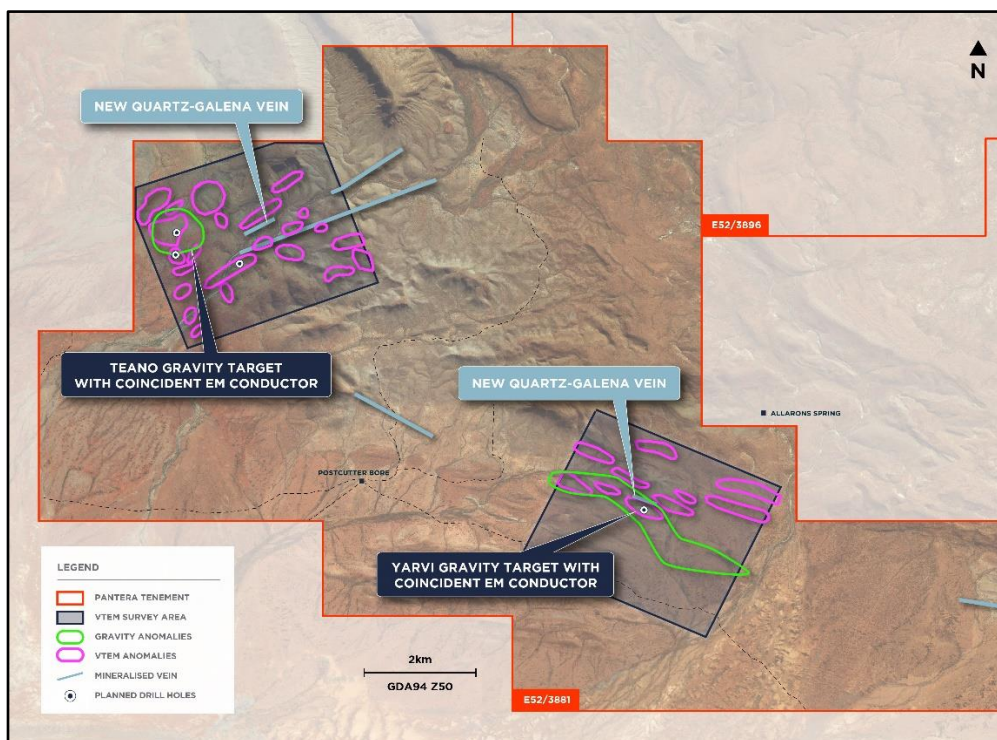


6 April 2022

# HELLCAT VTEM SURVEY STRENGTHENS GRAVITY TARGETS

## HIGHLIGHTS

- **VTEM (Versatile Time Domain Electromagnetic) survey outlines multiple conductors.**
- **High priority gravity targets at Teano and Yarvi are coincident with EM conductors.**
- **Proposed drilling has now been optimised to test high priority gravity targets and modelled EM conductors.**
- **Field reconnaissance follow up of preliminary EM conductor targets identified additional galena mineralisation in outcrop, proximal to the geophysical targets.**
- **The mineralised 'Teano Vein' has now been extended by 800m to a strike length of 3500m.**



**Figure 1 - Teano and Yarvi prospects showing the gravity and VTEM targets**

**Pantera CEO, Matt Hansen commented:**

*"The results of the recent VTEM surveys over the Teano and Yarvi gravity targets are encouraging for base and precious metal mineralisation. Having multiple geophysical and geochemical anomalies, within a prospective structural and stratigraphic setting, continues to build our excitement for the Hellcat Project and the significant potential for a successful discovery. The identification of new quartz-galena veins is further evidence of the potential for significant mineralisation within the project area.*

*With a proposed drill program anticipated for June 2022, we look forward to an exciting year ahead for the project."*

Pantera Minerals Limited (**ASX:PFE**) ("**Pantera**" or the "**Company**") is pleased to announce the results of the Versatile Time Domain Electromagnetic ("**VTEM**") helicopter EM survey over high priority geological and geophysical targets, at its 80% owned Hellcat Project, located in the Edmund Basin of Western Australia.

VTEM surveying over Hellcat in February 2022 detected multiple EM conductor responses that may be associated with semi-massive to massive sulphide mineralisation or other conductive geological sources, with the highest priority targets now requiring drill testing. The VTEM survey was carried out using flight lines spaced 100m or 200m apart and a combined total of 123 survey line kilometres were acquired over the Teano and Yarvi prospects.

**VTEM CONDUCTOR TARGETS**

Interpretation of the VTEM survey data has identified a significant number of EM conductor targets. Conductor plate modelling has been carried out on the higher priority EM conductor targets and drillholes have been planned to drill test these targets.

