ASX RELEASE **12 May 2020**
ASX: PTR

Mabel Creek Project – Drilling Results

Summary

- The Area 5 North Prospect test hole intersected a 49-metre downhole zone of breccia, with iron-oxide (hematite) enrichment and highly elevated rare earths, that may be indicative of Olympic Dam Style alteration.
- Area 5 is a large geophysical target, spanning several square kilometres and requires follow up exploration.
- Results support the Mabel Creek Ridge's fertility for Iron Oxide Copper Gold mineralisation and other related mineralisation styles.
- Numerous high priority gravity and/or magnetic targets remain to be drill tested.

Petratherm Limited (ASX: PTR) has received assays from its recent Mabel Creek Drilling Operations. The drill program successfully tested 4 gravity targets, each with a single hole to planned depths. The Mabel Creek Ridge, 50 kilometres northeast of Coober Pedy in South Australia, is considered prospective for Olympic Dam Style Copper-Gold mineralised systems and related magnetite skarn copper and high value rare-earths. The region has only been lightly explored historically and Petratherm's drill program represents a first pass drill reconnaissance of anomalous gravity and magnetic target areas which previously had no exploration drilling.

Drill hole MCDA5-01 tested one part of the large Area 5 magnetic and gravity anomaly, (Figure 4, refer to PTR ASX release 30/01/2020 for detailed target description). The hole tested the eastern flank of a strong magnetic feature and the upper portions of a deeper gravity target. A 49-metre breccia (not true width) with iron-oxide (hematite) enrichment was intersected from 337.5 metres before passing into altered granite at 386.5 metres (Figure 1). Near the base of the hole the altered granite had a later strong overprinting of magnetite which is interpreted to account for the magnetic anomaly.

The breccia matrix is dominantly sericite-biotite-hematite and geochemical analysis returned highly elevated concentrations of the light rare earths, cerium and lanthanum (sampling of the breccia matrix returned up to 1277 ppm Ce+La, Appendix 1). The form and mineralogy of the breccia is characteristic of Olympic Dam Style hydrothermal alteration seen on the edges of a mineralised system. The rock interval above the breccia zone shows broad zones of moderate sericite-biotite-chlorite-K feldspar alteration which is also characteristic of Olympic Dam Style hydrothermal alteration and includes minor hematite crackle veining. Trace levels of chalcopyrite are observed along fractures and as thin (typically 1cm-5cm) bedding parallel disseminations, with one 4 metre interval returning 0.18% copper from 168m (not true width) (Figure 2).

Figure 1 – Hole ID MCDA5-01 – Photo of core tray box 52, showing a portion of the breccia sequence. The dark matrix comprises iron-oxide enriched sericite-biotite. Clasts comprise coarse K-feldspar from the local host granite. Breccia matrix is enriched in the light rare earths, cerium and lanthanum.

