ASX ANNOUNCEMENT
31 July 2024

Down Hole Geophysics commenced at Atlantis Cu-Au Prospect

HIGHLIGHTS - Atlantis Cu-Au Prospect

- Down Hole Electromagnetic survey has commenced at the Atlantis Cu-Au Prospect
  - The survey is being undertaken on holes recently drilled into each of the three modelled Electromagnetic (EM) geophysical conductors
  - Aim to identify any off-hole conductors representing accumulation of sulphides
  - In the last week of June, a drill rig was mobilised to test the EM conductors as a priority. The program was terminated early due to a significant rain event, but holes were completed into the conductors and assays are pending. This has allowed the down hole EM surveys to commence as planned
- Atlantis is defined by:
  - Outcropping high grade 15.3% Cu and 0.84g/t Au rock chips[1] (see photos 1 & 2)
  - Extensive 6.5km long soil anomaly (Au-Cu-Sb-As)
  - Three Electromagnetic (EM) geophysical conductors identified down-dip of the outcropping copper-gold mineralisation
  - Doubly-plunging mafic dome similar to +5Moz Stawell gold mine in Western Victoria[2]
  - Located between two fault splays coming off the mantle-tapping Koonenberry Fault
  - Hosted in similar sequence of sediments and volcanic rocks known to host high grade Cu mineralisation 50km to the south[3]

Koonenberry Gold Ltd **(ASX:KNB)** ("Koonenberry" or the "Company") is pleased to report the progress of work at the Koonenberry Project.

Managing Director, Dan Power, said:
"Whilst we have seen a slight delay to the work program due to a significant rain event earlier in the month, we were fortunate to have completed enough drilling at Atlantis to gain drill positions for the downhole EM work. This type of geophysical surveying has been successfully applied by other explorers in the highly prospective Koonenberry Belt who have intersected copper mineralisation in similar rock types at depth under subtle surface features less than 50km from our Atlantis Prospect[3]."

***Photo 1**. Rock chip sample KB03113, which returned **15.3% Copper**[1], comprised of oxidized white meta-tuffaceous siltstone with oxide copper mineralisation (green/dark grey in photo).*

[1] Refer ASX announcement dated 21/03/2023
[2] References to Stawell Gold mine and geological similarities do not in any way guarantee that the Company will have any or similar successes in delineating a Mineral Resource on its projects. Refer to disclaimer on page 11
[3] Refer ASX announcement from G11 Resources Ltd (ASX:G11) dated 4 June 2024

Koonenberry Belt VMS Cu-Au Prospectivity

The Koonenberry Belt is a frontier Terrane prospective for Orogenic gold, VMS Cu-Au-Pb-Zn-Ag and Magmatic Ni-Cu-PGE systems. Traceable for over 225km, the Koonenberry Fault has acted as a long-lived deep crustal structure that has tapped metal source rocks and acted as a conduit for mineralised fluids. The Koonenberry Fault has numerous associated splays, second order faults/thrusts and associated folds and is believed to be critical for concentrating these fluids and depositing metals within trap sites and dilatant zones.

The Koonenberry Belt has been largely under-explored due to its remoteness, with past exploration efforts considered to have been largely ineffective. In recent years however, the belt has been heavily pegged by various explorers who have recognised the enormous prospectivity of the belt to host significant Tier 1 deposits. Modern exploration techniques are being applied for the first time at a belt and prospect scale and are likely to increase the probability of discovery.

The majority of the 2,060km^2 Koonenberry Gold Project is considered highly prospective for Orogenic Gold. With abundant evidence of gold mineralisation in multiple bedrock sources and a pipeline of emerging targets, the Company believes it has the potential to discover significant gold deposits. Furthermore, along the western margin of the Project a sequence of sedimentary rocks and volcanics can be traced to the south where other explorers have demonstrated recent success in applying electrical geophysical techniques that have resulted in the discovery of high grade Cu-dominant VMS systems (G11 Resources Ltd, ASX announcement dated 4 June 2024 "High Grade Copper Intercepts at Wilandra Central." e.g. 9m @ 2.66% Cu from 310m, inc. 6m @ 3.46% Cu from 311m)[4].

