

## Chalice Mining identifies new Ni-Cu-PGE targets at Venture's South West Project

### HIGHLIGHTS

- Chalice Mining (ASX: CHN) has received results from the recently completed Auger Soil Geochemistry program (refer Figures 1 & 2) and has identified two new Ni-Cu-PGE targets. The new targets are located over interpreted ultramafic rocks, which contain coincident and untested airborne electromagnetic ("EM") and magnetic anomalies at Thor (refer to Figures 1 & 2);**
- Following completion of the latest auger sampling program combined with the recent Maiden Drill Program, Chalice has now met its expenditure requirement of \$1.2 million to earn 51% and would need to spend (at its election) a further \$2.5 million over the next two years to earn 70% in Venture's South West Project (for full JV earn-in terms refer to VMS and CHN ASX announcements 21 July 2020);**
- The South West Project is located ~240km south of Perth in the Balingup Metamorphic Belt, within the highly prospective West Yilgarn Ni-Cu-PGE Province discovered by Chalice (refer Figure 5). The Project hosts the Thor Target, a 20km long, magnetic anomaly containing multiple EM targets (refer Figure 4).**

**Venture's Managing Director commented** *"The Company is very pleased with the results of Chalice's Auger Geochemistry Program, successfully delivering two new Nickel-Copper-PGE targets associated with interpreted ultramafic rocks and coincidental with Magnetic and Airborne Electromagnetic highs at Thor. These targets were not part of Chalice's ground EM program completed last year and the Auger Soil Geochemical results for these new targets have stronger magmatic indicators than the area covered by the recent ground EM survey. In addition, there are several kilometres of strike on the prospective 20 km long Thor magnetic trend that is yet to see any Geochemical surveying or EM work. Venture believes that Chalice's latest exploration results have successfully identified a new and prospective ultramafic rock sequence that runs parallel to the Thor target and has never been explored.*

*I am very pleased with the progress made to date at Thor. With Chalice now having met their 51% expenditure milestone ahead of schedule, Venture looks forward to working with Chalice in the future on our South West project."*

Venture Minerals Limited (**ASX code: VMS**) ("Venture" or the "Company") is pleased to announce that Chalice Mining Limited (**ASX code: CHN**) ("Chalice") has received results from the recently completed Auger Soil Geochemistry program and has identified two new target areas having magmatic Ni-Cu-PGE sulfide potential supported by underlying geology that is consistent with the presence of ultramafic rocks (shown by elevated Cr) and lie within areas of untested airborne EM anomalies and coincident with magnetic highs at Thor, that warrant exploration follow-up.

These new targets were not part of Chalice's ground EM program completed last year and the Auger Geochemical results in these new targets have stronger coincidental magmatic indicator metals, including Ni, Cu, Co, Pd, Pt & Au, than the area covered by the recent ground EM. There remains several kilometres of strike on the prospective 20km long Thor magnetic trend that has not been the subject of any Surface Geochemical or EM work programs. In addition, there is another area in the Project that clearly has ultramafic rocks (marked by historical mapping and talc occurrences, talc is typically a product of the metamorphism of ultramafic rocks) that are running parallel to the Thor target that remain unexplored.

Chalice's Auger Soil Geochemistry program, in combination with their recently completed Maiden Drilling Program (with assay results due shortly) on the prospective 20 km long Thor magnetic trend, have met Chalice's expenditure requirement of \$1.2 million to earn 51% and would need to spend (at its election) a further \$2.5 million by 29th July 2024 to earn 70% in Venture's South West Project. The next stage for the project would include following up the Auger Soil Geochemistry program results with ground EM, and infill geochemical sampling, to prepare the generated targets for potential drill testing.

The South West Project (256 km<sup>2</sup>) is located ~240 km south of Perth hosted in the Balingup Metamorphic Belt, within the highly prospective West Yilgarn Ni-Cu-PGE Province discovered by Chalice that hosts their Julimar discovery, which is one of the largest greenfield Ni-Cu-PGE sulfide discoveries in recent history (*refer Figure 5*). The two main prospects within the Project are Thor and Odin, and both contain areas of potential Nickel-Copper-PGE prospectivity.