The most significant of the EM conductor targets identified coincides with the Teano gravity anomaly, and the conductive source was modelled to sit about 375m below surface. The EIS<sup>1</sup> funded drillhole planned to test the gravity target will also test the EM conductor response.

Galena Mining's (ASX:G1A) globally significant Abra Pb-Ag Deposit (100km east of Teano) is associated with a broad, asymmetric single peak EM anomaly that was resolved by the VTEM system<sup>2</sup>. The source of the EM conductor response at Abra is caused by zones of weakly conductive massive galena ( $\pm$ pyrite and chalcopyrite) mineralisation within parts of the ore body. The Abra Deposit is also associated with a discrete gravity and magnetic anomaly.

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<sup>1</sup> Exploration Incentive Scheme (EIS) - The Western Australia Department of Mines, Industry Regulation and Safety will contribute 50% of the direct drilling costs, up to \$150,000.

<sup>2</sup> David Stannard, Jayson Meyers, and Angelo Scopel, (2021), "The Abra sedimentary-hosted Pb-Ag-Cu-Au deposit, Western Australia: A geophysical case study," The Leading Edge 40: 129-138.



## FIELD RECONNAISSANCE

Field reconnaissance to follow up some preliminary VTEM conductor target areas has identified new zones of quartz veining with fresh galena mineralisation at both the Teano and Yarvi prospect areas. Access routes to the four planned diamond drillholes have been marked out, in anticipation of the upcoming Heritage Survey.

At **Teano**, the main 'Teano Vein' has been extended a further 850m towards the gravity anomaly, increasing the total mineralised strike length to 3500m. Significantly, fresh galena veinlets were observed within a rock sample of highly silicified unit that surrounds the quartz vein, which had not been observed by previous explorers.

At **Yarvi**, the 'Postcutters Trend' of highly silicified alteration of the carbonate host with quartz-galena veining was identified for the first time. The identification of this anomalous zone along with a coincident EM conductor and gravity response has increased the prospectivity of the Yarvi target.



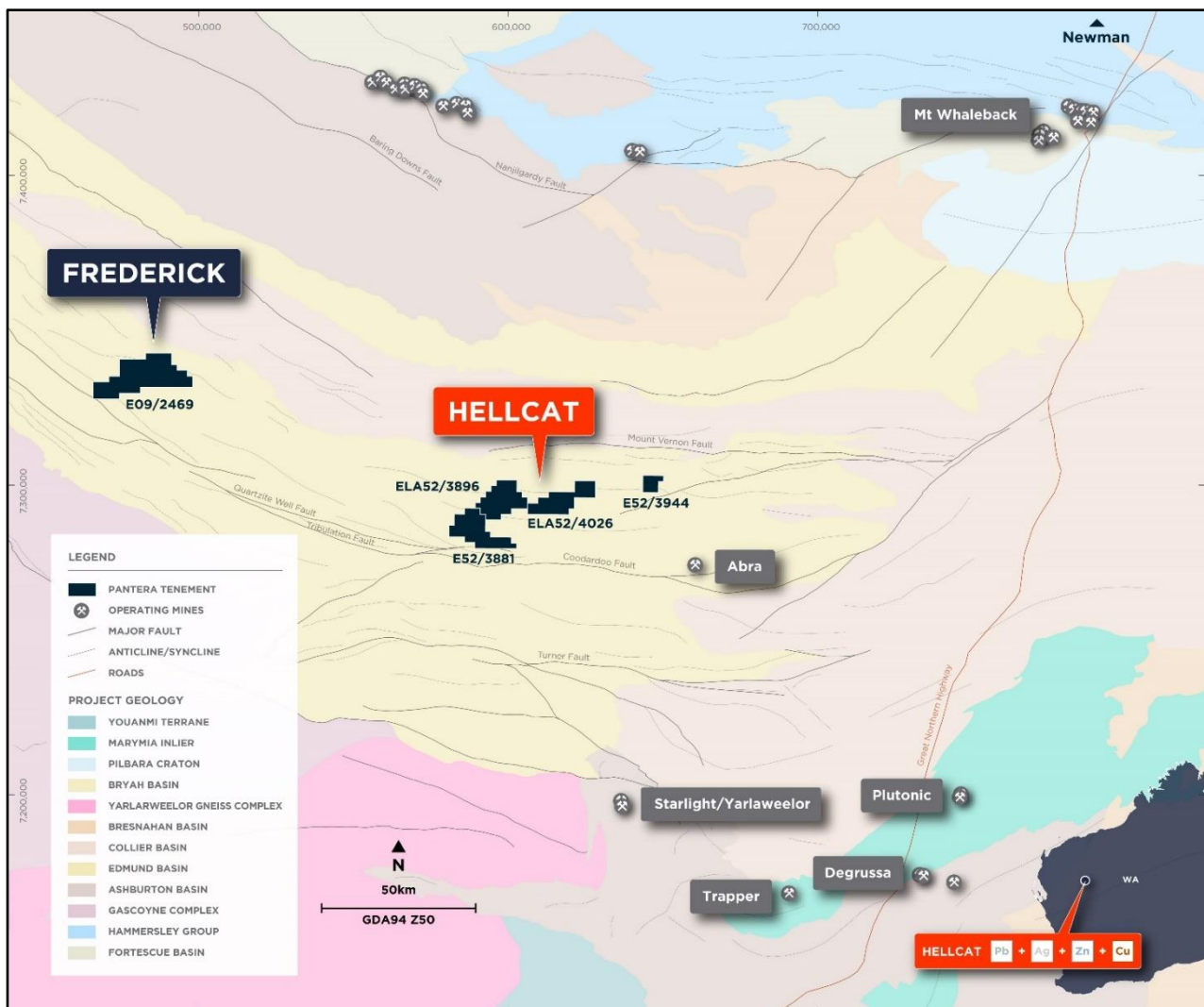
**Figure 2 - Examples of fresh galena mineralisation within rock samples**

