

## **Yuengroon (Victoria) High Tenor Gold Pathfinder Anomalies Defined**

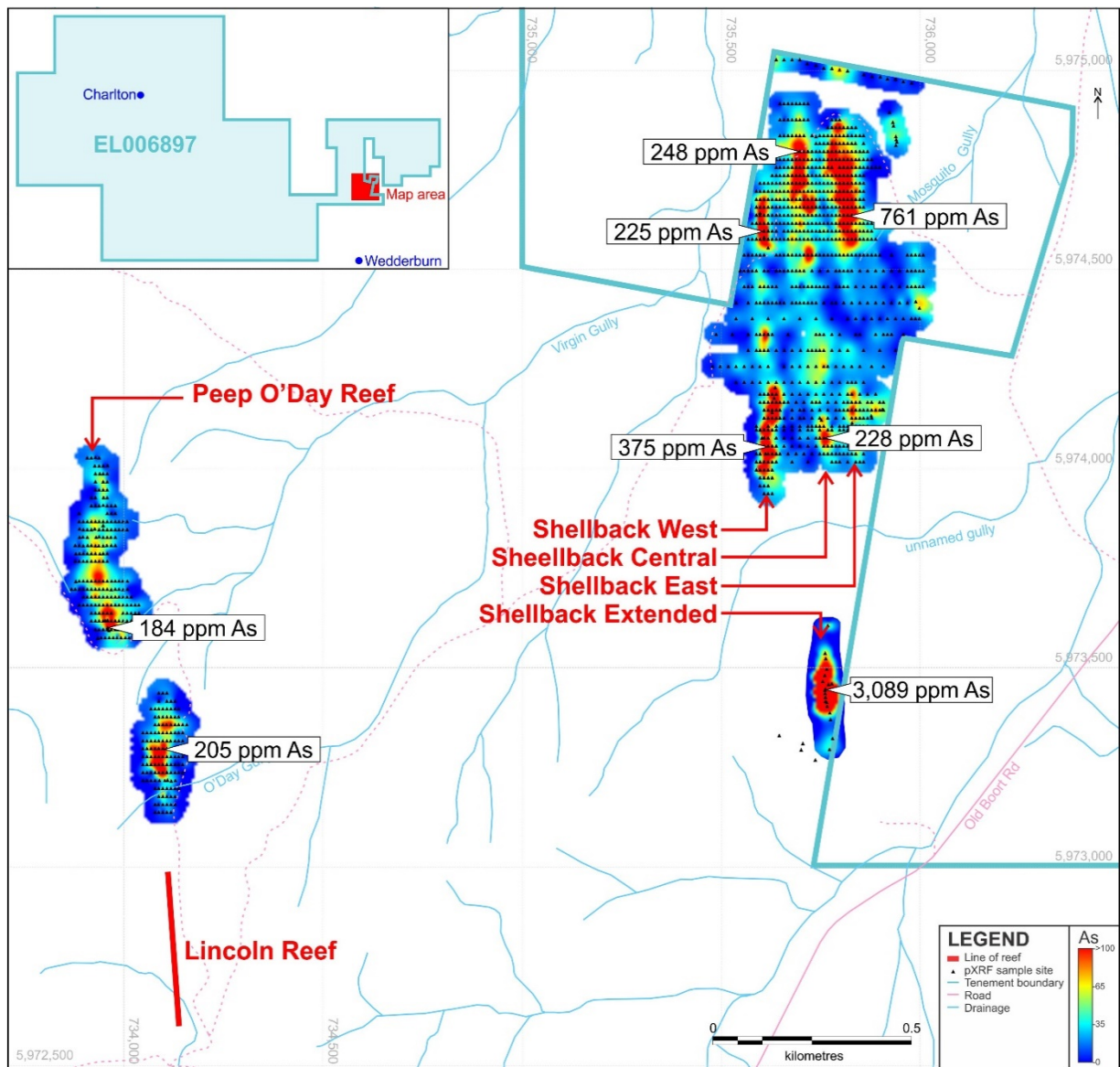
### **HIGHLIGHTS**

- Yuengroon (EL 6897), a large licence area of 683 km<sup>2</sup>, covers a highly prospective ground position over a portion of the Bendigo Zone.
- Soil geochemical surveys over shallow cover areas have identified 6 extensive high magnitude and area extensive, arsenic soil anomalies which may be an indication of gold mineralisation in the bedrock below.

Petratherm Limited ("Petratherm" or "the Company") (ASX: PTR) is pleased to provide an update on a soil geochemical sampling program, which has defined six high tenor arsenic (As) soil anomalies over the eastern portion of the Yuengroon Gold Project. Yuengroon (EL6897) is a large licence area of 683 km<sup>2</sup> over a portion of the Bendigo Zone, covering the historic northern Wedderburn Goldfield and extends westwards over several important historical gold occurrences. The tenement area is blanketed mostly by shallow cover sediment concealing the prospective basement rocks and as a consequence has only been lightly explored.

Arsenic anomalism in soil is derived from the breakdown of the sulphide mineral arsenopyrite which is found to occur with gold mineralisation in the underlying bedrock. It is principal path finder element used to locate primary gold mineralisation in the Victorian Goldfields.