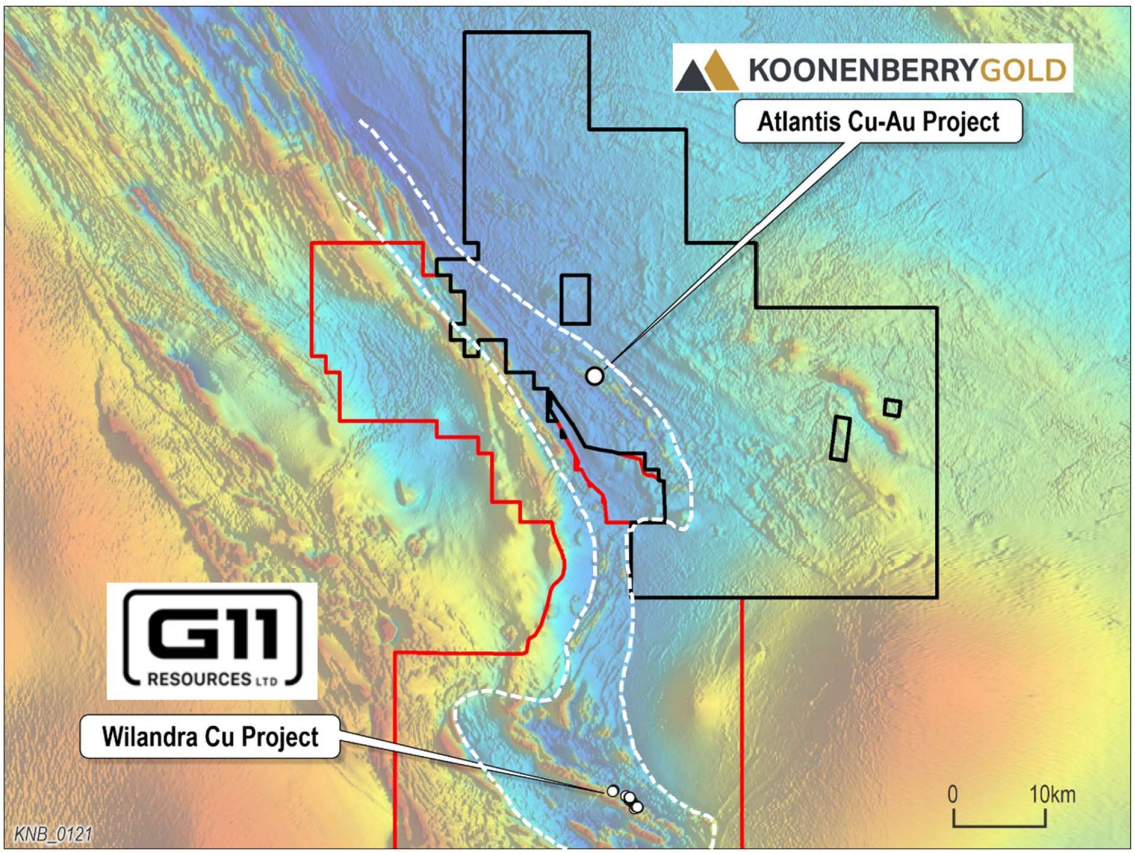


Figure 1. *Regional Airborne Magnetic image showing Koonenberry Gold Project (black outline), G11 Resources Project (red outline) and a sequence of Cambrian aged sediments and volcanics considered prospective for Cu-Au-Pb-Zn VMS systems (white dashed lines).*

[4] References to proximate projects do not in any way guarantee that the Company will have any or similar exploration success. Refer to disclaimer on page 11

Atlantis Prospect Background

The Atlantis Prospect is defined by a 6.5km long gold-copper-antimony-arsenic-lead-zinc soil anomaly. Stratiform malachite and remnant sulphides have been observed in outcrop in association with silica and hematite alteration. **High-grade rock chip assays of 15.3% Cu and 5.62% Cu, as well as up to 0.84g/t Au, 16,000ppm As and 0.34% Pb, have been returned from outcrop**.[5]