## HELLCAT PROJECT BACKGROUND

Located within the Gascoyne Region of Western Australia, the Hellcat Project covers 442km<sup>2</sup> of tenure considered prospective for base and precious metal mineralisation. Hellcat represents a greenfields project with advanced, drill-ready geophysical targets, exhibiting gravity and EM signatures similar to the Abra lead-silver deposit (ASX:G1A), which is located 100 kms east of Teano.

The Teano gravity and EM anomaly identified within the Hellcat Project is analogous to the anomalous geophysical response observed at the Abra Deposit, indicating the presence of dense minerals at depth. The observed fresh galena within quartz veins and altered carbonate host rocks further increase the prospectivity of the Teano project.

Pantera Minerals acquired 80% interest of the Hellcat Project in December 2021.



**Figure 3 Hellcat Project - location plan**

## HELLCAT PROJECT NEXT STEPS

The following exploration activities are to be undertaken over the coming six months:

- Heritage survey to clear drill sites and access routes;
- Drilling of 4 diamond drillholes under EIS funding approved for Hellcat (Q2 2022); and
- High resolution airborne magnetic and radiometric surveying in E52/3896, E52/3944 and E52/4026 (Q2 2022).

- END -

This release is authorised by the Board of Directors of Pantera Minerals Limited.

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## COMPETENT PERSON'S STATEMENT

The information in this report that relates to exploration results and exploration targets is based on and fairly represents information compiled by Ms Georgina Clark, a Competent Person who is a Member of the Australian Institute of Geoscientists. Ms Clark has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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' ("JORC Code"). Ms Clark consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

All parties have consented to the inclusion of their work for the purposes of this announcement. The interpretations and conclusions reached in this announcement are based on current geological theory and the best evidence available to the author at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however might be, they make no claim for absolute certainty. Any economic decisions which might be taken on the basis of interpretations or conclusions contained in this presentation will therefore carry an element of risk.