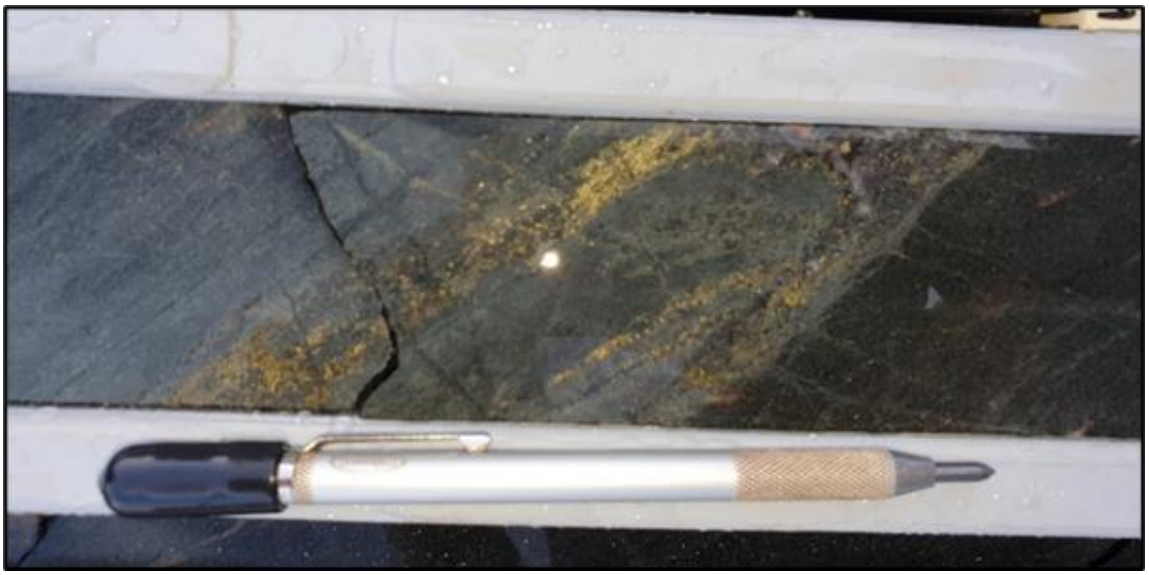

Figure 2: Drill hole MCDA5-01 - Altered meta-sedimentary sequence showing a band of chalcopyrite mineralisation. A four-metre interval from 168m down hole depth returned 4m @ 0.18% Cu.