Thor is a 20km long magnetic anomaly (*refer Figure 4*) associated with chromium rich rocks indicative of mafic-ultramafic intrusions. An airborne EM survey by Venture identified 13 highly conductive anomalies within the southern 6.5km of the regional magnetic feature, of which only two have been tested by single holes in Venture's 2018 maiden drill program, with the last drill hole (TOR05) intersecting 2.4 metres of Massive Sulfide averaging 0.5% Copper, 0.05% Nickel, 0.04% Cobalt and anomalous gold & palladium (*refer Figures 3 & 4 and ASX announcement 21 February 2019*).

At Odin, in the only hole drilled, Nickel and Copper sulfides were intersected within a highly prospective mafic-ultramafic unit that extends over 10 strike kilometres. This was further supported by surface sampling returning significant nickel and copper geochemical anomalies (*refer ASX announcement 11 May 2018*).

#### **South West Project Highlights:**

- Thor has a 20km long magnetic anomaly associated with chromium rich rocks indicative of mafic-ultramafic intrusions;
- An airborne EM survey in 2018, identified 13 targets in the southern 6.5 km of the Thor magnetic anomaly, the northern half of the survey was heavily disrupted by electrical infrastructure;
- Maiden Drill Program at Thor intersected 2.4m of Massive Sulfide in TOR05 averaging 0.5% Cu, 0.05% Ni, 0.04% Co and anomalous Au & Pd (*refer ASX announcement 21 February 2019*);
- Maiden Drill Hole at Odin intersecting Ni and Cu sulfides within a highly prospective mafic-ultramafic unit that extends over 10 strike kilometres (*refer ASX announcement 11 May 2018*).

Figure One | South West Project - Chalice's Auger Surface Geochemistry results on aeromagnetics over the Thor Target

