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ASX ANNOUNCEMENT

30 July 2021

Quarterly Activities Statement – June 2021

Highlights

- Sale of Victorian Gold Assets to publicly listed Canadian Company, Outback Goldfields Corp., successfully completed with Petratherm's shareholders receiving an in-specie distribution of shares acquired from the sale in April 2021.
- At Mabel Creek drilling of multiple target sites defined 2 areas displaying pervasive IOCG style hydrothermal alteration. High concentrations of tungsten were also encountered providing an additional exploration target.
- Follow up IP Geophysics is planned for Mabel Creek as a direct targeting tool over the IOCG alteration areas to search for potential sulphide accumulations associated with these large alteration systems.
- At Comet a regional RAB drilling gold exploration program identified a significant new gold anomaly covering approximately a 2,000 metre by 800 metre area.
- Infill sampling to get underway in early August, with follow-up drill testing of this target, Comet, and Target 14 Gold Prospects in the coming months.
- Woomera Project (ELA 2021/00066) acquired near the recent Emmie Bluff Deeps IOCG Discovery.
- Significant IOCG style copper mineralisation occurs at Winjabbie Prospect, adjacent to the northern edge of the Woomera tenement area.
- Gravity modelling identifies a prominent ridge of high gravity extending over 10 kilometres, through the tenement, prospective for IOCG mineralisation.
- Company to maintain busy second half year with drilling and geophysical programs to continue over the coming months.



Summary of Operations

During the period Petratherm Limited (“the Company/ Petratherm”) completed major drilling programs at both its Mabel Creek and Comet Gold Projects in South Australia.

The Mabel Creek Project is prospective for Iron-Oxide Copper-Gold (IOCG) mineralisation and drilling has identified two areas (Areas 5 and 13) showing IOCG style hydrothermal alteration requiring further follow up. In addition, significant tungsten mineralisation was also intersected at the Area 13 Prospect. The tungsten mineralisation is associated with intrusive dyking and provides another exploration target for this frontier terrain which has undergone very little historical exploration.

At the Comet Project, a large regional scale RAB drilling program exploring for new gold accumulations under shallow cover identified a significant new gold anomalous occurrence (DG1) spanning an approximate 2,000 metre by 800 metre area. Follow up drilling of this anomaly will get underway in early August.

Early in the quarter the in-specie distribution of Outback Goldfields Corp. (“Outback Goldfields”) shares to Petratherm’s shareholders was completed following the completion of the sale of the Company’s Victorian Gold Projects. Petratherm’s shareholders as of the in-specie share distribution record date of April 13 2021 collectively held a 57% ownership interest in Outback Goldfields. The sale unlocks the value the Victorian Gold Project Portfolio for Petratherm’s shareholders and ensures these projects are well funded going forward. Outback Goldfields began large scale diamond drilling operations during the quarter.

The Company had exploration and evaluation costs of \$884,000 relating principally to the Mabel Creek and Comet Project drilling operations. The Company is scheduled to recoup \$182,000 of this expenditure during the next quarter as the Mabel Creek drilling is supported by a South Australian Government Accelerated Discovery Initiative Grant. Administration and corporate costs totalled \$246,000 which is higher than average due to costs associated with the Outback Goldfields sale and subsequent in-specie share distribution. The Company held \$3,103,000 cash at the end of the quarter. A summary of exploration activities during the quarter is presented below.

In accordance with ASX Listing Rules Guidance Note 23, the aggregate amount of payments to related parties of the entity and their associates disclosed under section 6.1 of the Appendix 5B totalled \$39,000 and comprised of Director’s fees.

Mabel Creek Project

The Mabel Creek Project, 50 kilometres northeast of Coober Pedy in South Australia is prospective for Iron-Oxide Copper-Gold (IOCG) and related magnetite skarn copper and high value rare-earths. Petratherm has a large ground position with four tenements (EL’s 6332, 6333, 6404 & 6405) totalling 2,852 km² (Figure 1). Previous limited drilling at Mabel Creek by Petratherm in March 2020 encountered evidence for IOCG alteration at the Company’s Area 5 gravity target (refer to PTR ASX release 30/07/20).