## ANNEXURE 1 : JORC Code Table 1

### Section 1 Sampling Techniques and Data (Hellcat Project)

Criteria in this section apply to all succeeding sections

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>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.</i></p>	<p>The VTEM™ Max survey was flown over the Teano and Yarvi prospect areas by UTS Geophysics Pty Ltd, collecting electromagnetic and other ancillary datasets. The geophysical data has been reviewed, interpreted and modelled by the companies consulting geophysicist.</p> <p>The following specifications were used:</p> <p>Teano:</p> <ul style="list-style-type: none"> <li>• 65 line km</li> <li>• Lines oriented 340°</li> <li>• Line spacing 100-200m</li> <li>• EM sensor height was ~60m</li> </ul> <p>Yarvi:</p> <ul style="list-style-type: none"> <li>• 58 line km</li> <li>• Lines oriented 20°</li> <li>• Line spacing 200m</li> <li>• EM sensor height was ~45m</li> </ul>
<b>Drilling techniques</b>	<p><i>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.).</i></p>	<ul style="list-style-type: none"> <li>• Not applicable - no drilling data reported</li> </ul>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p>	<ul style="list-style-type: none"> <li>• Not applicable - no drilling data reported</li> </ul>
	<p><i>Measures taken to maximise sample recovery and ensure</i></p>	<ul style="list-style-type: none"> <li>• Not applicable - no drilling data reported</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>representative nature of the samples.</i>	
	<i>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.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
<b>Logging</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>The total length and percentage of the relevant intersections logged.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>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.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	
	<i>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.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>The use of twinned holes.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>Discuss any adjustment to assay data.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
<b>Location of data points</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
	<i>Specification of the grid system used.</i>	<ul style="list-style-type: none"> <li>All data was collected in WGS84 UTM</li> </ul>
	<i>Quality and adequacy of topographic control.</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	<ul style="list-style-type: none"> <li>VTEM data was collected on 100m or 200m line spacing, which is appropriate given the area being covered by the survey</li> </ul>
	<i>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</i>	<ul style="list-style-type: none"> <li>VTEM data is not used in Mineral Resource estimates.</li> </ul>
	<i>Whether sample compositing has been applied.</i>	<ul style="list-style-type: none"> <li>No sampling compositing has been applied</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	<ul style="list-style-type: none"> <li>The surveys were designed to fly perpendicular to current interpretation of geological features.</li> <li>The lines at Teano were flown at 340°</li> <li>The lines at Yarvi were flown at 20°</li> </ul>
	<i>If the relationship between the drilling orientation and the</i>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> <li>All data was collected under strict security measures by UTS Geophysics Pty Ltd.</li> </ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>VTEM survey data has been received, reviewed, interpreted and modelled by the companies consulting geophysicist</li> </ul>

## Section 2 Reporting of Exploration Results (Hellcat Project)

Criteria in this section apply to all succeeding sections

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<p><i>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.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>The Hellcat Project consists of 4 granted exploration licences covering 442km<sup>2</sup> and is location on pastoral station land and unallocated vacant crown land. <ul style="list-style-type: none"> <li>E52/3881</li> <li>E52/3896</li> <li>E52/3944</li> <li>E52/4026</li> </ul> </li> <li>The Hellcat project area is 850km NNE of Perth, 230km NW of Meekatharra and 220km SW of Newman.</li> <li>Access is via the Great Northern Highway, the Mt-Augustus-Woodlands Road, and local station tracks.</li> <li>The Frederick tenement (E09/2469) covers 88 sq. km and is located on pastoral station land.</li> </ul>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> <li>Most of the past exploration work within the Hellcat Project area including mapping and soil/rock chip sampling and geophysical surveys was completed by: <ul style="list-style-type: none"> <li>International Nickel Australia Ltd</li> <li>AMAX</li> <li>Amoco</li> <li>Geopecto</li> <li>BHP</li> <li>CRA</li> <li>Rio Tinto</li> <li>Abra Mining Ltd</li> </ul> </li> <li>The reports are available on the West Australian Mines Department WAMEX open file library.</li> <li>These reports have all been downloaded and briefly reviewed, with key rock sampling and drilling data digitised.</li> <li>All available geophysical data has been compiled and reviewed by the vendors and consulting geophysicists.</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> <li>The Hellcat Project is within the Edmund Basin, formed by intracratonic rifting and subsidence in the Capricorn Orogen in Western Australia.</li> <li>Siliciclastic and carbonate deposits of the Irregully and Kiangi Creek formations underly the area.</li> <li>The project sits at the western extent of the Jilawarra Mineralised Belt. Localized domes and shear zones correlate to major crustal shears and transfer zones, with evidence of hydrothermal alteration.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The Hellcat project is considered highly prospective for sediment replacement base metal mineralisation, particularly at/near the Irregully-Kiangi Creek contact.</li> </ul>
<b>Drillhole Information</b>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drillhole collar</i></li> <li><i>elevation or RL (elevation above sea level in metres) of the drillhole collar</i></li> <li><i>dip and azimuth of the hole; and</i></li> <li><i>down hole length and interception depth hole length.</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable - no drilling data reported</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>See body of text</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of</i></li> </ul>	<ul style="list-style-type: none"> <li>The VTEM data has been received by Pantera, and reviewed, interpreted and modelled by a consulting geophysicist.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All known and relevant data has been reported</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> </ul>	<ul style="list-style-type: none"> <li>All VTEM conductor responses will be assessed in due course</li> <li>Four diamond drillholes have been planned and marked out.</li> <li>A Heritage Survey is pending, before earthworks and drilling can proceed.</li> </ul>