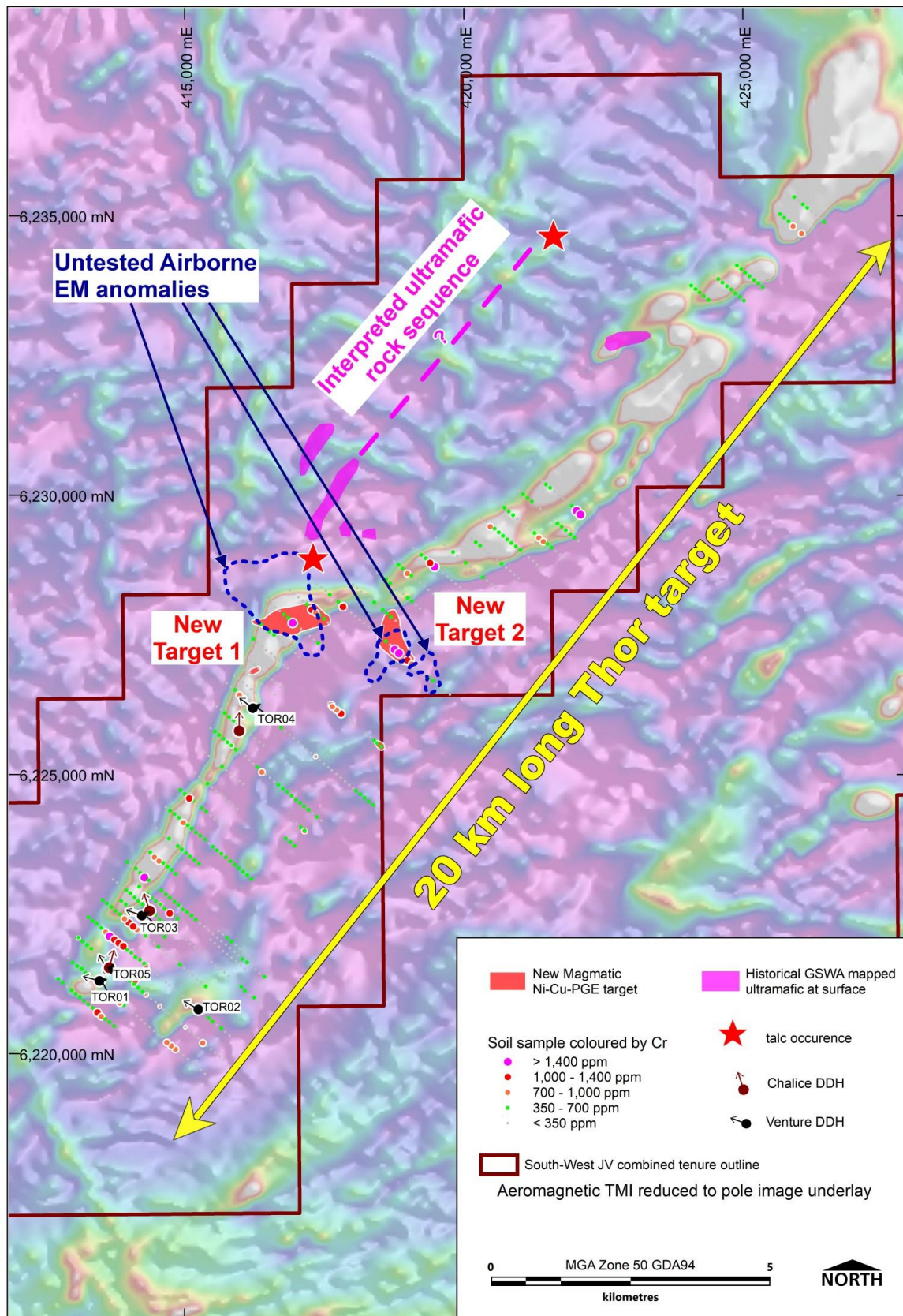




Figure Two | South West Project - Chalice's Auger Surface Geochemistry results on airborne EM over the Thor Target