During the quarter a second round of drilling successfully tested 5 gravity/magnetic anomalies, each with a single hole to targeted depths. A detailed summary and associated JORC tables can be found in the Company’s 27/07/21 ASX release and a short summary of key findings is presented below.

At the Area 5 Prospect drill hole MCA5-04 intersected altered and highly magnetic porphyritic granitoid which has undergone moderate to intense IOCG style alteration. This comprises wide zones of intense chlorite-epidote with iron-oxide (hematite) dusting/veining and zones of hematized K-feldspar (Figure 2). The granitoid shows moderate enrichment in light rare-earths, indicative of IOCG alteration, averaging more than 350 ppm throughout the hole however no copper or precious metals of any significance occur with the alteration.



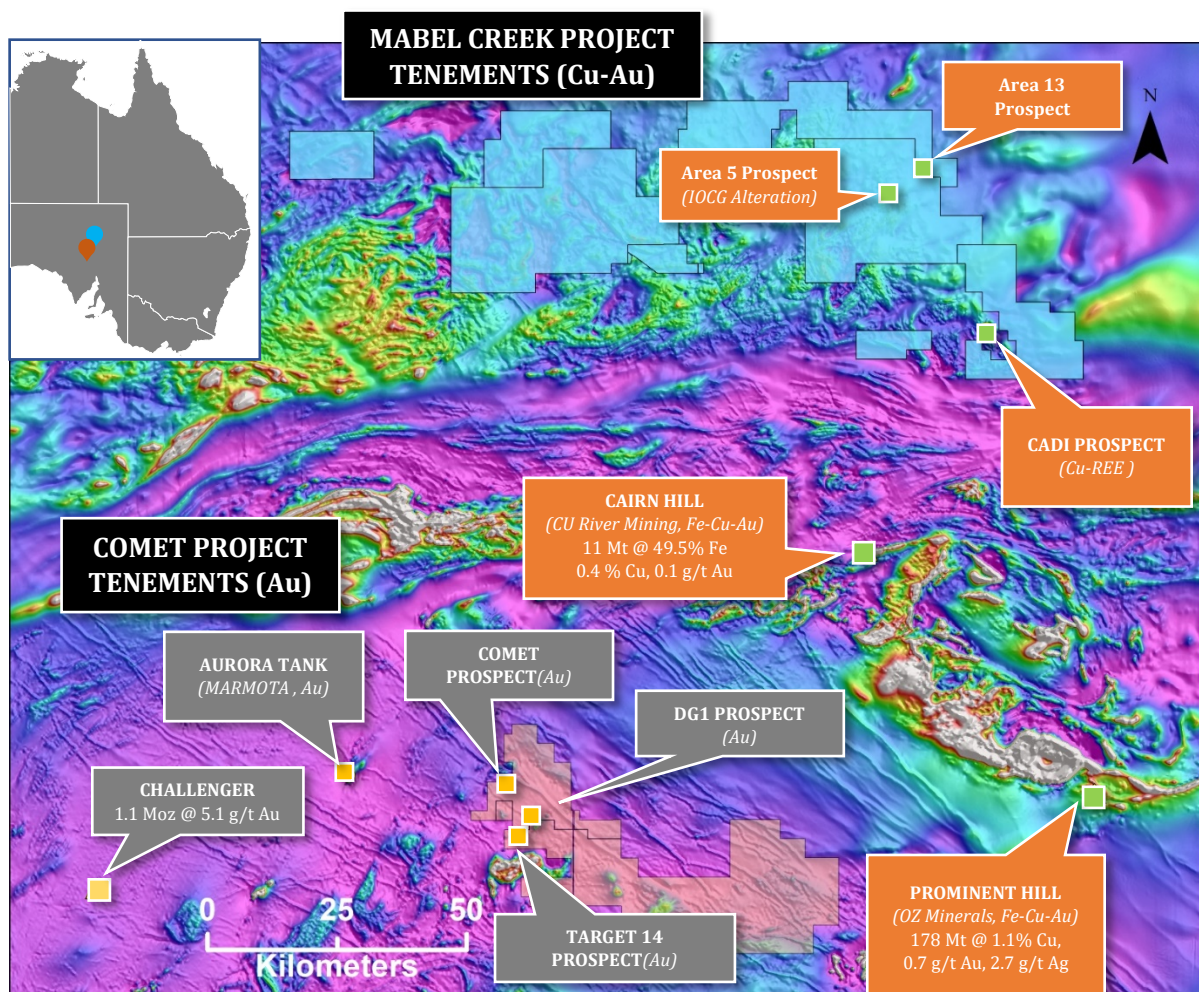


Figure 1 Regional Location Map showing Petratherm's Mabel Creek and Comet Project Holdings, with major mines and key prospects in the area overlain on a Regional Aeromagnetic Image

At the Area 13 Prospect, drill hole MCA13-01 intersected magnetite rich mafic gneiss displaying moderate levels of IOCG style alteration with trace disseminations and occasional veinlets (1 mm to 1 cm) of chalcopyrite throughout the length of the hole. The maximum 4 metre composite sample returned 0.074% Cu. In addition to the anomalous levels of copper, high tungsten values were recorded associated with 2 thin cross cutting pegmatitic dykes and results are presented below:

- 4m @ 0.11% WO₃ from 357 m
- 4m @ 0.16% WO₃ from 429 m

These results indicate the region may also be prospective for tungsten and other related metals such as tin and molybdenum and further geological evaluation will be made.

At both the Area 5 (refer to PTR ASX release 30/07/20) and Area 13 Prospects drilling to date has identified low levels of copper anomalism occurring in flanking positions on the edges of the main gravity anomaly features. The Company is considering undertaking IP geophysical surveying over these broad and complex gravity anomalies and over other earlier stage gravity anomalies to see if this may be a more effective targeting tool to directly locate any chargeable zones potentially indicating high concentrations of sulphide.



