

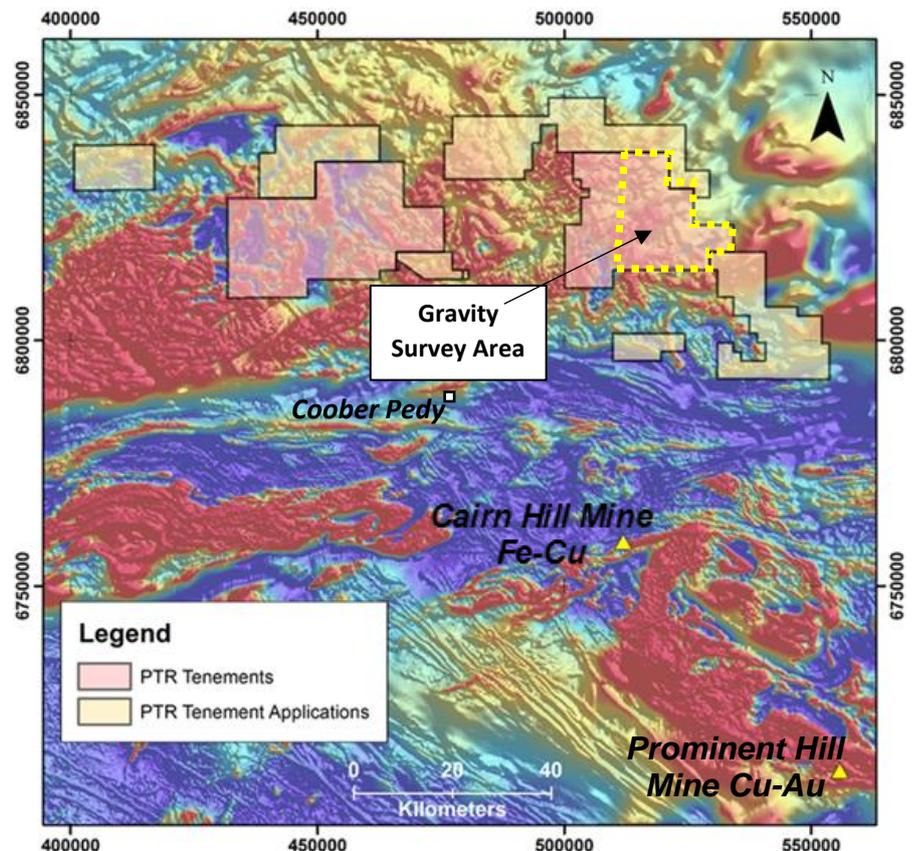
## Gravity Survey Identifies High Tenor Olympic Dam Style Targets

