

ASX ANNOUNCEMENT

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26 March 2024

Trek Set to Drill Champagne Pool Epithermal Gold Target

Earthmoving completed and drill contractor secured for maiden drilling program at untested gold target in WA's Pilbara region.

Highlights

Pincunah Gold Project, WA:

- Drilling planned to commence in the coming weeks at the untested high potential Champagne Pool gold target within Trek's Pincunah Project in the Pilbara region of WA.
- Strong surface geochemical indicators are suggestive of a cap to an epithermal gold system, with the gold zone likely 'intact' sub-surface.
- Earthmoving in progress and drill contract awarded, with drilling set to commence in the coming weeks.

Trek Metals Limited (ASX: **TKM**) ("**Trek**" or the "**Company**") is pleased to advise that its 2024 exploration field season is about to commence with a maiden drilling program at the high priority Champagne Pool epithermal gold prospect, located within the Pincunah Project in Western Australia.



Figure 1: Drill access and pads have been completed for upcoming drilling scheduled to commence in the coming weeks.

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Overview

Trek Metals' CEO Derek Marshall said the Company was looking forward to the imminent commencement of drilling at Champagne Pool, which marked the start of a gold-dominated exploration field season in 2024.

"After Trek discovered a large, robust multi-element soil anomaly at the Valley of the Gossans (VOG) prospect, our exploration team, supported by expert independent consultants, have now identified a very exciting new gold opportunity along strike from the base metal target.

"The team has identified a favourable zone along the same geological horizon that is interpreted to represent the cap to a buried epithermal gold system. This is of critical importance, as our previous drilling at VOG indicated that, while we were within a large mineralised system, the gold zone had likely been eroded away and we were left with the root of the system. The newly identified target at Champagne Pool appears to have the entire system preserved, presenting a very compelling drill target.

"I'm looking forward to getting the drill turning very soon and wish the TKM team and shareholders the best of luck for this exciting drill program."

Champagne Pool Drilling

The Company is set to commence a drill program to test the exciting new Champagne Pool Prospect. The aim of the drill program to test beneath the coincident geochemical / geophysical anomaly and collect samples for analysis that are hoped will confirm the epithermal gold mineralisation model and herald a new discovery for this potentially very valuable style of mineralisation.

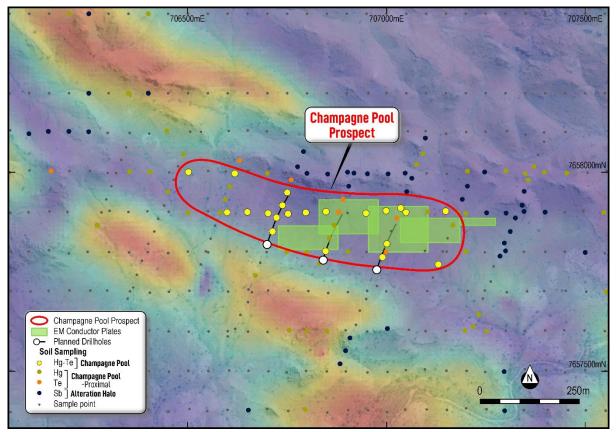


Figure 2: Champagne Pool Prospect classified surface geochemical dots with the anomalous target area (red circle), EM plates (green), and initial planned drilling over merged magnetic/aerial imagery.



Three holes are proposed for the initial test with a planned depth of ~250m each (Figure 3), though additional holes will be added immediately if visual mineralisation is confirmed.

Champagne Pool Target

'Conductor A' was initially defined as an airborne electromagnetic (EM) target along strike from the Valley of the Gossans (VOG) prospect (*refer ASX: TKM 16th Nov 2021*). The surface geochemical coverage that identified VOG was extended, and results have significantly upgraded the prospectivity of 'Conductor A'.

Ongoing interpretation of the surface geochemistry over 'Conductor A' revealed a more compelling target with the element association consistent with a low temperature epithermal 'cap'. The refined target has been renamed the 'Champagne Pool' Prospect. Defined by the combination of Zn-Hg-Te-(Fe-In), with low level gold, the Champagne Pool target is a discrete bullseye target that covers an area of 750m x 200m, with a halo of Hg grading out to lower temperature Sb (Figure 3).