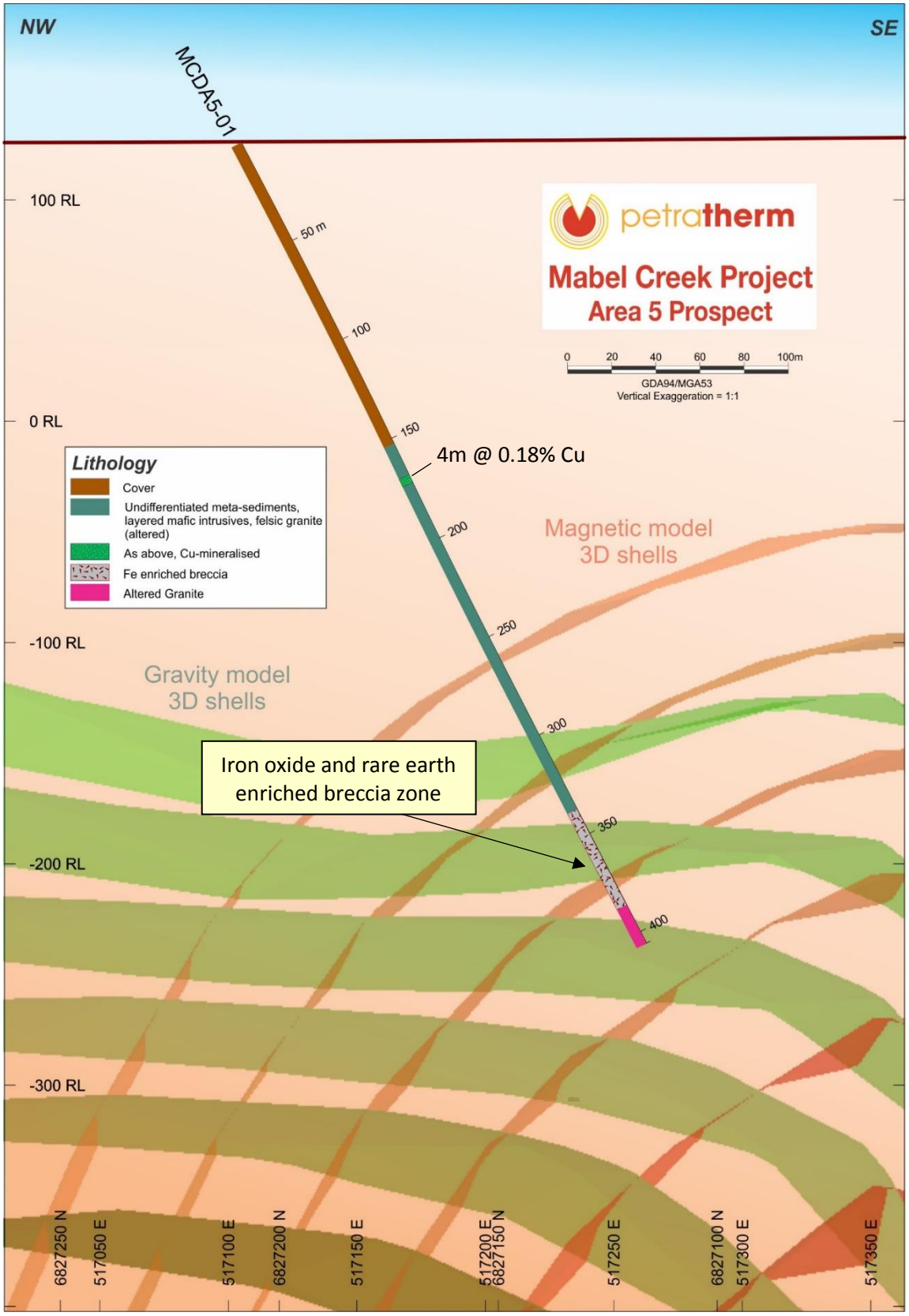

Figure 3 Cross section Hole ID MCDA5-01, completed in March at the Area 5 Prospect, Mabel Creek Project.

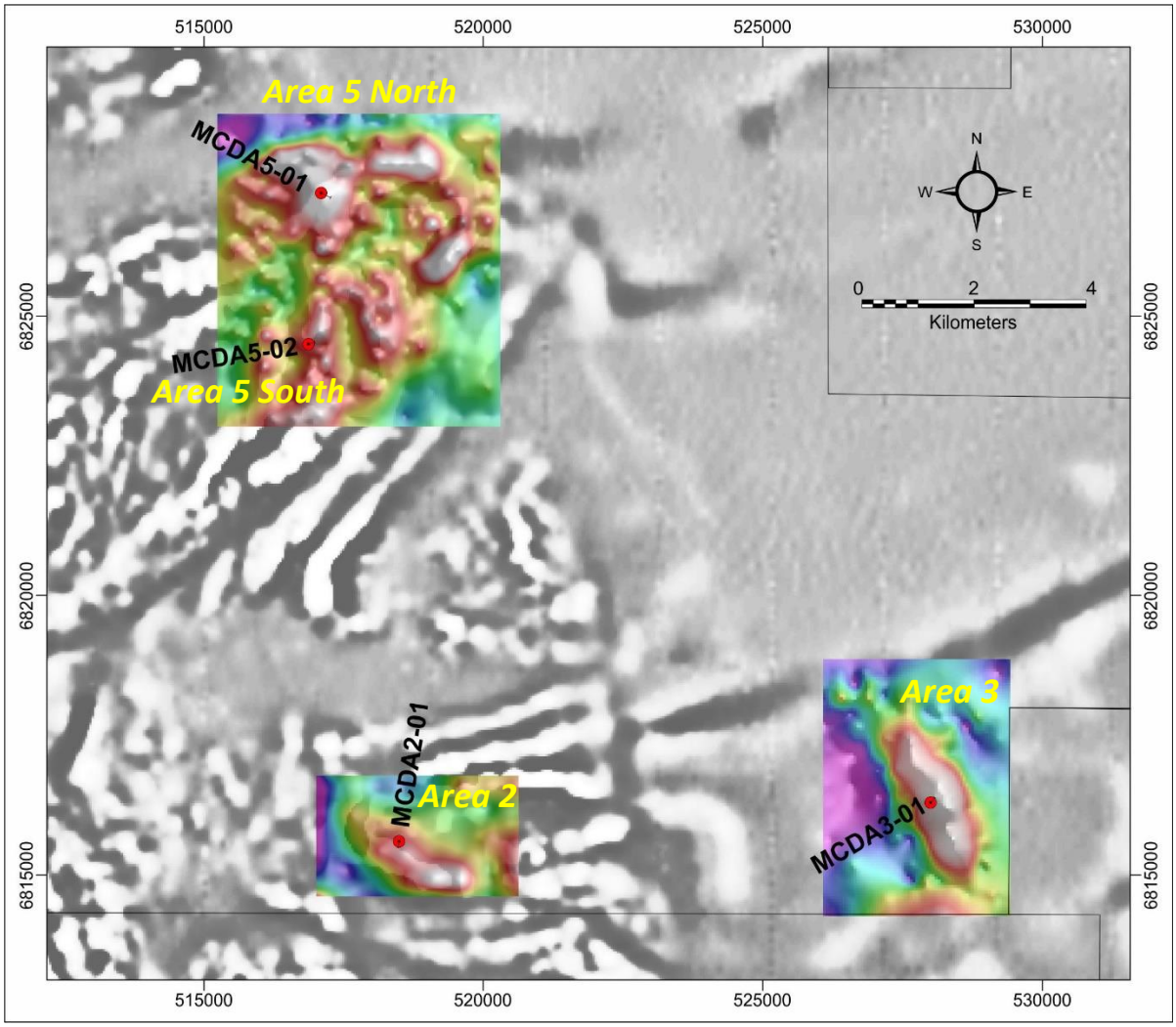

Figure 4: 1VD Gravity anomalies drilled, overlain on 2VD Greyscale Magnetic Image

