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ASX: PTR

# Successful Competitive Bid for Gawler Craton Gold Tenement

#### **HIGHLIGHTS**

- Comet Project (ELA 2019/122), located within the Gawler Craton of South Australia, covering 256 km² has been secured through a South Australian Government managed competitive bid process.
- > Tenement is prospective for Challenger-style high-grade gold
- Comet Gold Prospect has only been partially drill tested and includes multiple shallow gold intersections, which are open at depth and along strike.

Petratherm Limited ("Petratherm" or "the Company") (ASX: PTR) is pleased to announce that it has been successful though a competitive bid process to be the preferred applicant for ELA 2019/122 (Comet Project). The tenement is located within the northern Gawler Craton of South Australia, which hosts numerous significant, gold occurrences, including the Challenger deposit (Figure 1), which has a recorded historical production of 1.1 million ounces at an average grade of 5.1 g/t.

The tenement includes the Comet Gold Prospect, discovered using regional calcrete soil geochemistry in the mid 1990's during the Gawler Craton Gold Boom (Figure 1). The prospect was initially shallow RAB drill tested and then two small RC drill campaigns followed testing anomalous gold areas identified from the RAB drilling. The RC drilling identified a continuous zone of gold intersections, over at least 150 metres of strike, and remains open to the north, south and at depth (Figure 2). Best historical drill intercepts (not true width) include:

- CM023C 12m @ 1.0 g/t Au from 56m to then end of hole
- **CM030C** 28m @ 0.4 g/t Au from 48m
- RCCM1 16m @ 1.9 g/t Au from 28m and 8m @ 0.7 g/t Au from 48m
   Inc. 2m @ 6.17 g/t Au from 30m
- RCCM5 4m @ 3.75 g/t Au from 36m
   Inc. 1m @ 6.97 g/t Au from 39m
- RCCM7 12m @ 0.53 g/t Au from 72m
   Inc. 1m @ 4.6 g/t Au from 82 m

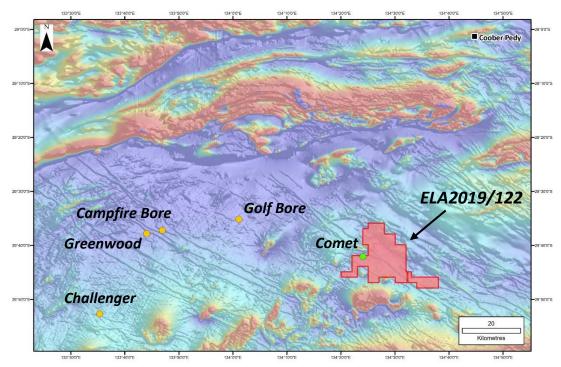


Figure 1 – Location map of the new tenement application area, Comet Gold Prospect (green dot) and proximal contained gold Resources (orange dots) overlying a regional reduced to pole aeromagnetic image (compiled from Sth.Aust. Government data).

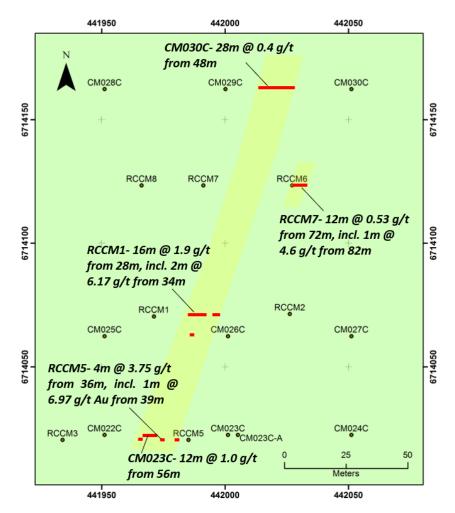


Figure 2 – Comet Drill Collar Map. Historical anomalous gold intercepts (red lines) projected to surface. Gold intercepts occur over a strike length in excess of 150 metres and is open to the north, south and at depth.

Upon granting of the tenement, follow up drill testing of the Comet Prospect will be a priority. The Company has an existing Native Title Mining Agreement in place with the Native Title Owners and anticipates a future drilling approval could be achieved quickly, soon after grant of the Licence.

The Northern Gawler Craton is mostly blanketed by a veneer of shallow younger cover sediment and has undergone a complex weathering history. This has proved an impediment to exploration over large areas by effectively masking any mineralisation, which may occur in the older basement rock just below the ground surface.

The original gold exploration drive in 1990's over the Gawler Craton, relied heavily on surface geochemical sampling methods for drill targeting. Subsequent research by Government Agencies, Universities and Industry, have highlighted its limitations as a targeting tool in many regions of thickened, deeply weathered or transported cover.