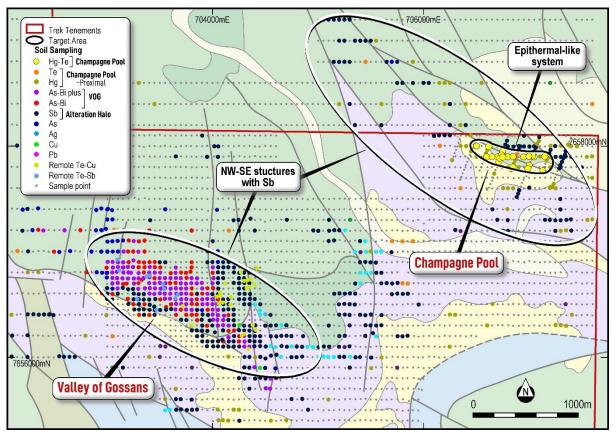


Figure 3: Geochemical coverage of Valey of Gossans and Champagne Pool (previously Conductor A) Prospects over geology.

As an indication of the strength of the Hg-Te anomalism, Hg assay results reach a peak of 15.3ppm within the Champagne Pool Prospect against a crustal average abundance of 0.085ppm (CRC^{#1}), and Te reaches a maximum assay of 0.26ppm against the crustal average abundance of 0.001ppm (CRC^{#1}).

Gold is included in the element association of the Champagne Pool Prospect; however it is subtle, which is regarded as a good sign as it confirms that it is an auriferous system.

Epithermal systems have sharp grade boundaries, so low grade gold suggests that the target may be reached with relatively shallow drilling.



Pueblo Viejo Deposit as an Analogue

Epithermal gold deposits are some of the largest and highest-grade gold deposits known. A well-known example is the Pueblo Viejo (PV) deposit located in the Dominican Republic of Central America. PV is operated under a joint venture between Barrick (60%) and Newmont (40%), with annual production exceeding 800,000oz of gold (*source: https://www.barrick.com/English/operations/pueblo-viejo/default.aspx*).

Along with gold and silver production, the PV orebody also contains appreciable zinc and copper, with copper historically being produced from the mine. Of relevance to the Champagne Pool target is the mercury (Hg) vapour halo and associated geochemistry as illustrated in Figure 4.

It is important to note that, where gold grade decreases dramatically beyond the ore zone, mercury (+tellurium) persists and may provide strong guidance toward the gold mineralisation (Figure 4). The left-hand side of Figure 4 below illustrates the relationship between Au, Hg and the depth of the ore zone, where the grade of Hg persists further from the ore zone, with Au dropping off sharply above it.

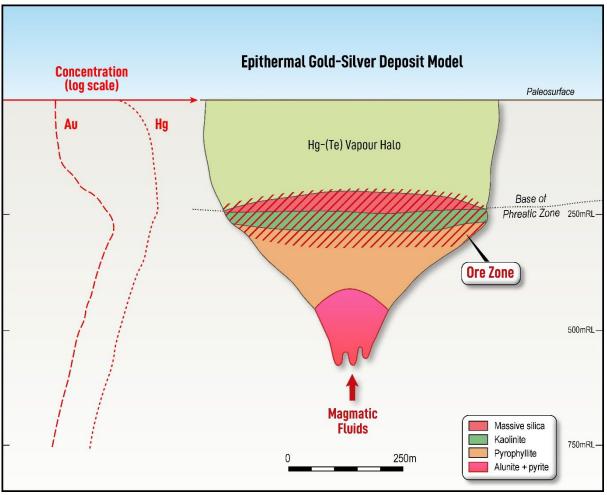


Figure 4: Schematic section through the Pueblo Viejo deposit illustrating the relationship between the gold bearing ore and Hg-Te halo above. Note how the gold grade (Au) drops sharply above the ore zone, while the mercury (Hg) persists significantly above the ore zone. Figure redrawn from Kesler and others (2003).

Along with gold, high-sulfidation epithermal deposits also contain appreciable amounts of copper, zinc, lead, silver, arsenic, antimony, mercury, selenium, and tellurium. Generally, all elements follow the same pattern as the gold, where the metals are deposited together except for mercury and tellurium. The reason for the separation of the gold and other metals from the mercury and tellurium is most



likely the boiling of the hydrothermal fluids that results in the deposition of the metals, with the mercury and tellurium persisting in the vapor (steam) and continue upward away from the ore zone.

Zinc and copper are significant constituents of the PV ore, with zinc being a significant pathfinder element. Zinc is also conspicuous in the soil and rock chip samples over Champagne Pool (refer ASX: TKM 4th March 2022 see Conductor "A") where the Zn and Hg-Te outlines closely overlap.