Drill hole MCDA2-01 tested the Area 2 target (Figure 4), a strong magnetic anomaly and combined residual 1 milligal gravity feature within a broader 3 milligal gravity anomaly (refer to PTR ASX release 30/01/2020 for target description). The hole encountered low to moderate sericite-chlorite-biotite-K feldspar alteration and includes minor zones of hematite (iron-oxide) crackle style and bedding parallel veining. The iron-oxide alteration is enriched in light rare earths (up to 457ppm Ce+La from a 4m composite core analysis, Appendix 1). Near the base of the hole banded zones of earlier magnetite alteration and increased mafic amphibolite are interpreted to account for the magnetic and gravity target.

Drill hole MCDA3-01 tested the Area 3 gravity target (Figure 4), intersecting basement at 267 metres down hole and drilled a sequence of un-mineralised gabbroic rich rocks accounting for the gravity anomaly. Drill-hole MCDA5-02 which tested a gravity feature in the Area 5 South Prospect zone (Figure 4), intersected weakly altered mafic meta-sedimentary schists accounting for the gravity response.

The Company is encouraged by the evidence of IOCG style alteration encountered in its maiden drill campaign at the Area 5 North Target Area. This is a large geophysical anomaly spanning several square kilometres (Figure 4) and the alternation observed may indicate other portions of this anomaly could be mineralised and as a result warrants further geophysical surveying and test drilling. These results support the eastern Mabel Creek Ridge Area being fertile for IOCG style and related mineralisation.

Extensive regional gravity survey work conducted during the 2019 period identified a further 5 high priority targets and another 30 early stage gravity targets over its lease areas (Figure 5). Two high priority targets (Areas 13 & 14, refer to PTR ASX release 30/01/2020 for target descriptions) occur in deeper covered areas on the eastern side of the project area, along a major northwest trending crustal fault. The Company has applied for South Australian Government Exploration Development Initiative grant funding to aid future drill testing of these targets.

At Mabel Creek, the gravity anomalies occur under relatively shallow cover (generally less than 200 metres) and are therefore amenable to other forms of geophysical targeting. IP and EM geophysics may be trialled over the Area 5 gravity target and other gravity targets, as a means to directly locate any potential mineralised portions of the gravity anomaly ahead of further drill testing.

