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ASX ANNOUNCEMENT

03/11/2021

Comet Project – Regional Shallow Drilling Program Identifies New Gold Anomalies

HIGHLIGHTS

- Shallow RAB drilling completed in Sept-Oct 2021 has identified 3 anomalous gold areas at Petratherm's Comet Project (EL 6443 & EL 6633), in South Australia.
- Follow-up infill drilling of these new anomalies and regional shallow exploration drilling into new areas is scheduled to get underway in 3 weeks.
- A second rig has been secured to conduct air-core/hammer drilling of the Comet and Target 14 Gold Prospects in parallel with the shallow RAB drilling targeting work.

Petratherm Limited ("Petratherm" or "the Company") (ASX: **PTR**) is pleased to announce that assays from its most recent phase of regional geochemical gold exploration at the Comet Project on the Gawler Craton, in South Australia, has defined three gold anomalies in the weathered basement clays (saprolite) that could be indicative of nearby gold mineralisation.

The three new anomalies are shown in Figure 2 with the highest gold detected being in the vicinity of Petratherm's **Target 14** Prospect Area. The 3 anomalous values are:

- Drill Hole 658 – 4 metres @ **305 ppb Au**, from 20-24 metres
- Drill Hole 596 – 3 metres @ **21 ppb Au**, from 18-21 metres
- Drill Hole 614 – 3 metres @ **17 ppb Au**, from 18-21 metres

Drill hole number 658 featuring **305 ppb Au** expands the prospective area of interest for the **Target 14** Gold Prospect (refer to PTR ASX release 29/10/21). Drill hole 596, which returned 21 ppb Au, is also notably highly anomalous in copper, returning 419 ppm which is close to 20 times background, and may indicate the prospect also has some potential for copper mineralisation.

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 has applied a new exploration methodology, where regional scale (400 metre by 400 metre) shallow grid drilling is being undertaken 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 20 metres depth.

The saprolite sampling program has proved effective, with 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 at depth.

The assay results have yielded gold in saprolite up to 305 ppb and for comparison, the gold in saprolite above primary gold mineralisation at the nearby Comet Gold Prospect ranged between 7 to 51 ppb. Bedrock drilling below the saprolite anomaly at 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 Company has engaged McLeod Drilling to undertake infill sampling over the new prospective zones and this work is scheduled to start in approximately 3 weeks’ time. Following the infill sampling work, the rig will then expand the regional shallow geochemical grid sampling program into new areas. The shallow grid drilling is supported by S.A Government grant funding to a level of \$147,500 on a 1 for 1 basis through the Accelerated Discovery Initiative (PTR ASX release 21/05/21).

In parallel to the regional saprolite drill targeting work the Company has engaged Bullion Drilling to conduct air core/percussion drilling of the Target 14 and Comet Gold Prospect Areas. This work is scheduled to get underway from mid-November.