### HIGHLIGHTS

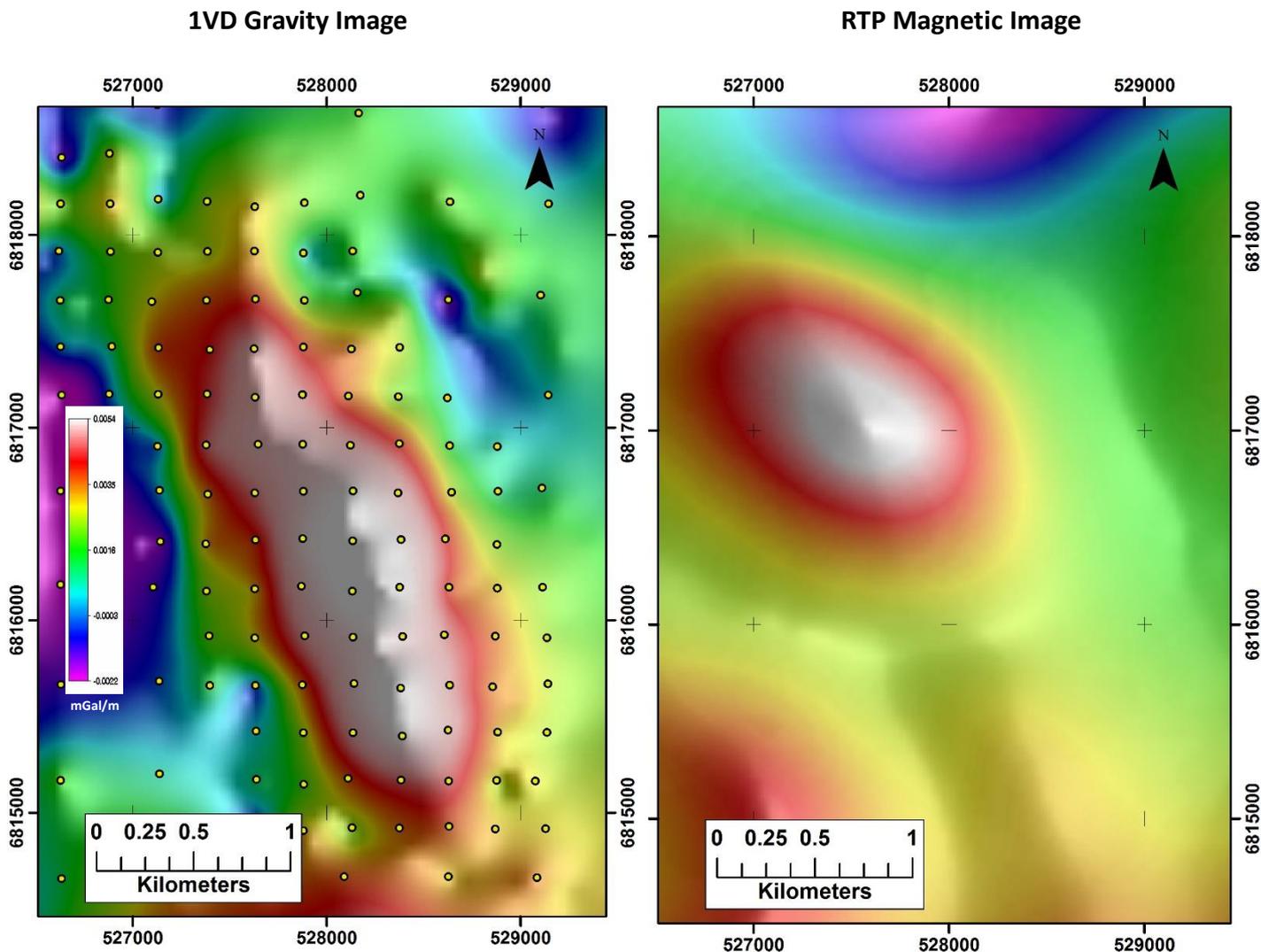
- A gravity survey over the eastern half of EL 6333 has been completed and preliminary modelling has identified several targets.
- The Area 3 Anomaly is a large-amplitude discrete gravity target of at least 3 milligals and comparable in size and magnitude to the Prominent Hill copper-gold deposit gravity response.

Petratherm Limited (“Petratherm” or “the Company”) (ASX: PTR) is pleased to announce that gravity survey operations have been completed over an eastern portion of its Mabel Creek Project Tenement holdings (EL 6333). In total 1,124 gravity readings were taken to infill 7 areas which had some previous evidence of gravity and/or magnetic anomalism (Figure 1). Preliminary findings of the raw data have identified several anomalies which will undergo 3D modelling analysis to help rank and define targets for potential drill testing. One of these targets, Area 3, is a discrete high tenor gravity anomaly which is comparable in size and magnitude to the gravity response from the Prominent Hill Copper-Gold Deposit. Survey details are presented in Table 1 and early descriptions of two of the initial defined targets are presented below. Further results and presentation of other targets will be reported once gravity modelling work has been completed.

**Figure 2** - Regional location map showing Petratherm’s Mabel Creek Project tenements, gravity survey area and major mines overlying a regional reduced to pole aeromagnetic image.