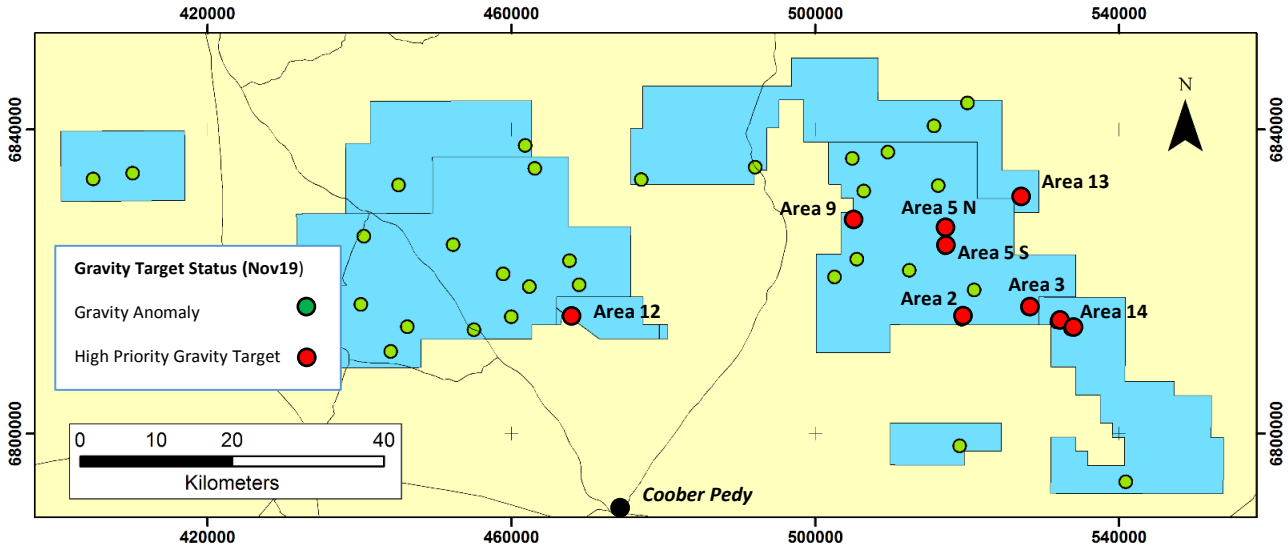

Figure 5: Petratherm's Mabel Creek Tenement Holdings and Gravity Target Locations