Figure 2 – Hole ID MCDA5-04 – Photo of core tray box 35, showing pervasive Red Rock (silica – hematized K-Feldspar (brick red)) alteration of original porphyritic granite host rock. Matrix of granite is enriched in the light rare earths, cerium, and lanthanum.



Diamond Drilling Operations at Area 13

Comet (EL 6443 & ELA 2020/0194) Gold Project

The Comet Project contains prospective Archean strata of the Northern Gawler Craton which hosts numerous gold occurrences such as the Challenger gold deposit (1.1 Moz @ 5.1g/t) and is located 30 km east from the recent high-grade Aurora Tank Gold discovery (Figure 1).

Historical surface geochemical sampling exploration techniques in the region have been severely impeded by shallow cover strata which masks most of the prospective basement rock geochemical response. To overcome this issue, Petratherm applied a new exploration methodology, where regional scale (400 metre by 400 metre) shallow grid drilling has been undertaken during the quarter to directly sample the top of the in-situ “saprolite” zone clays (deeply weathered basement rock which has been chemically decomposed to clay) below younger transported cover strata (refer to PTR ASX release 28/05/21 for program background). In most areas over the tenement the top of saprolite zone occurs between 5 and 15 metres depth and shallow drilling was undertaken using a light weight and cost-effective land cruiser mounted air core drill rig. In all, 468 drill holes totalling 5,777 metres were drilled during the quarter.

The survey has identified a significant new coherent gold anomalous occurrence (DG1) spanning an approximate 2,000 metre by 800 metre area (Figure 3), warranting immediate follow-up (PTR ASX release 9/07/21). The new assay results for the DG1 gold anomalous area has yielded gold in saprolite up to 33 ppb (on a 400m grid).

For comparison, the gold in saprolite above primary gold mineralisation at the Comet Gold Prospect 5 km to the northwest ranged between 7 to 51 ppb (including all detailed in-fill RAB drill sampling down to a 50m grid size). Bedrock drilling below the saprolite anomaly at the Comet Prospect has yielded multiple high gold intercepts of up to 6.97 g/t Au (refer to PTR ASX release 30/10/20 for summary of significant gold intercepts).