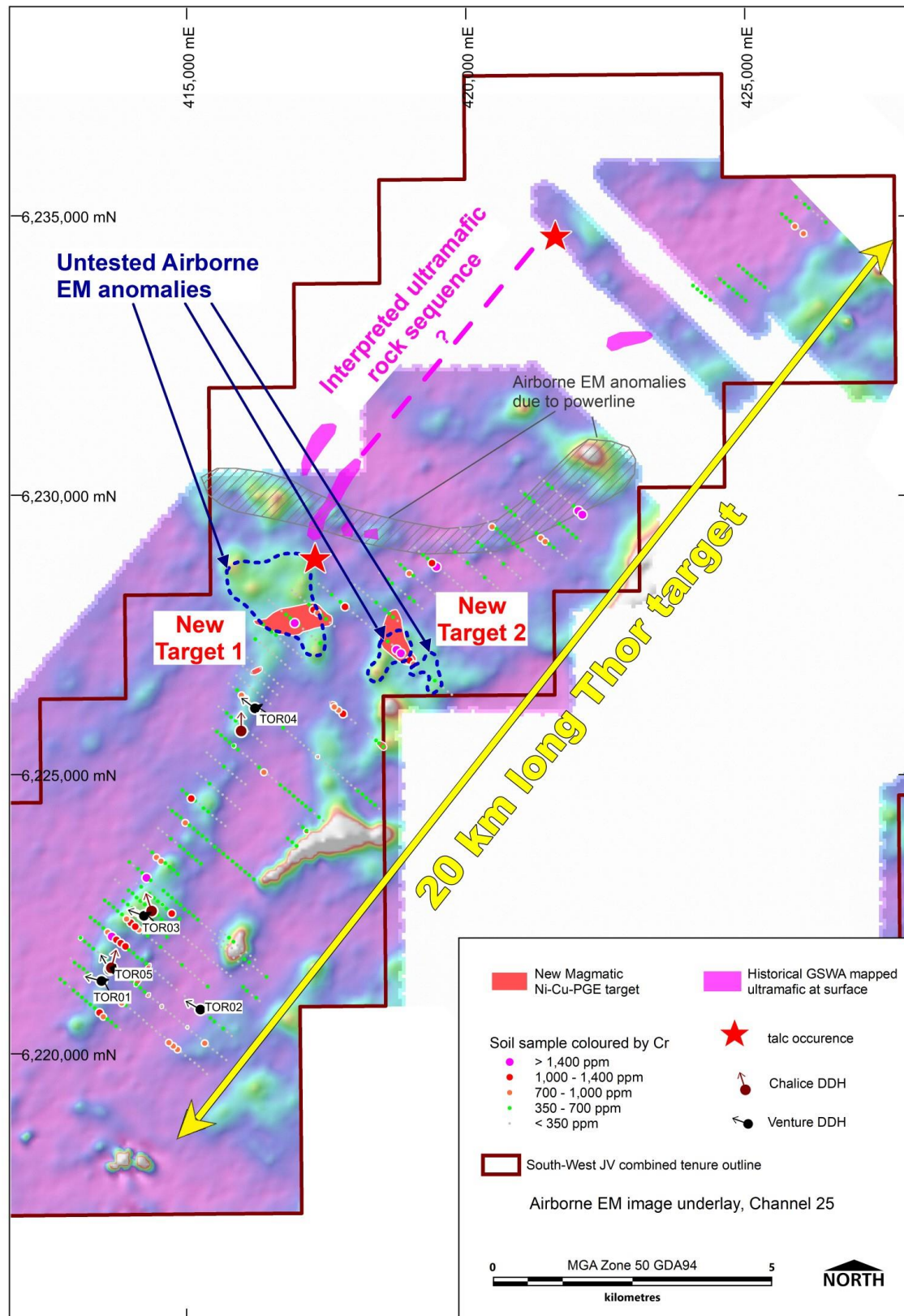


Figure Three | Massive Sulfides in TOR05 from drilling at the Thor Target



Figure Four | Comparison of Chalice's Julimar Complex and Venture's Thor Target aeromagnetic signatures and EM anomalies at the same scale