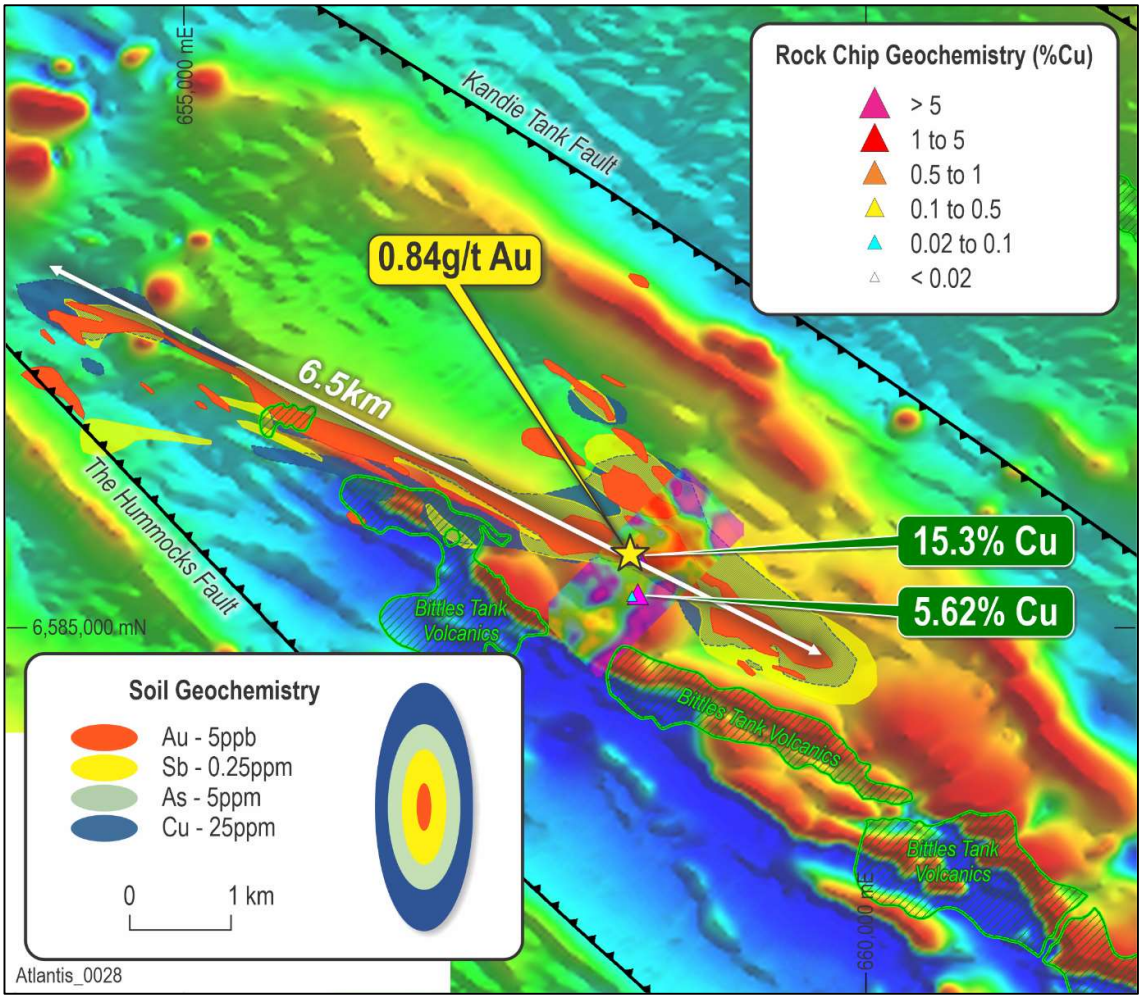


Figure 2. *Atlantis Prospect with Late Time (Channel 21) EM image over RTP aeromagnetic image, 6.5km long Gold-Copper and Pathfinder element soil anomaly, rock chips & Volcanics outcrop.*