The saprolite sampling program has proved effective, with early findings indicating sampling provides geochemical data with high level of precision (low noise), eliminates superficial anomalies contained in the transported cover sediment, and most critically provides direct geochemical screening of the prospective basement rock. The Company has engaged McLeod Drilling to undertake infill sampling over the new prospective zone and this work is scheduled to start at the beginning of August and will take about 10 days to complete.

The Company was recently awarded S.A Government grant funding to a level of \$147,500 on a 1 for 1 basis through the Accelerated Discovery Initiative (ADI) to assist the Company’s Deep Geochemical Gold exploration for the Comet Project Area (PTR ASX release 21/05/21). A small portion of this grant will be used to co-fund the upcoming infill sampling work, with the majority to be spent on regional and infill sampling on the adjoining tenement application area (ELA 2020/0194, “Gina Project”). An initial focus area for the Company on the adjoining Gina Project Area includes the historical Target 14 Gold Prospect (refer to PTR ASX release 03/12/2020) which occurs about 5km SW of the new gold anomalous area, and which may be along the same structural trend (Figure 1).



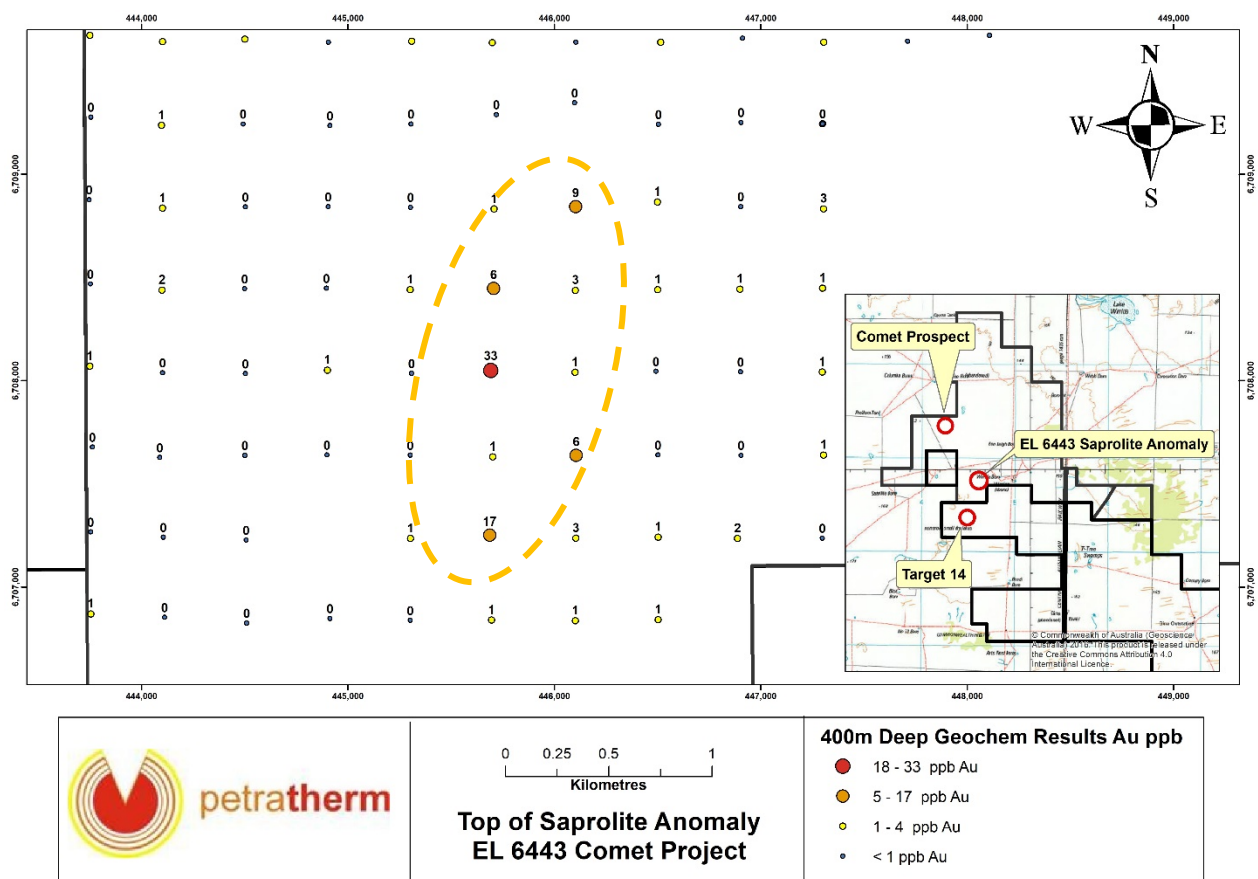


Figure 3 Geochemical Plan highlighting the DG1 Saprolite gold anomaly



Photo: RAB Drilling Operations at Comet

Woomera (ELA 2021/00066) IOCG Project

In June, the Company secured a prospective ground position close to Coda Minerals recent Emmie Bluff Deeps Prospect Iron-Oxide Copper-Gold (IOCG) discovery (Refer to Coda Minerals (ASX: COD) 09/06/21 ASX release) near Woomera in South Australia (Figure 4). The new Licence Application (ELA 2021/00066), Woomera Project, covers a 209 km² area. Open file historical company reporting additionally recorded significant historical copper drill intersections from three drill holes just north of the new tenement area (Figure 5).

The Company has completed initial processing and gridding of historical open-file gravity data. The gravity data coverage over the Woomera Project Area is good, with several modern close spaced surveys (200 metre to 400 metre station spacing) completed by previous explorers. A prominent northwest trending zone of high gravity anomalism is evident and shown to extend over 10 kilometres in length across the tenement area (Figures 4 & 5). IOCG mineralisation, being iron rich, is associated with areas of high gravity anomalism and is one of the main direct targeting tools used by explorers (i.e. Figure 4). Whilst earlier exploration work by other explorers identified the prominent high gravity zone, no historical drilling has been undertaken over the tenement area.