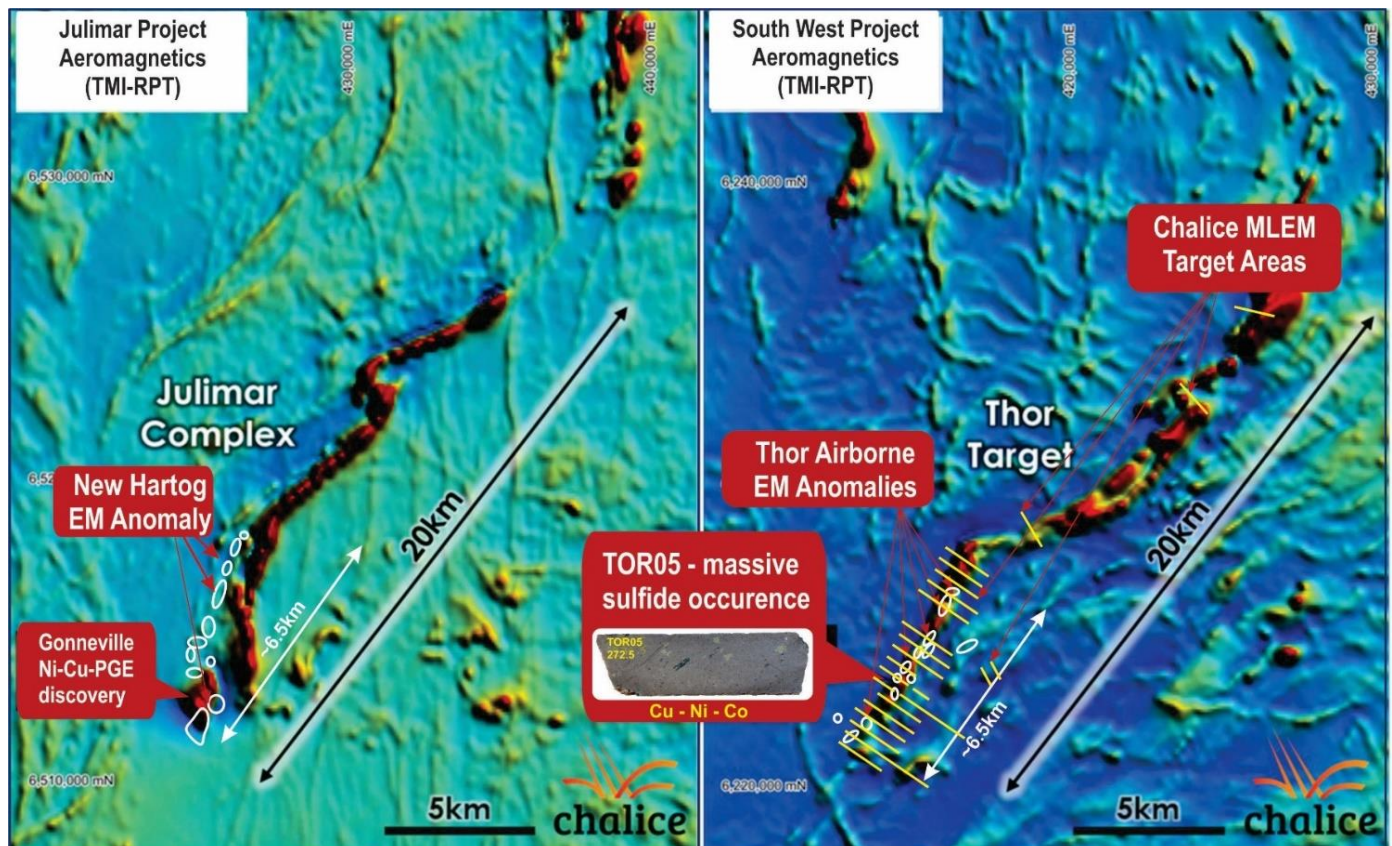
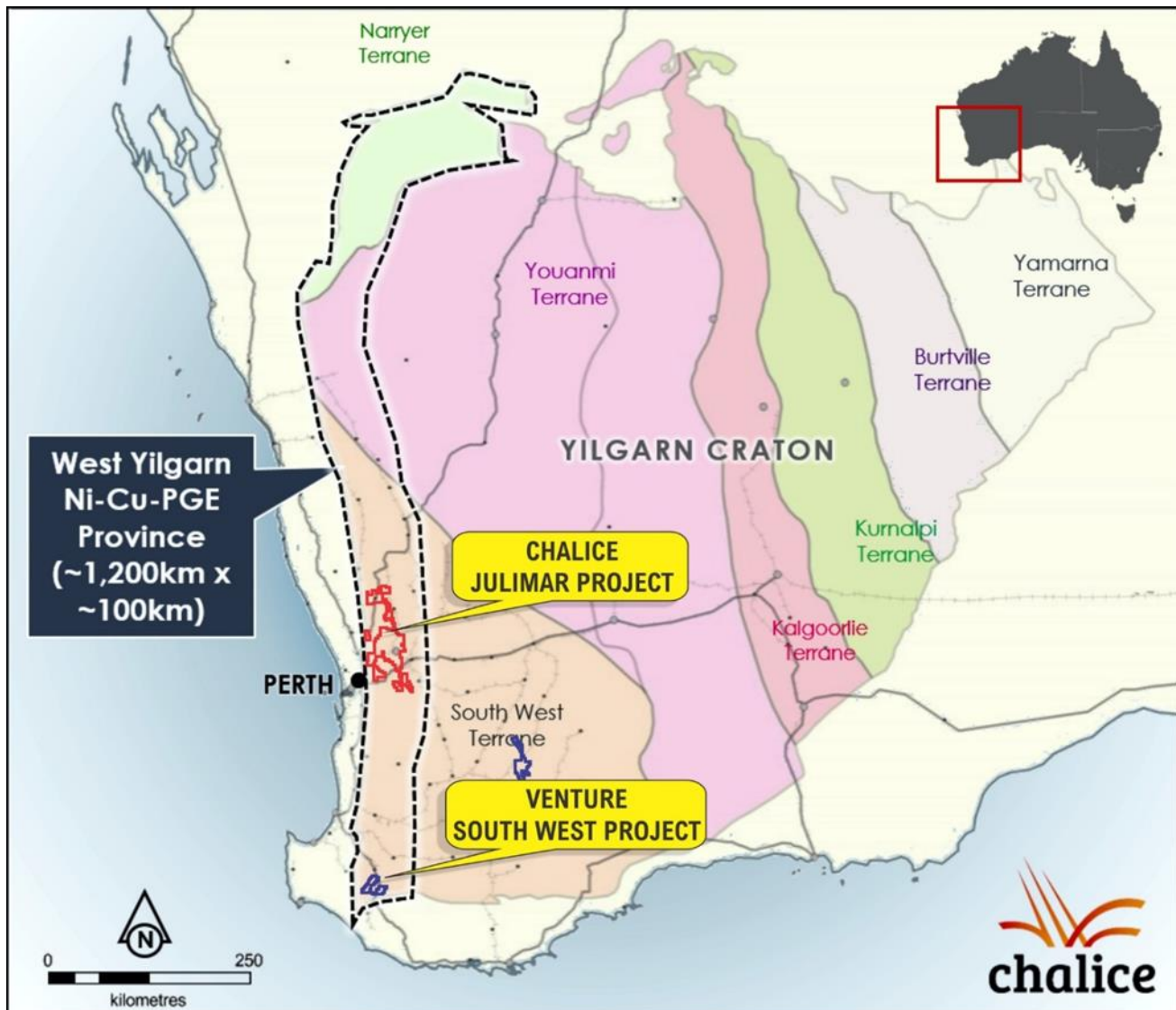