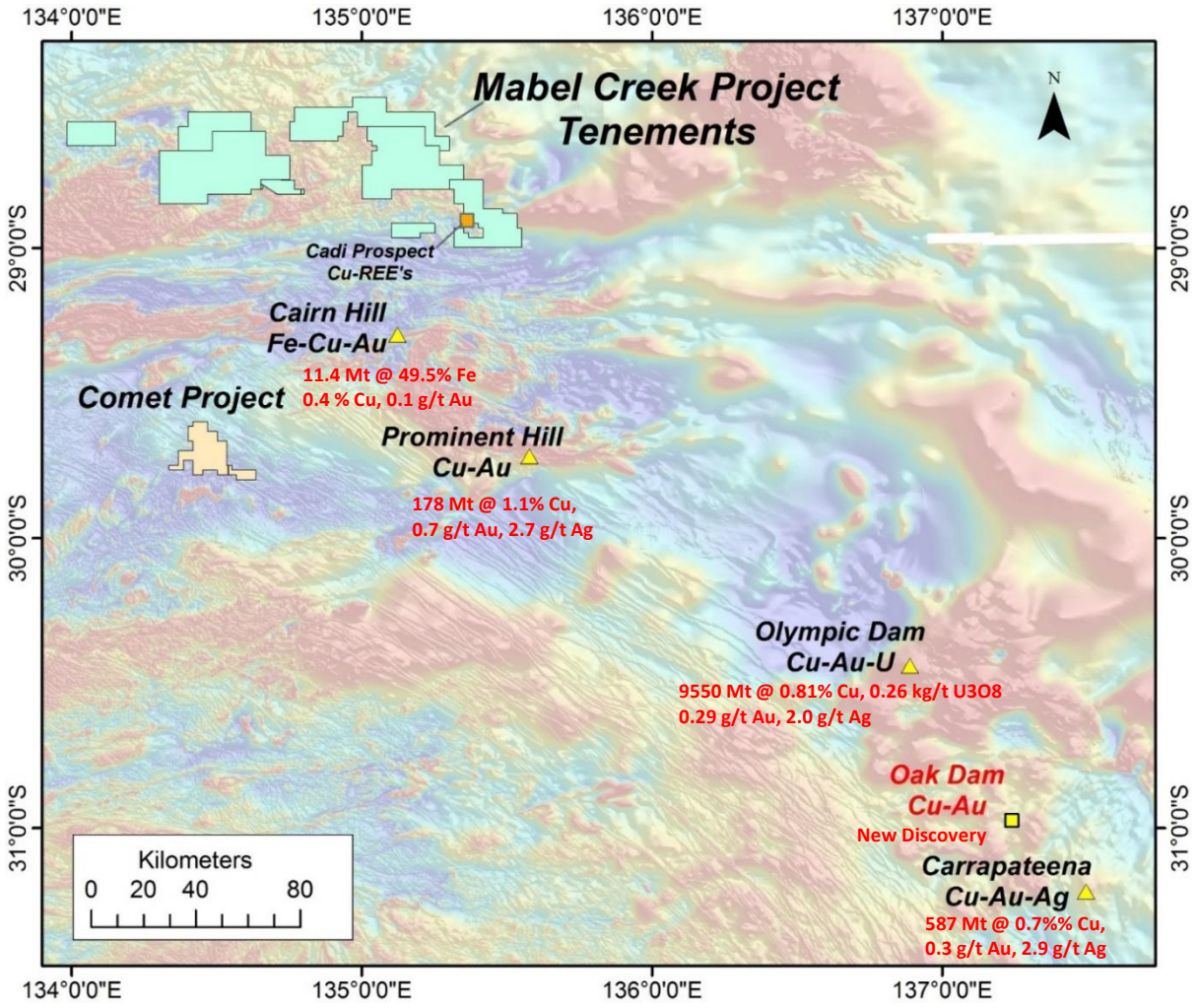

Figure 6- Location map of Mabel Creek Project Tenements, IOCG mines and related prospects, overlying a regional reduced to pole aeromagnetic image (compiled from Sth. Aust. Government data).

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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.

Appendix 1: Summary Table of Drill Hole Details

Table 1A: Summary of Drill Intervals - Mabel Creek Project.

Hole ID	Prospect	From (metres)	To (metres)	Interval (metres)	Fe (%)	Ce+La (ppm)	Cu (%)
MCDA5-01	Area 5 North	338	386	48	4.7	350	--
MCDA5-01	Area 5 North	168	132	4	8.4	54	0.18%
MCDA5-01	Area 5 North	350	350.1	0.1	7.5	583	--
MCDA5-01	Area 5 North	362	362.1	0.1	7.3	1277	--
MCDA5-01	Area 5 North	366	366.1	0.1	7.2	583	
MCDA2-01	Area 2	252	256	4	3.5	457	--
MCDA2-01	Area 2	292	296	4	4.9	344	--

Table 1B: Drill Collar locations for Mabel Creek Project.

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 for Tables 1A and 1B

1. Down hole lengths reported, and the true width of intercepts is not yet known
2. Significant results are shown for intercepts
3. Coordinates are in GDA 94 Z53

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
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 (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.*	• Sampling was undertaken using standard industry practices and standard operating procedures. The sections of core selected for assaying are marked up, digitally recorded for cutting and sampling at a certified geotechnical laboratory. • Sampling involved two NQ core cutting methods. Drill hole MCD05-01 was cut in half along a base of hole orientation line where available using a diamond core saw. One resultant half core was then cut again to produce a quarter sample for geochemical analysis. Drill holes MCDA2-01, MCDA3-01 and MCDA5-02 underwent cutting a one third sample parallel to the base of hole orientation line. • Core sections sampled where based from geological logging and Niton XRF analysis which aided determination of representative rock sequences and where alteration was observed. • Core samples submitted comprised mostly of 4 metre intervals with some minor 2 metre composite intervals submitted and spot sampling of breccia matrix encountered in MCDA5-01. • Individual samples weighed 4 to 6 kg, these were crushed, pulverised and split to produce a 50g charge for fire assay for gold and a 25g sample for multi-element (ICP-MS) analysis. Standards and blanks were undertaken during the batch analysis

Criteria	JORC Code explanation	Commentary
		as per industry best practice. The sample size is deemed appropriate for the grain size of the material being sampled.
Drilling techniques	• *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.).*	• Rotary Mud Collar with orientated, HQ diamond collar set then NQ diamond tail. Down hole surveys approximately every 30m, using a TruCore UPIX orientation system.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Core recovery process involves comparison of drillers recorded depth against the length of core recovered. Rock Formations drilled were competent and no significant core loss was observed.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Core logging is carried out by qualified geologists using project specific logging procedures. Data recorded includes, but is not limited to, lithology, structure, recovery, alteration, sulphide mineralology. This is supervised by the exploration manager familiar with the geology and alteration / mineralisation style and nature. Logging is at a sufficient level of detail to support appropriate mineral resource estimation and mining studies. • Drill logging is both qualitative by geological features and quantitative by geotechnical parameters in nature. Photographs are taken of all core trays (dry and wet) of core. • All drill intervals are logged and recorded as standard operating practice.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Drill core was cut and both quarter core and one third core was collected for submission to ALS Laboratory in Adelaide for analysis. The sample is considered representative