Winjabbie IOCG Prospect occurs just north of the new tenement area and is situated along an extension of the high gravity zone (Figure 5). Three historical vertical drill holes have been drilled at Winjabbie and all intersected broad zones of significant Iron-Oxide Copper-Gold (IOCG) style alteration with intervals of copper mineralisation (PTR ASX release 1/07/21).

A summary of significant drill results from Winjabbie Prospect are presented below.

Drill hole WJD1 (WMC, 1980) – testing a magnetic anomaly returned:

62m @ 0.33% Cu from 864m.

Drill hole SAE11 (MIM,1990) - testing a second magnetic feature returned:

94 metres @ 0.21% Cu (interval 1005-1099 m.)

Including 7m @ 0.48% Cu from 1006 m.

Including 9m @ 0.52% Cu from 1086 m.

and,

42 metres @ 0.28% Cu (Interval 1123 – 1165 m.)

Including 5m @ 1.1% Cu from 1160 m.

Drill hole 07WJ01 (Uranium Exploration Australia, 2008) – testing a residual gravity anomaly just north of the WJD1 and SAE11 returned:

42 metres @ 0.34% Cu (Interval 824 – 866 m.)

Including 9m @ 0.8% Cu from 824 m.

These holes are widely spaced (ranging between 1.8 to 3 km apart, Figure 2) indicating IOCG style mineralisation occurs over a large area. One important feature of the Winjabbie Prospect is that it appears to occur as a strata-bound, essentially flat lying, replacement style mineralised body. The hydrothermal mineralising IOCG fluids are likely to have been focused along vents and/or fault structures along the edge of or within the sheet like body. Future exploration will aim to locate these feeder zones as higher copper grades and wider mineralised widths could potentially be expected.

The Company is very pleased to be able to secure a significant holding in the Woomera sub-region, which is proving fertile for significant IOCG style mineralisation, with not only the new Emmie Bluff Deep's Discovery, but also includes BHP's recent Oak Dam West Discovery and OZ Minerals' newly operating world-class Carrapateena Cu-Au deposit (Figure 1). The exploration licence is expected to be granted later in the year with ground activities to get underway upon the grant.