Figure Five | Chalice's Julimar and Venture's South West JV Project locations over regional geology



Authorised by the Board of Venture Minerals Limited.

*Andrew Radonjic*

**Andrew Radonjic**  
**Managing Director**

The information in this report that relates to Exploration Results, Exploration Targets and Minerals Resources 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.

## About Venture

Venture Minerals Ltd (ASX: VMS) has refocused its approach to developing the Mount Lindsay Tin-Tungsten Project in northwest Tasmania, already one of the world's largest undeveloped Tin-Tungsten deposits. With higher Tin prices and the recognition of Tin as a fundamental metal to the battery revolution, Venture has commenced an Underground Feasibility Study on Mount Lindsay that will leverage off the previously completed open-pit feasibility work. At the neighbouring Riley Iron Ore Mine, the mine is prepared for a quick restart should the market conditions become favourable. In Western Australia, Chalice Mining (ASX: CHN) recently committed to spend up to \$3.7m in Venture's South West Project, to advance previous exploration completed by Venture to test the priority 20 km long Thor target, with drilling having just commenced. At the Company's Golden Grove North Project, it has already intersected up to 7% Zinc, 1.3% Copper and 2.1g/t Gold at Orcus and has identified several, strong EM conductors to be drill tested along the 5km long Volcanogenic Massive Sulfide Target Zone, along strike to the world class Golden Grove Zinc-Copper-Gold Mine. Venture has doubled the Nickel-Copper-PGE landholding at Kulin by securing two highly prospective 20-kilometre long Ni-Cu-PGE targets.

## COVID-19 Business Update

Venture is responding to the COVID-19 pandemic to ensure impacts are mitigated across all aspects of Company operations. Venture continues to assess developments and update the Company's response with the highest priority on the safety and wellbeing of employees, contractors and local communities. Venture will utilise a local workforce and contractors where possible.