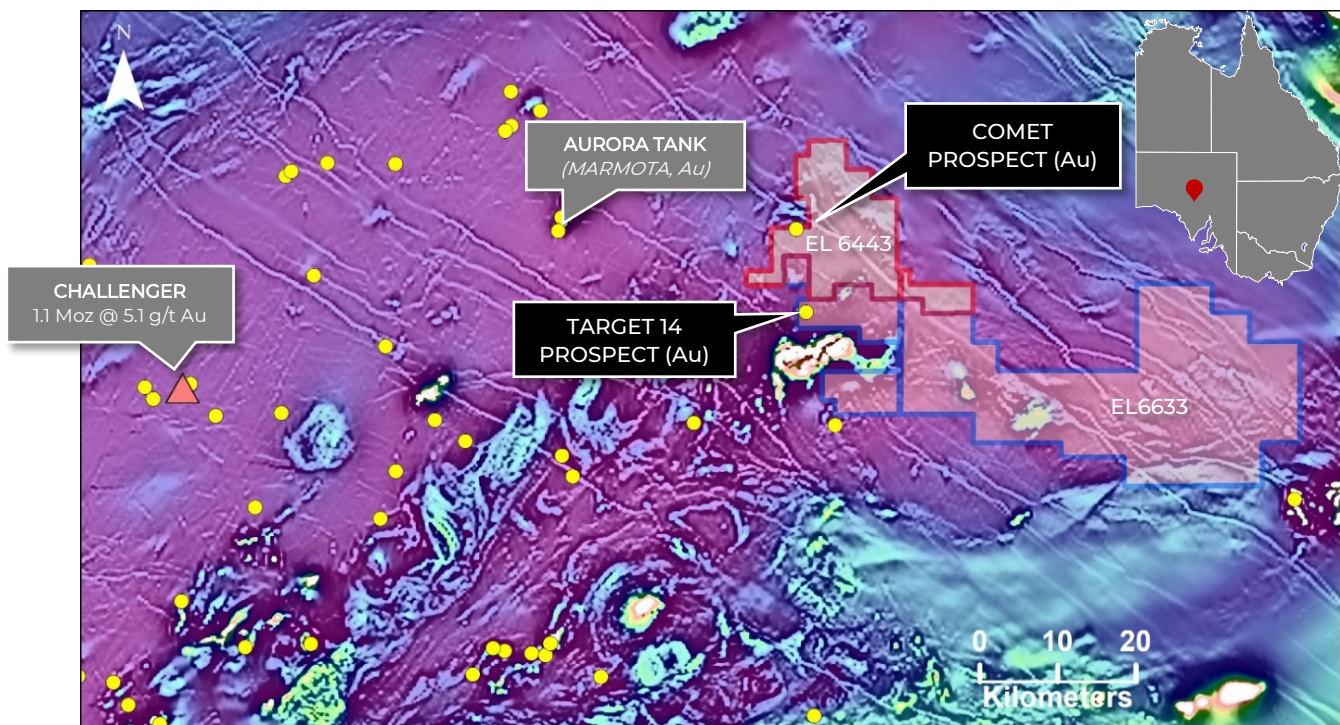


Figure 1 Regional Location Map of Petratherm’s Comet Project (comprising EL6443 and EL 6633) and gold occurrences overlain on a regional aeromagnetic image

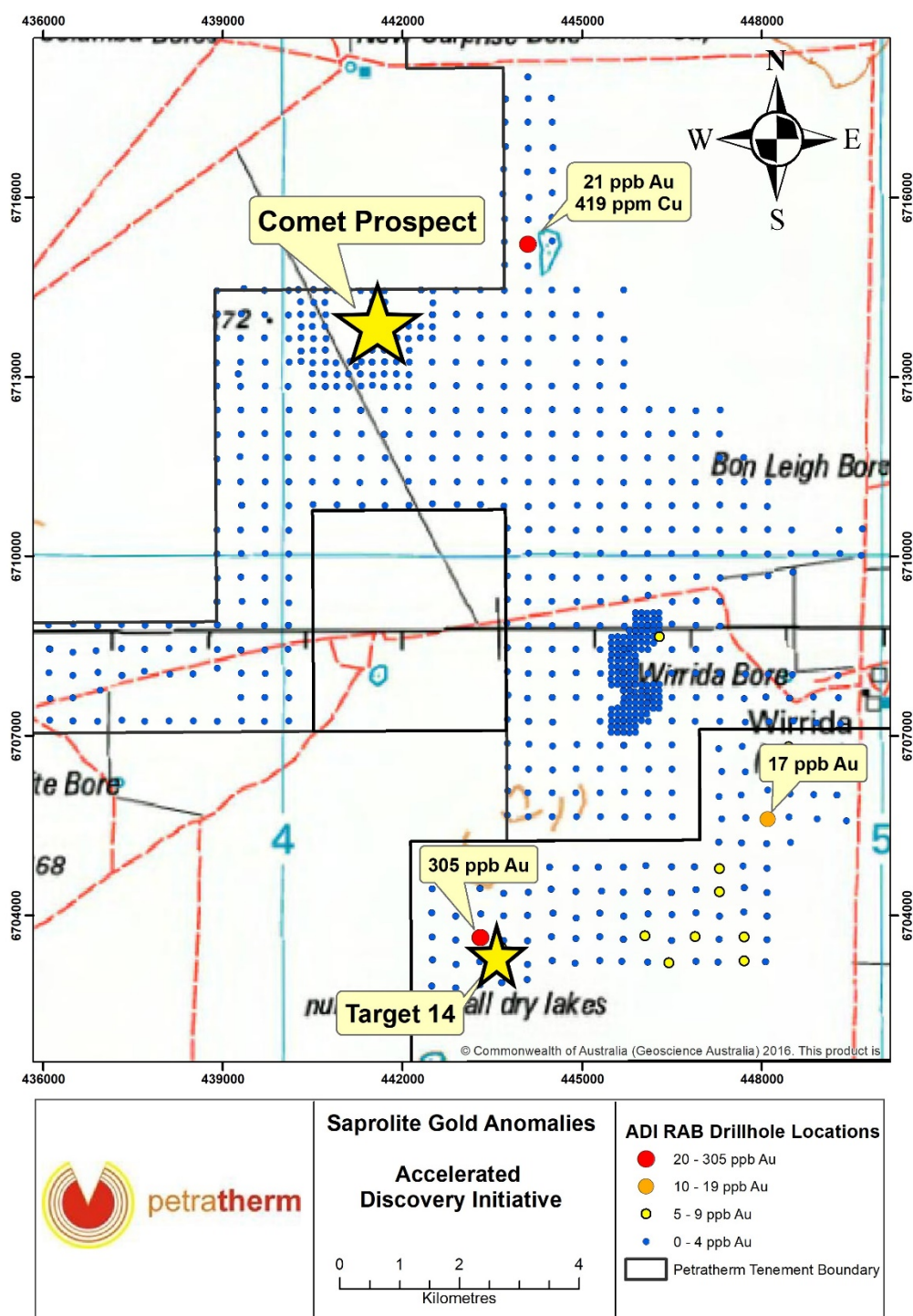


Figure 2 Geochemical Plan highlighting the new saprolite gold anomalies.