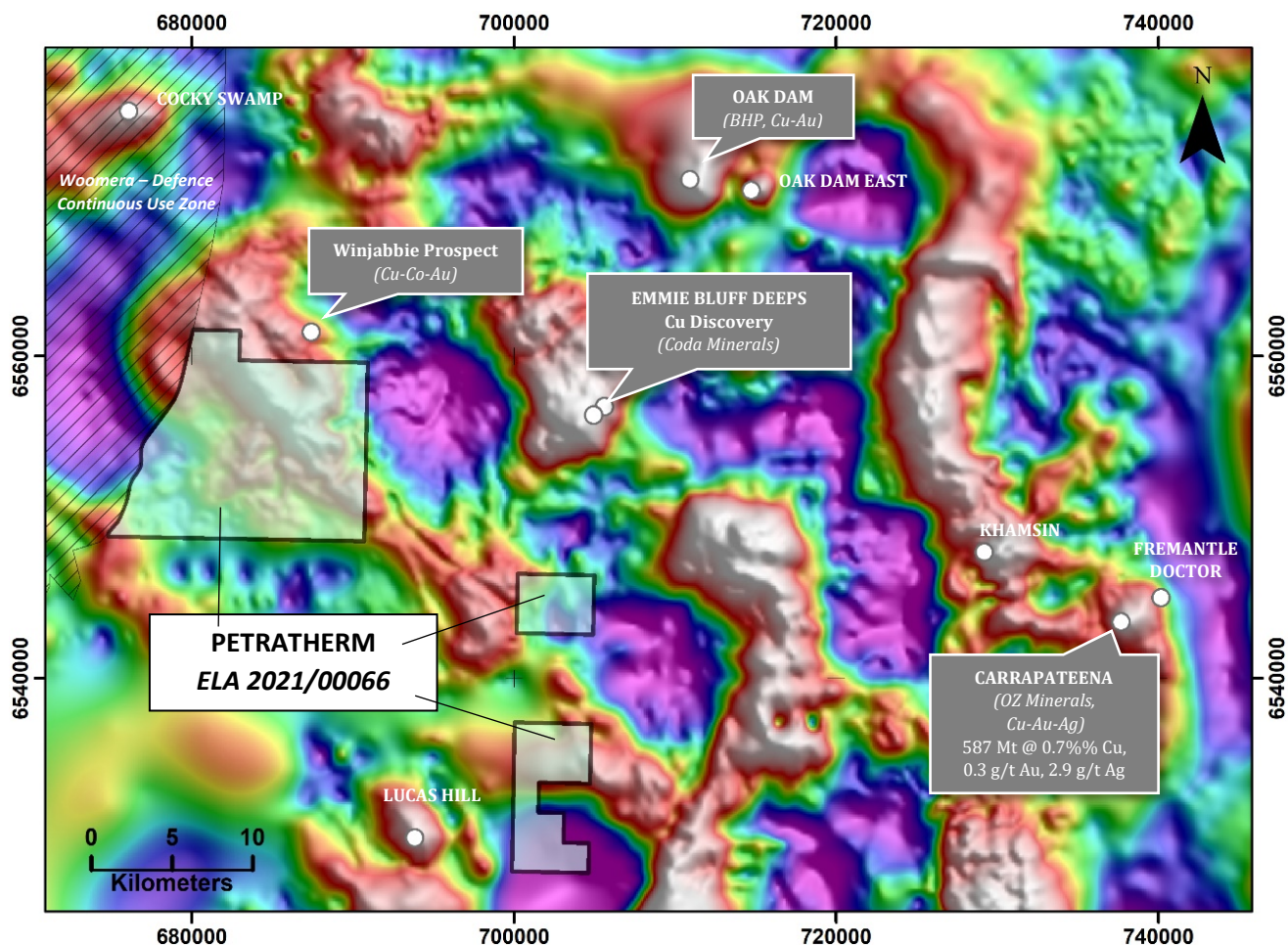


Figure 4: Regional Location Map of Petrathern Exploration Licence Application Area (ELA 2020/00066), IOCG Mines and IOCG Prospects, overlain on a Bouguer (High Pass Filtered-15km) Gravity Image.