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## 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>Soil samples were collected from below the surface organic layer at a depth of between 10cm and 80cm using a hand auger and sieved on site to a +2 -5mm fraction size where possible with samples retained for geochemical analysis.</li> <li>Sample weights were kept as consistent as possible (~1kg) and collected in calico bags.</li> <li>The soil sampling techniques applied are considered standard industry practice. A 250g pulverised split better than 85% passing 75 microns was prepared prior to analysis.</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>No drilling, not applicable.</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>No drilling, not applicable.</li> <li>No drilling, not applicable.</li> <li>No drilling, not applicable.</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>Soil sample sites are described noting the nature of soil media.</li> <li>Soil sample descriptions are considered qualitative in nature.</li> <li>No drilling, not applicable.</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> <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>	<ul style="list-style-type: none"> <li>No drilling, not applicable.</li> <li>Samples were screened in the field to +2mm -5mm where possible. Approximately 20% of samples contained finer material due to the nature of some regolith material sampled. Samples were mostly dry upon collection.</li> <li>Sample preparation comprises oven drying, jaw crushing, riffle splitting and pulverising up to 250g to -75 microns (80% pass) which is considered standard industry practice.</li> <li>Sampling of consistent geological media and sample sizes improve representivity of the samples collected.</li> <li>Sample sizes (~1kg) are considered appropriate for the material sampled which composed dominantly of lateritised material.</li> </ul>
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> </ul>	<ul style="list-style-type: none"> <li>Soil samples were submitted to ALS laboratories for Pt, Pd, Au by 50g lead collection fire assay with MS finish (PGM-MS24) and 51 elements by 25g aqua</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<p>regia digestion (AuME-TL43). The aqua regia technique is not considered a total digest.</p> <ul style="list-style-type: none"> <li>No drilling, not applicable.</li> <li>Certified analytical standards and blanks were inserted at appropriate intervals in sample batches with certified levels cross referenced with analytical results. Acceptable levels of accuracy were returned with no bias detected. Results are considered high quality.</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>No drilling, not applicable.</li> <li>No drilling, not applicable.</li> <li>Primary soil sampling data was collected in both hard copy and digital format before being validated and transferred to the company's master SQL database.</li> <li>No assay data has been adjusted.</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>Soil sample locations were recorded by Chalice employees using a handheld GPS with a +/- 5m margin of error.</li> <li>The grid system used for the location of all soil sample sites is GDA94 - MGA (Zone 50).</li> <li>Nominal RLs were assigned from 1 sec (30m) satellite data.</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>Soil samples were collected on a 400m x 100m closing to 200m x 100m grid over select areas of interest.</li> <li>The data spacing is considered regional and a level of interpretation is required to assume continuity of anomalies between data points.</li> <li>No sample compositing has been applied.</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 orientations of the completed soil sampling lines are perpendicular to the interpreted strike of the regional geology whilst also covering the major geophysical features of potential exploration interest to minimise any potential bias effects.</li> <li>There is no known sampling bias to results reported.</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>Samples are collected in polyweave bags and delivered directly from site to the assay facility in Wangara, Perth by a Chalice employee.</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>No review has been carried out to date.</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 prospect is located within Exploration Licences 70/4837 and 70/5067.</li> <li>The South West Project comprises Exploration Licences 70/4837, 70/5067 and 70/5421, and all are 100% held by Venture Lithium Pty Ltd and have been Joint Ventured to Chalice Mining Ltd as outlined in Venture Minerals announcement to the ASX on 21 July 2020.</li> </ul>
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>Documented previous explorers within the area now covered by E70/4837, 70/5067 and 70/5421 most notably include Pancontinental Mining, Amerod Holdings Ltd and WA Exploration Services Pty 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</li> </ul>

Criteria	JORC Code explanation	Commentary
		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.
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>No drilling, not applicable.</li> <li>Coordinates are in MGA Zone 50 datum GDA94.</li> <li>RL is based on the 30 m Shuttle Radar Topographic Mission data.</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>Magmatic Ni-Cu-PGE targets are defined by Standard Deviation (SD) <math>\geq 2</math>, when SD taken is as the sum of the individual Ni+Cu+Pt+Pd+Co+Au SD <math>\geq 1</math>.</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>No drilling, not applicable.</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 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>Of the total of 690 soil samples collected some 45% assayed &gt;350ppm Cr, 8% assayed &gt;700ppm Cr, 3% assayed &gt;1,000ppm Cr and 1% assayed &gt;1,400ppm Cr.</li> <li>Of the total of 690 soil samples collected some 31% present <math>\geq 1</math> SD, some 16% present <math>\geq 2</math> SD, some 6% present <math>\geq 3</math> SD and some 2% present <math>\geq 4</math> SD, when SD taken as the sum of the individual Ni+Cu+Pt+Pd+Co+Au SD <math>\geq 1</math>.</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 work have not been implemented at this reconnaissance stage of exploration.</li> <li>Appropriate reconnaissance 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>The next stage for the project would include following up the Auger Soil program results with ground EM, and infill geochemical sampling to prepare the generated targets for potential drill testing.</li> <li>An appropriate exploration target plan is included in the body of this release.</li> </ul>