To date 1248 samples have been collected over a regular grid (refer to JORC Table 1 for details) and analysed for As content using a portable handheld XRF. The surveys were undertaken over areas of shallow cover beyond the limits of historical shallow mining (Figure 1). This work has identified several coherent As anomalies of considerable magnitude and area extent. Typically, arsenic values in excess of 50 ppm are considered anomalous warranting further investigation. Each of the new targets defined have coherent As trends well in excess of 100 ppm extending for several hundred metres and include several exceptionally high As values (refer to Figure 1).



**Figure 1** – EL6897 (Yuengroon) East Location Map, showing the historical Lincoln Reef site and extent and magnitude of newly defined arsenic soil anomalies.

The newly defined prospects are (refer to Figure 1):

- **Shellback Prospects** - The north eastern portion of the survey area has identified 3 prominent As trends and a fourth zone to the South which is a likely extension of this trend (Shellback Extended). The northern prospects trend up to 1 kilometre in length, with strong anomalies at the northern and southern end separated by a saddle (Mosquito Creek) which may be masking the As trend through this middle area. South of these anomalies, the Shellback Extended trend to the south has been identified and records a peak As value of 3089 ppm and may link up to the northern areas through the cover of an unnamed creek.
- On the western side of the survey area two prominent As targets have been identified, and have been termed the Peep O'Day and Lincoln Reef Extension Prospects. The Lincoln/Peep O'Day trend is 1.4 kilometres long. South of this trend the historic Lincoln Reef, line of workings which extend approximately 600 metres in length occur and

comprise a series of shallow shafts sunk to the water table, at about 20 metres depth. The Lincoln line of workings have not undergone any modern systematic exploration and have never been drill tested.

The Company intends to drill test these targets, but at this stage is uncertain of the timing of when this will occur, due to the deeply unfortunate circumstances around the current Coronavirus Pandemic.

***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.

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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 gold 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>pXRF soil samples are collected from the top of the B-Horizon clay interface then analysed for As using an portable XRF unit and results reported out as a digital text file.</li> </ul>
Drilling techniques	<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>NA – no drilling conducted.</li> </ul>
Drill sample recovery	<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>NA – no drilling conducted.</li> </ul>
Logging	<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>pXRF soil samples are located by GPS and relevant notes taken including proximity to historical workings.</li> </ul>
Sub-sampling techniques and sample preparation	<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>pXRF analysis was conducted on along lines of reef and along new trends discovered during the exploration process.</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No duplicate samples were collected.</li> <li>• The sample analysis technique is appropriate for the style of mineralisation</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The pXRF analytical procedures are appropriate for the style of mineralisation.</li> <li>• pXRF soil geochemistry surveys aim to locate zones of anomalous proxy elements for gold to highlight areas suitable for future mapping, sampling and drilling.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All field data are imported and stored in a database.</li> <li>• Primary field data was collected using a hand-held GPS.</li> <li>• No adjustments have been made to any pXRF data contained in this report.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All location coordinates are measured using handheld GPS.</li> <li>• Accuracy is variable but maintained &lt;5m during pXRF analysis process.</li> <li>• The grid system used is GDA MGA 94 Z54.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sample lines are 20 to 40 metres apart with samples 10 m apart along lines.</li> <li>• Sampling has been done along four main trends. Line length varies from 150 metres along the Shellback Extended line to 1.4 kilometres along the Peep O'Day – Lincoln line.</li> <li>• A total of 1248 samples were analysed.</li> <li>• PXRF results are used for geochemical studies only and are not composited.</li> </ul>



<i>Orientation of data in relation to geological structure</i>	<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>The sampling follows extensions four main lines, with historical workings only identified on Peep O'Day, Lincoln and Shellback West lines.</li> <li>No significant sample bias is considered to be introduced because of the orientation of the sample lines.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No samples were submitted for analysis.</li> </ul>
<i>Audits or reviews</i>	<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>The data are validated when loaded into the database. No formal external audit has been conducted.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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>The project area is within the vicinity of Wedderburn, Victoria and located on EL6897 which is 100% owned by Petrathern Ltd.</li> <li>Sampling activities were conducted.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>A search of open file reporting indicates no other historical drilling, geochemical sampling or geophysical surveying has occurred in the area of the current soil surveys. Historical, gold prospecting has occurred in the area.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The host rocks are marine sandstones and shales. Gold is hosted associated with quartz veining along several reefs.</li> </ul>
<i>Drill hole Information</i>	<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 drill holes: <ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>NA – no drilling conducted.</li> </ul>

	<p><i>and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	
Data aggregation methods	<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>• NA</li> </ul>
Relationship between mineralisation widths and intercept lengths	<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>• NA</li> </ul>
Diagrams	<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>• Refer Figure 1 linked to this report.</li> </ul>
Balanced reporting	<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>• All arsenic results from the survey have been gridded and included in Figure 1 as a contour image showing As concentration. Other elements have not been reported.</li> </ul>
Other substantive exploration data	<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 substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All relevant data is presented in the text, tables and diagrams.</li> </ul>
Further work	<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>• Future exploration activities will be dependent on company direction.</li> </ul>