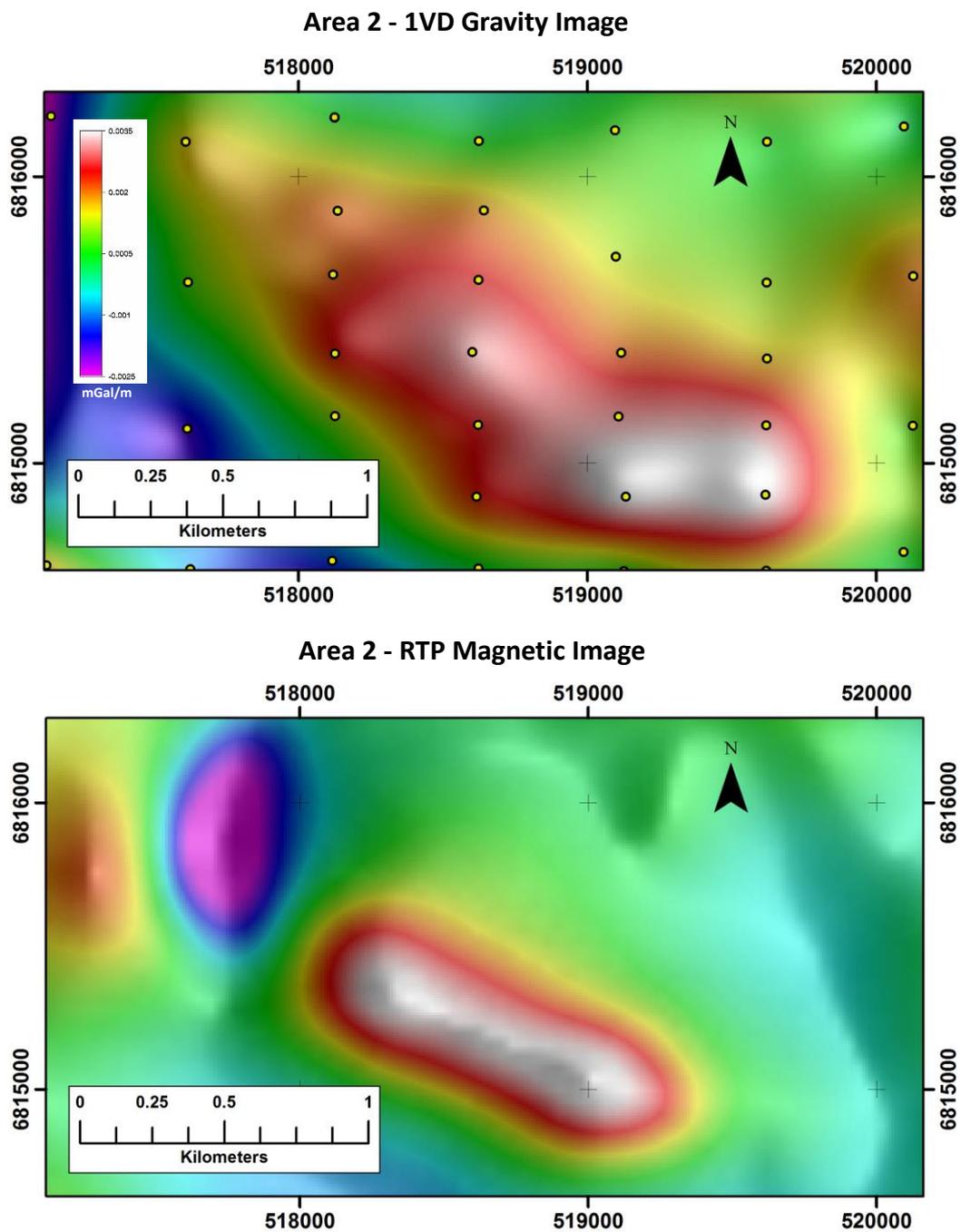


The Area 3 target is a discrete NNW trending gravity anomaly, approximately 2.5 kilometres in length and at least 3 milligals in magnitude (Figure 2). The target has a comparable size and magnitude of gravity to the Prominent Hill copper-gold deposit and initial depth modelling estimates suggest the top of the body may start at about 250 metres depth. 3D Inversion modelling work is yet to be completed and this will be reported at a later date.



**Figure 2** – Area 3 Anomaly – 1VD Gravity Image (left) and RTP Magnetic Image (right). Gravity stations yellow dots. Gravity anomaly is approximately 3 milligals in magnitude and mostly not magnetic.

The Area 2 target is a gravity anomaly of approximately 3 milligals within a broader zone of regional higher gravity. Figure 3 overleaf depicts a gradient gravity image highlighting the target area along with a reduced to pole magnetic image of the same area. The aeromagnetic image contains a discrete highly magnetic body however the gravity body appears to have a larger extent. Initial depth to basement estimates suggests the target may start at about 150 metres.



**Figure 3 – Area 2 Anomaly – 1VD Gravity Image (top) and RTP Magnetic Image (bottom).** Gravity stations yellow dots. Gravity anomaly is an approximate 3 milligal anomaly within a larger area of increased gravity anomalism. Note discrete high intensity magnetic body partly coincides with gravity target.

The Company has been working with Native Title Holders to complete Mining Access Agreements to allow geophysical surveying over the remainder of the tenement package and to allow subsequent drilling activities in the near term. This work is advanced, and it anticipated agreements will be finalised in the coming weeks.

***For further information, please contact:***

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**Competent Persons Statement:** The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Peter Reid, who is a Competent Person, and a Member of the Australian Institute of Geoscientists. Mr Reid is not aware of any new information or data that materially affects the historical exploration results included in this report. Mr Reid is an employee of Petratherm Ltd. Mr Reid 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'. Mr Reid consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## EL 6333 (Mount Barry Project) JORC Table 1