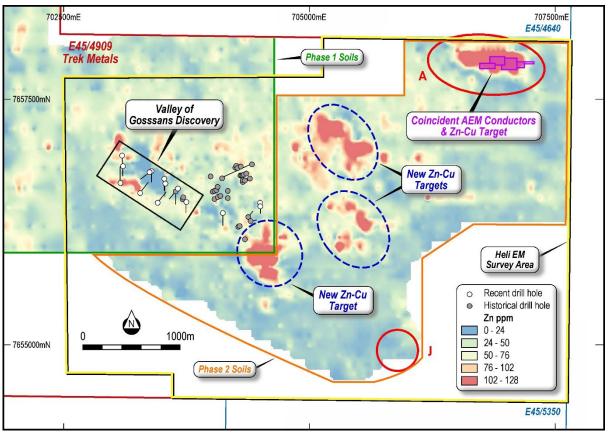


Figure 5: Champagne Pool (Conductor "A") outlined by significant zinc anomalism in soil sampling, and coincident conductor plates (reproduced from ASX: TKM 4th March 2022).



About the Pincunah Project

The Pincunah Project, which includes the Valley of the Gossans (VOG) & Champagne Pool Prospects, (E45/4909 & E45/4917, Figure 6) is located 100km south of Port Hedland and proximal to numerous operating mines, including Pilgangoora (Pilbara Minerals), Iron Bridge (FMG) & Abydos (Atlas).

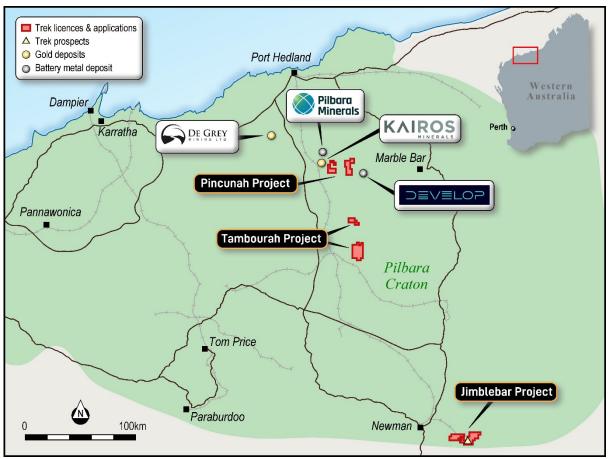


Figure 6: Pincunah Project sitting within Trek Metals Pilbara regional tenement holdings.

Trek has been active at the Pincunah Project since 2020, with a large surface geochemical soil sampling survey defining an extensive (>2km) robust, coherent, and coincident multi-element anomaly at the Valley of the Gossans (VOG) Prospect (*refer ASX: TKM 16th Feb 2021*).

A drilling program completed in 2021 intersected multiple horizons of mineralisation and alteration, with highly anomalous zinc, copper and silver, plus multiple pathfinder elements indicating a large mineralised system (*refer ASX: TKM 13th Oct 2021*).

Subsequent to the drilling, Trek completed an airborne EM survey (*refer ASX: TKM 16th November 2021*) and extended the surface geochemistry to cover the EM targets, with soil assay results confirming coincident EM and geochemical anomalies. The surface geochemistry results significantly upgraded the prospectivity of airborne EM conductive target 'A' (*refer ASX: TKM 4th March 2022*) as a compelling target along strike from the VOG discovery. Recent interpretations have upgraded this target, which has been re-named Champagne Pool.



Authorised by the Board of Directors

ENDS

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Competent Persons Statement

The information in this report relating to Exploration Results is based on information compiled by the Company's Chief Executive Officer, Mr Derek Marshall, a Competent Person, and Member of the Australian Institute of Geoscientists (AIG). Mr Marshall has sufficient experience relevant to the style of mineralisation and to the type of activity described 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 Marshall has disclosed that he holds Shares and Performance Rights in the Company. Mr Marshall consents to the inclusion in this announcement of the matters based on his information in the form and content in which it appears.

Footnote

^{#1} ABUNDANCE OF ELEMENTS IN THE EARTH'S CRUST AND IN THE SEA, CRC Handbook of Chemistry and Physics, 97th edition (2016–2017), p. 14-17)

Kesler, Stephen & Russell, Norman & McCurdy, Karr. (2003). Trace-metal content of the Pueblo Viejo precious-metal deposits and their relation to other high-sulfidation epithermal systems. Mineralium Deposita. 38. 10.1007/s00126-003-0356-1.



JORC Table Section 1: Sampling Techniques and Data: Pincunah Project

Criteria	JORC Code explanation	Commentary
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 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 gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Soil sampling by Trek was conducted from a 30-40cm cleared area with a hole dug to a depth of approximately 25cm. The sample was dry sieved to collect 200-300 grams of -2mm material. Two field duplicates were taken every 100 samples.
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). 	• NA
Drill sample recovery	 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. 	• NA
Logging	 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. 	 Simple descriptions of the sample media were collected, no detailed geological information was recorded.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling 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 	 Each sample was dry sieved in the field to collect 200-300 grams of -2mm material. As the assay method targets the finest possible clay/silt material, the sieving in the field removes the coarse material and reduces the amount of sample to be shipped. By collecting the finest material, the sample is considered more representative of the location, and sensitive to any underlaying mineralisation. Field QA/QC was undertaken with duplicates collected at a rate of 2:100. Sample sizes are considered appropriate for the material and analysis method.