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.

EL 6443 & EL 6633 (Comet 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A total of 732 drill holes have been drilled to collect samples from the top of the saprolite on a 400m grid spacing. Samples were collected as composite intervals from one metre drill samples stored individually in buckets. Composite samples were collected using a sampling tool to collect representative samples from buckets. Composite samples were an average weight of 2 kg. A handheld Garmin GPS was used to record the location of each drill hole. The accuracy of this GPS is +/- 3m
Drilling techniques	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Drill Method consists of RAB. Hole diameters are 100 mm
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> RAB drilling methods were utilised throughout the duration of the program. Hole diameters are 100mm A Geologist was on site for every drill hole to ensure that sample recoveries were appropriate.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All samples were geologically logged by the on-site geologist. Geological logging is qualitative. Representative chip trays containing 1 m geological subsamples were collected.
Sub-sampling techniques	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. 	<ul style="list-style-type: none"> Samples averaging 2 kg were collected for laboratory assay.

Criteria	JORC Code explanation	Commentary
<i>and sample preparation</i>	<p><i>and whether sampled wet or dry.</i></p> <ul style="list-style-type: none"> For all sample types, the nature, quality and appropriateness of the sample preparation technique. 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. 	<ul style="list-style-type: none"> It is considered that representative samples were collected. Laboratory sample preparation includes drying and pulverizing of submitted sample to target of p80 at 75 um. Duplicate samples have been introduced into the sample stream by the Company. Standard samples were introduced into the sample stream by the Company, and the laboratory also include standard check assays. Laboratory analytical charge sizes are standard sizes and considered adequate for the material being assayed.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> 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 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 (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> ALS in Perth has conducted the analytical work. Samples were analysed in the following manner: Aqua Regia Digest. Analysed by Inductively Coupled Plasma Mass Spectrometry and Inductively Coupled Plasma-Atomic Emission Spectrometer for Au to 1ppb and 39 other elements. For laboratory samples, the Company has introduced QA/QC samples at a ratio of one QA/QC sample for every 50 drill samples. The laboratory has introduced additional QA/QC samples (blanks, standards, checks)
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> The company has queried the results with ALS to verify the accuracy of the results and ensure the

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	<ul style="list-style-type: none"> protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> results are not an outcome of lab contamination. No twinned holes were drilled in the program. No adjustments have been made to the assay data.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All maps and locations are in UTM grid (GDA94 Z53) and have been measured by hand-held GPS with a lateral accuracy of ± 3 metres and a vertical accuracy ± 5m.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill holes were completed on a 400-metre spaced grid. The data spacing and distribution is insufficient to establish the degree of geological and grade continuity appropriate for a JORC mineral resource.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No geological information regarding orientation of structure was available.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Company staff collected all laboratory samples. Samples submitted to the laboratory were transported and delivered by Company staff.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audit of data has been completed to date.

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 style="list-style-type: none"> 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 	<ul style="list-style-type: none"> EL 6443 Comet and EL 6633 Gina are located approximately 80km south south-west of Coober Pedy overlapping Ingomar and Commonwealth Hill Pastoral Stations.

Criteria	JORC Code explanation	Commentary
	<i>to operate in the area.</i>	<ul style="list-style-type: none"> The tenements are located within the Woomera Prohibited Area (Amber Zone) and the Far North Prescribed Wells Area. Native Title Claims: SCD2011/001 Antakirinja Matu-Yankunyjatjara. The tenement is in good standing and no known impediments exist.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> Previous exploration work includes; Surface Geochemical Sampling: Calcrete Airborne Geophysics: Magnetics & Radiometrics. Ground Geophysics: Magnetics and Gravity. Exploration Drilling: 202 Mechanised Auger, 103 Air core, 9 Rotary Air, 27 Reverse Circulation & 3 Diamond.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> 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 style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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.</i> 	<ul style="list-style-type: none"> The type of drilling performed, comprised vertical shallow holes to an average depth of 15 metres on a 400m grid. The drilling is effectively a regional deep auger geochemical sampling program and as a result tabulation of drill hole information is considered not necessary as it does not add further material information and does not detract from the understanding of the report.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <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> <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> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> All reported drill results are true results as reported by ALS. No assumptions of metal equivalent values were made or used.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <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> 	<ul style="list-style-type: none"> Drill holes were drilled vertically at -90 degrees. Any relationship between mineralisation widths and intercepts lengths is not known. Gold values reported are down hole length.
Diagrams	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> See figures in release attached.
Balanced reporting	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> All drill hole results are classified by Au values in figure 2. As such all material Au results are represented.
Other substantive exploration data	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> See attached ASX Release. Geological observations are included in that report.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <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> 	<ul style="list-style-type: none"> See attached release.