Criteria	JORC Code explanation	Commentary
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	and appropriate for exploration stage analysis. • Sampling of wide continuous sections of representative core from each hole as well as all zones determined to show evidence of alteration underwent geochemical analysis. • Sample preparation is considered appropriate and was undertaken at ALS Laboratories in Adelaide. Using ALS code Pul-23 and Cru-21, samples were pulverised and crushed. Samples (ALS code Spl-21) underwent splitting and were subsequently analysed at ALS Laboratories in Perth. Gold was analysed by Fire Assay (specifically ALS code Au-AA26) using a 50g sample weight. Other elements (48 in total) Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr were analysed using ALS method code Me-MS61r which involves a four-acid near total digest and an ICP-MS finish using a 25g nominal sample weight. • No duplicates were sampled as the sample size was considered appropriate for the early stage of exploration. Remaining core was left for sub-sampling if required and for any later audit/checking process's if required. • Sample size as defined above is considered appropriate to the material sampled.
Quality of assay data and	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining*	• The sampling digest methods are considered appropriate and industry standard. ALS methods MeMS61r is a 4-acid

Criteria	JORC Code explanation	Commentary
laboratory tests	*the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *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.*	digest, which is near total and Au-AA26 is a fire assay technique. • No use of portable XRF is reported. • QAQC procedures include representative standards, blanks and check assays on a routine basis by the Laboratory. No abnormalities were detected
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• At least 2 geologists have reviewed the core and has been verified by the Petratherm's exploration manager. • No twinned holes • Drilling information is handwritten then digitally entered and stored following documented core handling procedures and back up electronically. • No adjustment has been made to the primary assay data.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All collar locations are in UTM grid (GDA94 Z53) and have been measured by hand-held GPS with a lateral accuracy of ±4 metres and a vertical accuracy ±5m.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Only single drill holes are reported testing different targets so data spacing is not applicable. • Data spacing is insufficient to establish the degree of geological and grade continuity required for a Mineral Resource estimation. • No sample compositing has been applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• The relationship between the drilling orientation and the orientation of any potential mineralised structures is unknown.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• A secure custody protocol was established from the field to delivery at the Laboratory. The core was been transported to a secure third-party facility for detailed logging and sampling. Petratherm geologists supervised the cutting and sampling program to ensure sample security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No review has been undertaken at this time.

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	• *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.* • *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.*	• EL 6333 was granted to Petratherm (100%) on the 29/03/2019. • EL 6333 is located approximately 50km northeast of Coober Pedy overlapping Mount Barry, Nilpinna and Anna Creek Pastoral Stations. • The southern half of the tenement overlaps the Woomera Prohibited Area (Green Zone). • **Native Title Claims:** SCD2012/002 Arabana & SCD2011/001 Antakirinja Matu-Yankunytjatjara. • The tenement is in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration work includes; **Airborne Geophysics:** Magnetics, Radiometrics and MCR. **Ground Geophysics:** Magnetics and Gravity. **Exploration Drilling:** 2 Rotary, 2 Rotary Percussion, 5 Reverse Circulation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Petratherm is primarily exploring for Fe-Oxide-Copper-Gold mineralisation (e.g. Olympic Dam-style) within the Peake & Denison Domain of the Gawler

Criteria	JORC Code explanation	Commentary
		Craton, South Australia.
Drill hole Information	• *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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *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.*	• Summary table of drill hole details included in Appendix 1. • True widths of intercepts reported is not yet known.
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Sample length weighted averaging was used to calculate the aggregate intervals reported. • Sample results reported represent 4 metre composite intervals. • No mineralised grades of significance have been reported, only evidence of alteration. • No metal equivalents have been used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Down hole length has been reported, as true width is not known, as insufficient work has been undertaken to understand the true width of intervals. • "Down hole length, true width not known" is stated in the notes to Table 1A.
Diagrams	• *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.*	• Plan view of drill collar locations has been shown in the body of this report. Section view has also been provided for the one hole (MCDA5-01) which returned material exploration results.
Balanced reporting	• *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.*	• The reporting is considered balanced. This is the first announcement by the Company of new drilling exploration results on this project. • Comprehensive reporting of all historical exploration results has occurred when appropriate.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	• *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.*	• 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. • Results of gravity surveying and defined drilled targets are contained in PTR ASX releases dated 14/08/2019, 15/10/2019 & 30/01/2020
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• A range of exploration techniques are being considered to progress exploration including geophysical surveying to aid drill targeting and further drilling.