The geology comprises sediments, volcanics and an interpreted doubly-plunging basalt dome which is represented as a magnetic high. The sedimentary sequence is further broken into lithic muddy feldspathic quartz siltstone, feldspar quartz greywacke and laminated carbonaceous mudstone and (all from the Cambrian Teltawongee Group) and has been metamorphosed to sub-greenschist/greenschist facies. **The area is considered highly prospective for Orogenic Gold mineralisation (Stawell Gold Mine – Type). Copper-dominant mineralisation styles such as VMS (Volcanogenic Massive Sulphide) are also possible.**

[5] Refer ASX announcement dated 1/03/2023

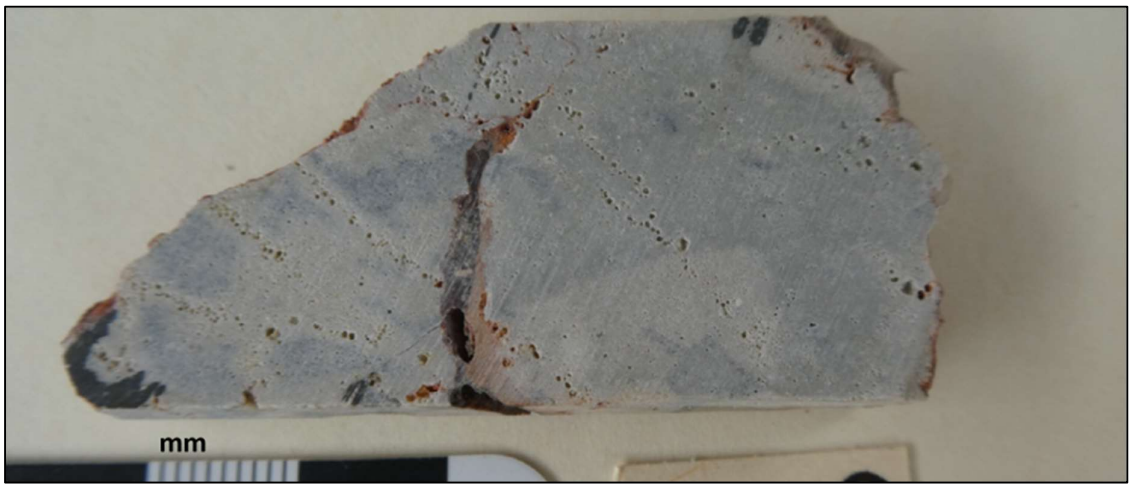


***Photo 2** – Slab from Atlantis outcrop of sample KB03118 which returned **0.84g/t Gold** [6], dominated by secondary silica (hydrothermal alteration), containing abundant ex-sulphide coarse voids (up to 1mm) which are flanked by fibrous pressure fringe quartz.*

A Moving-Loop Electromagnetic (MLEM) survey was completed in March 2023 at the Atlantis Prospect to test for the presence of conductive bodies potentially representing sulphide mineralisation. **The survey was completed over only a 600m strike length of the 6.5km long gold-copper-antimony-arsenic soil anomaly. Three Electromagnetic (EM) conductors were detected proximal to peak gold and copper rock chip assays of 0.84g/t gold and 15.3% Cu.**

The EM conductors, whilst relatively weak, are interpreted to represent possible interconnected sulphide veinlets associated with Cu-Au mineralisation. These are labelled as EM Plate 1 – 3 on the cross section (Figure 4) and have approximate strike lengths of 200m, 150m and 300m respectively, each with 125m down dip extent.

Significantly, the high-grade Cu-Au rock chip samples sit directly up dip from the modelled central plate. The down dip extension of the SW plate coincides with a monoclinal flexure in the conductivity profiles. These coincidences could be interpreted as up-dip leakage of sulphide mineralisation from a NE dipping body and the SW dipping plate reflecting a fault (Figure 4).

