applied.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The historic Teck Cominco holes were reconnaissance in nature and detailed geometry of target mineralisation is not defined.</li> <li>Mineralised intervals were observed to be near perpendicular to core axis, thus can be interpreted to be near true width.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>An appropriate exploration and drilling plan is included in the body of this release.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Venture is only referencing the mineralised intercepts of Teck Cominco's historic drill holes.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Bulk density, geotechnical and metallurgical works were not undertaken on the historic Teck Cominco drill holes.</li> <li>Appropriate exploration plans are included in the body of this release.</li> </ul>
Further work	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Venture proposes to conduct further surface geochemistry and drilling to advance the Cu-Zn targets.</li> <li>An appropriate exploration target plan is included in the body of this release.</li> </ul>