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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 (eg '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 Au that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling or sampling has been undertaken by Petrathern, although limited historical drilling and sampling exists.</li> <li>Historical sampling was undertaken using standard industry practices.</li> <li>Historical drill hole co-ordinates are in UTM grid (GDA94 Z53) and have been measured by hand-held GPS with a lateral accuracy of <math>\pm 4</math> metres and a vertical accuracy of <math>\pm 5</math> metres.</li> <li>No mineralisation was encountered in the historic drilling or sampling and therefore this information is not considered Material.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (eg 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 exploration drilling includes:</li> <li><b>Rotary:</b> CR/82AWH 1 &amp; 2 (CRA Exploration Pty Ltd., 1982).</li> <li><b>Rotary-Percussion:</b> CRA/MU 5 &amp; 6 (Australian Selection Pty Ltd., 1975).</li> <li><b>Reverse Circulation:</b> NC9201 &amp; NC9305 (Broken Hill Pty Co Ltd, 1992 – 1993) &amp; PD00WN009 – 011 (Goldstream Mining NL., 2000).</li> <li>Additional details from historic drilling are unknown.</li> </ul>
<b>Drill sample recovery</b>	<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 has been undertaken by Petrathern although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
<b>Logging</b>	<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> </ul>	<ul style="list-style-type: none"> <li>No drilling has been undertaken by Petrathern although limited historical drilling exists.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>Additional details from historic drilling are unknown.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<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 has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<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>No drilling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
<b>Verification of sampling and assaying</b>	<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 has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
<b>Location of data points</b>	<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 maps and locations are in UTM grid (GDA94 Z53) and have been measured by hand-held GPS with a lateral accuracy of <math>\pm 4</math> metres and a vertical accuracy <math>\pm 5</math>m.</li> <li>Two Atlas Geophysics Gravity/GNSS control stations; 201909500001 "Mt Barry South" and 201909500002 "Mt Barry North" were used to control all field observations throughout the gravity survey.</li> <li>Gravity control for the two Atlas control stations was established via tie loops</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>with existing Australian Fundamental Gravity Network (AFGN) control station 1992932018 "Airstrip Terminal – Coober Pedy SA".</p> <ul style="list-style-type: none"> <li>Control stations were established through Geoscience Australia's AUSPOS processing systems with x, y and z accuracy of 10mm.</li> </ul>
<b>Data spacing and distribution</b>	<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>Ground gravity survey stations were collected on 250m x 250m, 500m x 500m and 500m x 1000m grid configurations.</li> <li>No drilling or sampling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>No mineralisation was encountered in the historic drilling and therefore this information is not considered Material.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<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>No drilling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>No mineralisation was encountered in the historic drilling and therefore this information is not considered Material.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No sampling has been undertaken by Petratherm although limited historic sampling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
<b>Audits or reviews</b>	<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 sampling has been undertaken by Petratherm although limited historic sampling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement</b>	<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,</li> </ul>	<ul style="list-style-type: none"> <li>EL 6333 was granted to Petratherm (100%) on the 29/03/2019.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>and land tenure status</b>	<p><i>overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <ul style="list-style-type: none"> <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>EL 6333 is located approximately 50km northeast of Coober Pedy overlapping Mount Barry, Nilpinna and Anna Creek Pastoral Stations.</li> <li>The southern half of the tenement overlaps the Woomera Prohibited Area (Green Zone).</li> <li><b>Native Title Claims:</b> SCD2012/002 Arabana &amp; SCD2011/001 Antakirinja Matu-Yankunytjatjara.</li> <li>The tenement is in good standing and no known impediments exist.</li> </ul>
<b>Exploration done by other parties</b>	<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 work includes; <ul style="list-style-type: none"> <li><b>Airborne Geophysics:</b> Magnetics, Radiometrics and MCR.</li> <li><b>Ground Geophysics:</b> Magnetics and Gravity.</li> <li><b>Exploration Drilling:</b> 2 Rotary, 2 Rotary Percussion, 5 Reverse Circulation.</li> </ul> </li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Petratherm is primarily exploring for Fe-Oxide-Copper-Gold mineralisation (e.g. Olympic Dam-style) within the Peake &amp; Denison Domain of the Gawler Craton, South Australia.</li> </ul>
<b>Drill hole Information</b>	<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 has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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</li> </ul>	<ul style="list-style-type: none"> <li>No drilling has been undertaken by Petratherm.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole 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 (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• No drilling has been undertaken by Petratherm.</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>• No drilling has been undertaken by Petratherm.</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 both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No drilling has been undertaken by Petratherm.</li> </ul>
<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>• A ground gravity survey was conducted over EL 6333 by Atlas Geophysics.</li> <li>• The survey comprises 1124 gravity stations, on 250m x 250m, 500m x 500m and 500m x 1000m grid configurations.</li> <li>• Gravity control was established via an existing AFGN control station.</li> <li>• Data was acquired using two Scintrex CG- Autograv Gravity Meters, two CHC Nav i70+ GNSS Rover Receivers, one CHC Nave i70+ GNSS Base Receiver and one Leica System 1200 GNSS Base Receiver.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A range of exploration techniques are being considered to progress exploration including drilling.</li> </ul>