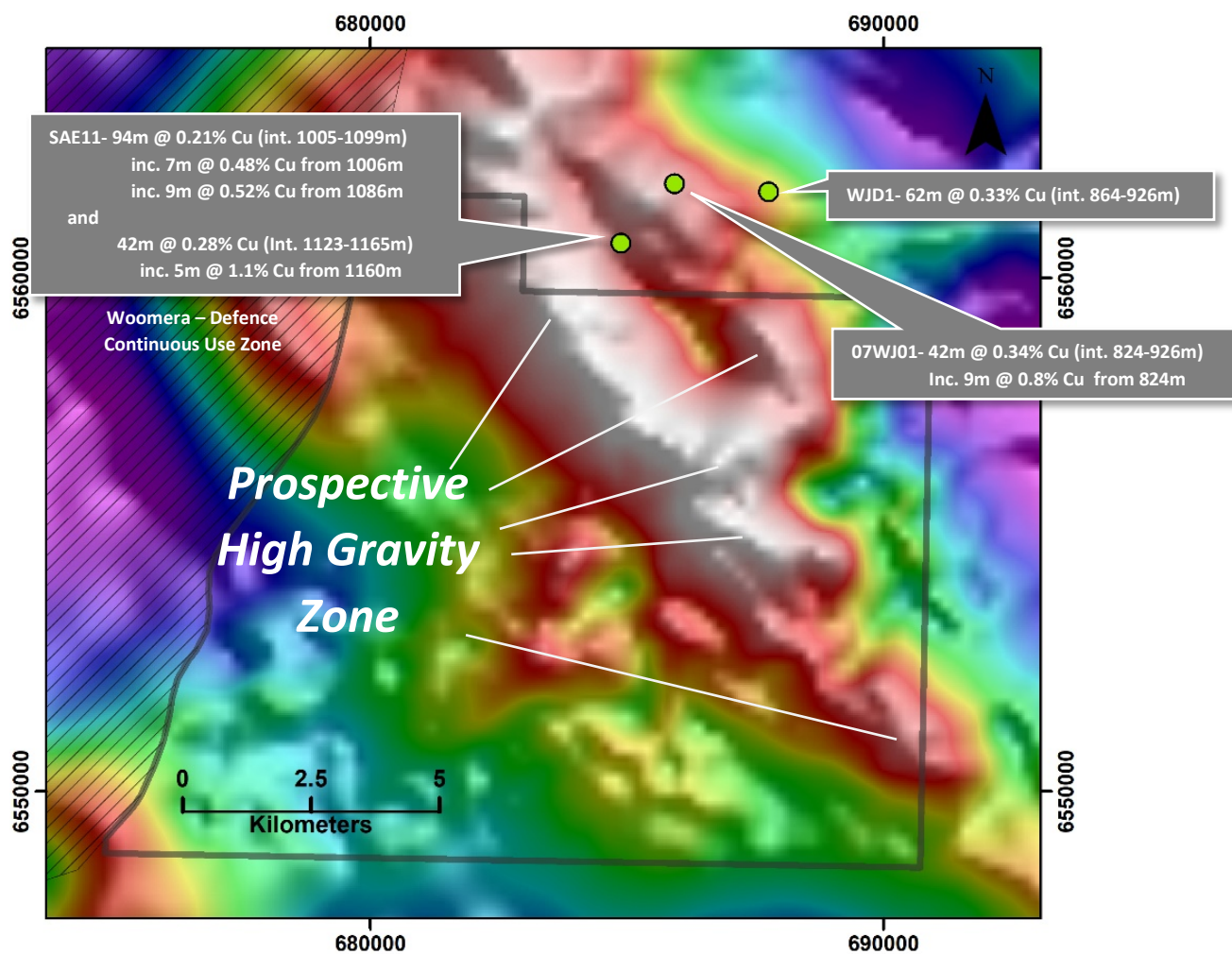


Figure 5: Significant historical IOCG copper intersections adjacent to Petratherm's Woomera Exploration Licence Application Area (ELA 2021/00066) overlain on a Bouguer (High Pass Filtered-15km) Gravity Image.

For further information, please contact:

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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.