

## Mabel Creek Project – Drilling Operations Successfully Completed

Petratherm Limited (ASX: PTR) is pleased to announce that the drilling operations have been successfully completed with each of the 4 Stage-1 gravity targets tested, each with a single drill hole to planned depths (refer to PTR ASX release 10/02/2020 for target descriptions). The Mabel Creek Ridge is considered prospective for Olympic Dam Style Copper-Gold (IOCG) mineralised systems and related magnetite skarn copper and high value rare-earths.

The drilling was completed in good time and within budget expectations. Drilling involved a rotary mud method through, softer cover sediment to the top of the basement rock and then changed to diamond coring to the end of the hole (refer to Table 1 for drill hole collar details). Core recovery was excellent and this core has now been freighted to Adelaide for further analysis, core cutting and geochemical sampling.

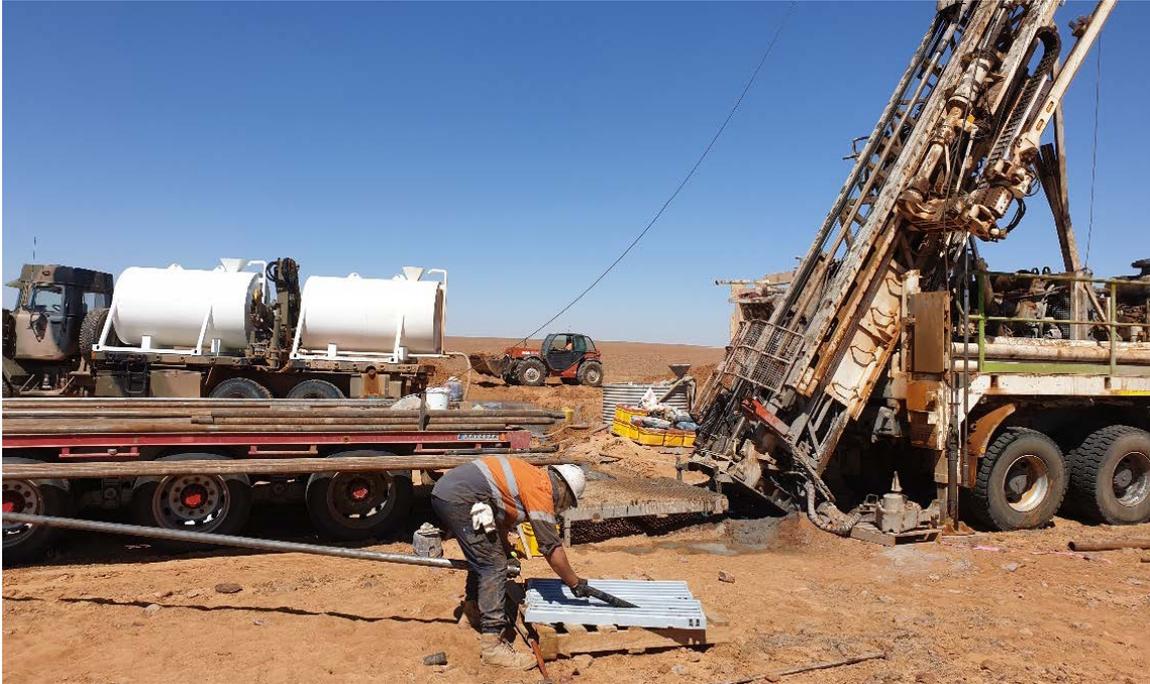
The first round of samples for geochemical analysis will be dispatched to the laboratory in the next few days and it is envisaged results will be available in approximately 3 weeks. The Company will report at that time, the initial geological findings and geochemical results.

**Table 1: Summary Table of Drill Hole Details**

Hole ID	Prospect	East	North	Elevation (Metres)	Collar dip (Deg)	Collar azimuth (Deg)	Down hole depth to basement (Metres)	End of hole depth (Metres)
MCDA2-01	Area 2	518500	6815600	110	70	200	112	296
MCDA3-01	Area 3	528000	6816300	102	60	050	267	310
MCDA5-01	Area 5 North	517100	6827200	121	62	130	152	406
MCDA5-02	Area 5 South	516880	6824500	124	60	090	143	256

*Notes: Core sent to Adelaide and detailed logging and sampling work has commenced.*

For personal use only



Drilling Operations at the Area 5 South Drill Site

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

Peter Reid  
Exploration Manager  
Tel: (08) 8133 5000

This ASX announcement has been approved by Petratherm's Board of Directors and authorised for release by Petratherm's Chairman Derek Carter

**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>Not applicable as no sampling has been undertaken as yet. No assay results are reported.</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>Rotary Mud Collar with orientated HQ and NQ diamond tail. Down hole surveys approximately every 30m, using a TruCore UPIX orientation system.</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>Core recovery process involves comparison of drillers recorded depth against the length of core recovered. To date no significant core loss has been observed.</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> <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>Not applicable. No sampling or appropriately detailed geological and geotechnical logging undertaken as yet.</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> </ul>	<ul style="list-style-type: none"> <li>Not applicable as no samples have been taken as yet, no assay results are reported.</li> </ul>

For personal use only

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>	
<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>Not applicable as no samples have been taken as yet, no assay results are reported.</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>Not applicable as no samples have been taken as yet, no assay results are reported.</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 collar 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> </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>Not applicable as no samples have been taken as yet, no assay results are reported.</li> <li>Data spacing is insufficient to establish the degree of geological and grade continuity required for a Mineral Resource estimation</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>Not applicable. The relationship between the drilling orientation and the orientation of any potential structures is unknown.</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 as yet. The core has been transported</li> </ul>

Criteria	JORC Code explanation	Commentary
		to a secure third-party facility for detailed logging and sampling. Petratherm geologists will supervise the cutting and sampling program to ensure sample security.
<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>Not applicable, no sampling has been undertaken</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 and land tenure status</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, 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>EL 6333 was granted to Petratherm (100%) on the 29/03/2019.</li> <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</li> </ul>	<ul style="list-style-type: none"> <li>Summary table of drill hole details included in main body of release. No</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>drill holes:</i></p> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> <ul style="list-style-type: none"> <li>● <i>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.</i></li> </ul>	<p>samples have been taken as yet, no assay results are reported.</p>
<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 (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>● <i>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.</i></li> <li>● <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>● Not applicable as no samples have been taken as yet, no assay results are reported.</li> <li>● No aggregation has been undertaken.</li> <li>● No metal equivalents have been used.</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>● Not applicable as no samples have been taken as yet, no assay results are reported, and no visual estimates have been 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>● Not applicable as no samples have been taken as yet, no assay results are reported.</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 comprehensive reporting of exploration results has occurred as yet. Only drill hole locations, orientations and depths drilled. Core recovered from the drilling has been transported to Adelaide for future detailed geological assessment, and sampling. Once this work has been completed results will be reported.</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</i></li> </ul>	<ul style="list-style-type: none"> <li>● Regional and infill ground gravity surveying was conducted over EL 6333. This work defined several gravity anomalies which formed the basis of initial drill targeting.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>substances.</i></p>	<ul style="list-style-type: none"> <li>Results of gravity surveying and defined drilled targets are contained in PTR ASX releases dated 14/08/2019, 15/10/2019 &amp; 30/01/2020</li> </ul>
<p><b>Further work</b></p>	<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 further drilling.</li> </ul>