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## Petratherm Secures Land Position Over Highly Prospective Olympic Dam Style, Copper-Gold, Geophysical Anomalies

## HIGHLIGHTS

- > Exploration licence application secured, covering a total area of 848 km<sup>2</sup>.
- Licence covers a portion of the eastern Mabel Creek Inlier which is prospective for Iron Oxide-Copper-Gold (IOCG) style mineralisation.
- > Several semi-coincident large magnetic and gravity anomalies identified.

Petratherm Limited ("Petratherm" or "the Company") (ASX: PTR) is pleased to announce that it has secured a ground position over a portion of the Mabel Creek Inlier covering a number of semicoincident magnetic and gravity anomalies which have not been drill tested. These geophysical features have potential to be due to hydrothermal iron-oxide systems. Mineralised examples of these occur along the eastern margin of the Gawler Craton of South Australia and include Olympic Dam, Carrapateena, Prominent Hill and most recently at BHP's latest discovery at Oak Dam (Figure 1).

The Mabel Creek Inlier is a large block exhibiting variable magnetic intensity and lies to the north of the Mount Woods Inlier which hosts the Prominent Hill Copper-Gold deposit. Importantly, depth of the overlying cover sediments in this region is minimal, with historical drilling recording the top of the prospective basement between 180 metres and 260 metres.

Recognising the regions prospectivity for IOCG style mineralisation, several major companies, including BHP, Vale, Teck Resources and Anglo American, undertook some early stage exploration over portions of the Mabel Creek Inlier. This work generally comprised widely spaced regional ground gravity surveying and included some limited single hole drill testing of magnetic and/or gravity features. Many of the early stage geophysical anomalies defined by this work were not followed up with more detailed surveying and have not been drill tested.



Figure 1 - Location map of major mines, the new BHP discovery (Oak Dam) and outline of the new tenement application area overlying a regional reduced to pole aeromagnetic image (compiled from Sth.Aust. Government data).



**Figure 2** – Regional pseudo-colour residual gravity image with 1 milligal gravity contours shown over the exploration licence application area (compiled from Sth.Aust. Government data). Historical drill hole collar positions shown as yellow dots. Several large gravity features are apparent, requiring follow up infill gravity surveying.

Petratherm is reviewing previous exploration results and processing geological and geophysical data in preparation to commence field work once the tenement is granted. Regional gravity station spacing over most of the tenement application area is 500 metres by 2000 metres and additional infill gravity surveying of the existing gravity data is warranted to locate, define and rank targets ahead of potential drill testing.

Petratherm's Chairman, Mr Derek Carter, who led the team which discovered the Prominent Hill IOCG deposit stated "the Mabel Creek Inlier, based on the character and size of the geophysical anomalies shown, has potential to host a world class IOCG accumulation. Importantly the anomalies occur at a depth which is relatively cheap and easier to test and to develop if a discovery is made".



**Figure 3** – Reduced to pole pseudo-colour aeromagnetic image (compiled from Sth. Aust. Government data) and 1 milligal spaced gravity contours (white) over the large central gravity anomaly. Note offset between peak of the magnetic and gravity anomalies. The gravity anomaly is at least 6 milligals in magnitude. As way of example the original Prominent Hill gravity target was approximately 4.5 milligals in magnitude. Historic drill hole (yellow) drilled to east intersected basement at 188 metres depth and open file government records report intersecting hydrothermally overprinted, metamorphosed and metasomatised, fine to medium grained mafic to intermediate igneous rock.

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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.