In addition, the high-grade rock chips, copper-gold-multielement soil anomalies and the late-time EM response (red component) are all co-incident with a fold hinge mapped by the Geological Survey of NSW. **Modelled EM plates appear to be located on both limbs of the fold. The limbs may have increased structural complexity related to deformation and folding and therefore be better sites for mineralisation.** This is supported by the observation of a carbonaceous mudstone unit during Phase I drilling which forms a marker horizon and indicates that the stratigraphy may folded into an antiform, or be a parasitic fold on a larger antiformal/domal structure.

[6] Refer ASX announcement dated 21/03/2023

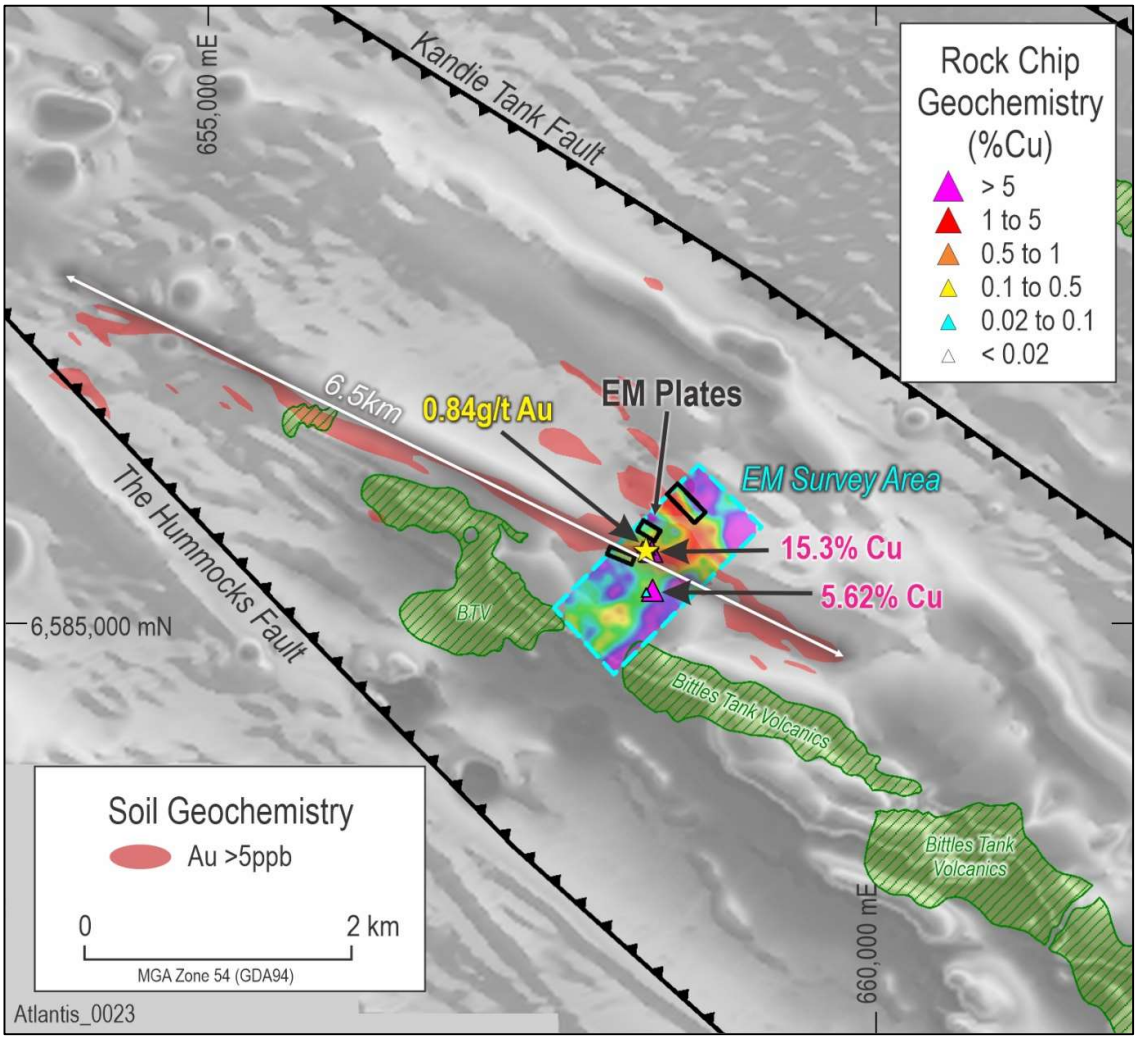


Figure 3. *Atlantis Prospect with Late Time (Channel 21) EM image within the survey area over Grayscale RTP aeromagnetic image, 6.5km long Gold in soil anomaly, Rock Chips and Volcanics outcrop.*