The Company intends re-evaluate areas that may have been prematurely down-graded based on ineffective historical surface soil geochemistry and will apply other exploration methods to target gold and other metals over the broader tenement area. This work will include some surface geochemical methods, where the cover-type is suitable, but will also target potential structural / magnetic target sites undercover via regional based, shallow RAB drilling to identify prospective mineralised zones.

### For further information, please contact:

Peter Reid Exploration Manager Tel: (08) 8133 5000

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.

# ELA 2019/122 (Comet Project) JORC Table 1

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	section apply to all succeeding sections.)  JORC Code explanation	Commentary
Criteria 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	<ul> <li>No drilling or sampling has been undertaken by Petratherm, although limited historical drilling</li> </ul>
	<ul> <li>Intimerals 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> <li>and sampling exists.</li> <li>Historical sampling was undertaken using standard industry practices.</li> <li>Historical drill hole coordinates are in UTM grid (GDA94 Z53) and have been measured by handheld GPS with a lateral accuracy of ±4 metres and a vertical accuracy of ±5 metres.</li> <li>Mineralised intersections were encountered, but have not been reported as true widths due to insufficient data spacing and orientation relationship knowledge.</li> </ul>
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.).	<ul> <li>Historic exploration drilling includes:</li> <li>Mechanised Auger: 202 RW-series (Minotaur Gold NL, 1998)</li> <li>Aircore: 103 CM-series (Minotaur Gold NL, 1997)</li> <li>Rotary Air: RED55 - 63 (Redport, 2003).</li> <li>Reverse Circulation: 98RCCM1, 3 &amp; 7, 99RCCM3 &amp; 5, 22 CM-series (Minotaur Gold NL, 1997 - 1999).</li> <li>Diamond: COM2, COM7 &amp; COM24 (Afmeco, 1981)</li> <li>Additional details from historic drilling are unknown.</li> </ul>
Drill sample recovery	<ul> <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> <li>No drilling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
Logging	Whether core and chip samples have been	<ul> <li>No drilling has been</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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> <li>undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <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 subsampling 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> <li>No drilling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
Quality of assay data and laboratory tests	<ul> <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> <li>No drilling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
Verification of sampling and assaying	<ul> <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> <li>No drilling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
Location of data points	<ul> <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> <li>All maps and 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.</li> </ul>
Data spacing and distribution	<ul> <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> <li>No drilling or sampling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Data spacing is insufficient to establish the degree of geological and grade continuity required for a</li> </ul>

Criteria	JORC Code explanation	Commentary
		Mineral Resource estimation.
Orientation of data in relation to geological structure	<ul> <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> <li>No drilling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>The relationship between the drilling orientation and the orientation of key mineralised structures has not been confirmed.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>No sampling has been undertaken by Petratherm although limited historic sampling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <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
Mineral tenement and land tenure status	<ul> <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> <li>The application for ELA2019/122 was received on the 06/09/2019.</li> <li>ELA2019/122 is located approximately 80km south south-west of Coober Pedy overlapping Ingomar and Commonwealth Hill Pastoral Stations.</li> <li>The tenement is located within the Woomera Prohibited Area (Amber Zone) and the Far North Prescribed Wells Area.</li> <li>Native Title Claims: SCD2011/001 Antakirinja Matu-Yankunytjatjara.</li> <li>The tenement is in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous exploration work includes;</li> <li>Surface Geochemical Sampling: Calcrete Airborne Geophysics: Magnetics &amp; Radiometrics. Ground Geophysics: Magnetics and Gravity.</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	Exploration Drilling: 202 Mechanised Auger, 103 Aircore, 9 Rotary Air, 27 Reverse Circulation & 3 Diamond.  Petratherm is primarily exploring for Orogenic Gold mineralisation (e.g. Challenger-style) within the
		Christie Region of the Gawler Craton, South Australia.
Drill hole Information	<ul> <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> <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> <li>No drilling has been undertaken by Petratherm although limited historical drilling exists.</li> <li>Additional details from historic drilling are unknown.</li> </ul>
Data aggregation methods	<ul> <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 should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No drilling has been undertaken by Petratherm.
Relationship between mineralisati on widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	No drilling has been undertaken by Petratherm.
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>No drilling has been undertaken by Petratherm.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>No drilling has been undertaken by Petratherm.</li> </ul>

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.	No other substantive exploration data has been collected by Petratherm.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>A range of exploration techniques are being considered to progress exploration including drilling.</li> </ul>