Criteria	JORC Code explanation	Commentary
	 duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	
Quality of assay data and laboratory tests	 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 (ie lack of bias) and precision have been established. 	 Soil samples collected by Trek were sieved to -53 micron at ALS Laboratories and run for gold plus a 43 multi-element package by aqua regia digestion for acid extractable gold (25-gram charge). Laboratory QAQC included sample duplication and insertion of standards and blanks.
Verification of sampling and assaying	 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) protocols. Discuss any adjustment to assay data. 	 Results have been verified by senior company management and an expert independent consultant. All data has been verified and included in the company database. No adjustments have been made to assay data.
Location of data points	 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. 	 Location of drill holes, rock and soil samples by Trek were recorded using a handheld GPS which is considered appropriate at this stage of exploration. Grid projection system is GDA94 MGA Zone 50. Surface RL data is collected using GPS.
Data spacing and distribution	 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. 	 Samples were collected over two separate grids, the first was 100m spaced lines with 40m spaced samples, the second was 140m spaced lines, with 35m spaced samples. Sample spacing is considered appropriate for this early stage of mineral exploration. No compositing has been completed on samples or results.
Orientation of data in relation to geological structure	 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. 	 Orientation of the target was inferred from the initial sample program. The second sampling program was designed to cross the target at a right angle, this orientation is also normal to the local topography. At this early stage of exploration, the exact orientation of any mineralised structures is unknown, and the planned drill program aims to gather information to inform future programs.
Sample security	The measures taken to ensure sample security.	 Chain of custody is managed by the Company. Samples are freighted directly to the Laboratory with the appropriate documentation.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 No audits or reviews of the sampling techniques has been carried out due to the early stage of exploration. It is considered by the Company that industry best practice methods have been employed at all stages of exploration to date. No sample issues were reported during results review and analysis



JORC Table Section 2: Reporting of Exploration Results: Pincunah Project

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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 license to operate in the area. 	 The Pincunah Project, located 50-70 km west of Marble Bar, comprises granted licences E45/4909 and E45/4917 that are held by ACME Pilbara Pty Ltd ("APP") which is a 100% owned subsidiary of Trek Metals Ltd. The project is covered by a Native Title application by the Nyamal People. L PL N050365 covers E45/4909 and UCL covers E45/4917.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Lynas Gold NL (1997): Carried out a conventional soil sampling program on grids ranging from 100m by 50m to 200m by 50m spacing. PMI (1969) conducted RC and Diamond drilling in 1969 at Valley of the Gossans. 27 RC holes and 5 Diamond (BQ and NQ) were completed, largely focused on the outcropping gossans orientated in a NW-SE orientation, likely related to structurally hosted mineralisation.
Geology	 Deposit type, geological setting and style of mineralisation. 	 Mineralisation identified at Valley of Gossans is interpreted to be of hydrothermal origin, possibly representing the root to an epithermal gold system. The zone in outcrop and within shallow drilling appears to be "below" the gold zone. The Champagne Pool target displays a geochemical zonation consistent with a capped epithermal mineral system. To date there has been no evidence of epithermal mineralisation at surface, though the mineralisation model predicts that this is unlikely as it is the cap, or halo, to an epithermal system at surface, and drilling is necessary to confirm the model at depth.
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	• NA
Data aggregation methods	 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. 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. The assumptions used for any reporting of 	 No data truncations were performed. No metal equivalents values have been reported.



Criteria	JORC Code explanation	Commentary
	metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	NA, surface sampling only.
Diagrams	 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. 	See relevant maps in the body of this announcement.
Balanced reporting	 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. 	 All available data has been presented, with emphasis on those results that have a material bearing on prospectivity of the project and relate to the direct targeting of present and future drill programs. A detailed plan is provided in the body of the release.
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. 	 Related information has been presented in previous releases, and these are referenced in the body of the announcement. Geochemical interpretation has been completed in ioGAS software that has led to the identification of a potential mineralisation style not previously considered for the project. Sample results were subject to split probability plots, and principal component analysis that highlighted the anomaly and mineralisation style discussed in the body of the announcement. Exploration data for the project continues to be reviewed and assessed and new information will be reported if material.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Further work is detailed in the body of the announcement and includes an imminent drill program.