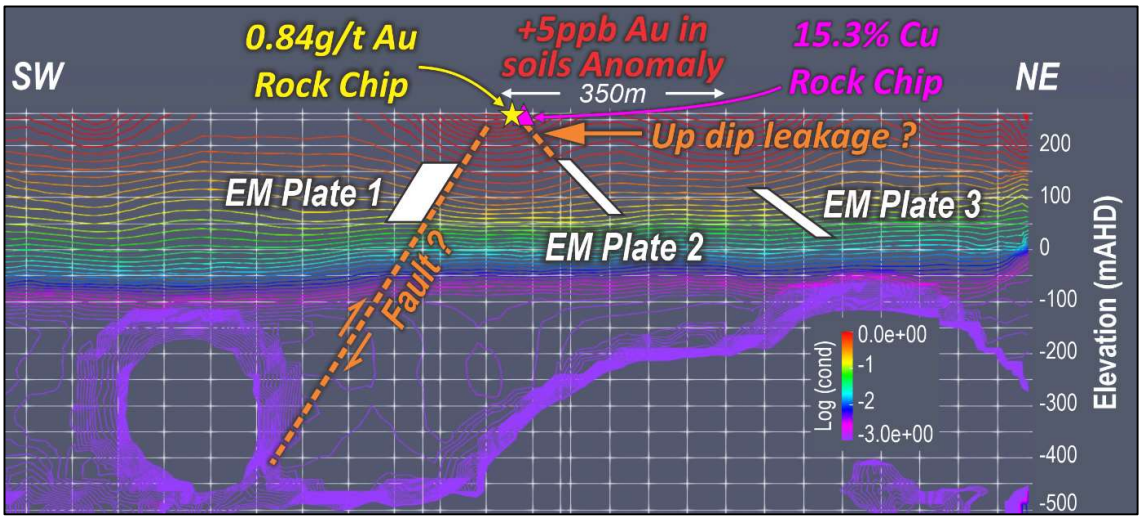


Figure 4. *SW-NE cross-section through the high-grade copper rock chips (view toward NW) with modelled EM plates, conductivity contours and interpreted structures. Elevation mAHD is metres Australian Height Datum. Note the location is also coincident with the 350m wide Cu-Au soil anomaly.*

The first phase of Air Core drilling at Atlantis was completed in April 2024 with eighteen holes for 892m drilled. Penetration was very slow due to hard and variably silicified ground. The program was originally planned to be ~5,000m but was terminated early due to the limitations of the rig configuration and air pressure. **As a result, the three EM conductors were not tested during this initial program. In addition, drilling was only conducted over a 150m strike extent of the 6.5km long Cu-Au soil anomaly.**

Despite this, results show that copper mineralisation (>0.1% - 0.72% Cu) and an anomalous copper zone (>300ppm) is associated with gold, arsenic, lead and zinc mineralisation. This is potentially significant as it may represent leakage and/or zonation from a larger system or leakage along a fault splay from one or more of the deeper EM targets. Alternatively, it could also represent leakage from the highly prospective contact between the sediments and the Bittles Tank Mafic Volcanics which outcrop to the west but may also be expected at depth.

Significant Intersections from the first phase of Air Core drilling at Atlantis included:[7]

- **3m @ 0.61% Cu from 9m including 1m @ 0.72% Cu from 9m** (24ATAC008)
- **12m @ 0.31% Cu from 9m** (24ATAC011)
- **5m @ 0.31% Cu from 5m** (24ATAC012)
- **6m @ 0.35g/t Au and 0.57% Pb from 0m** (24ATAC008)

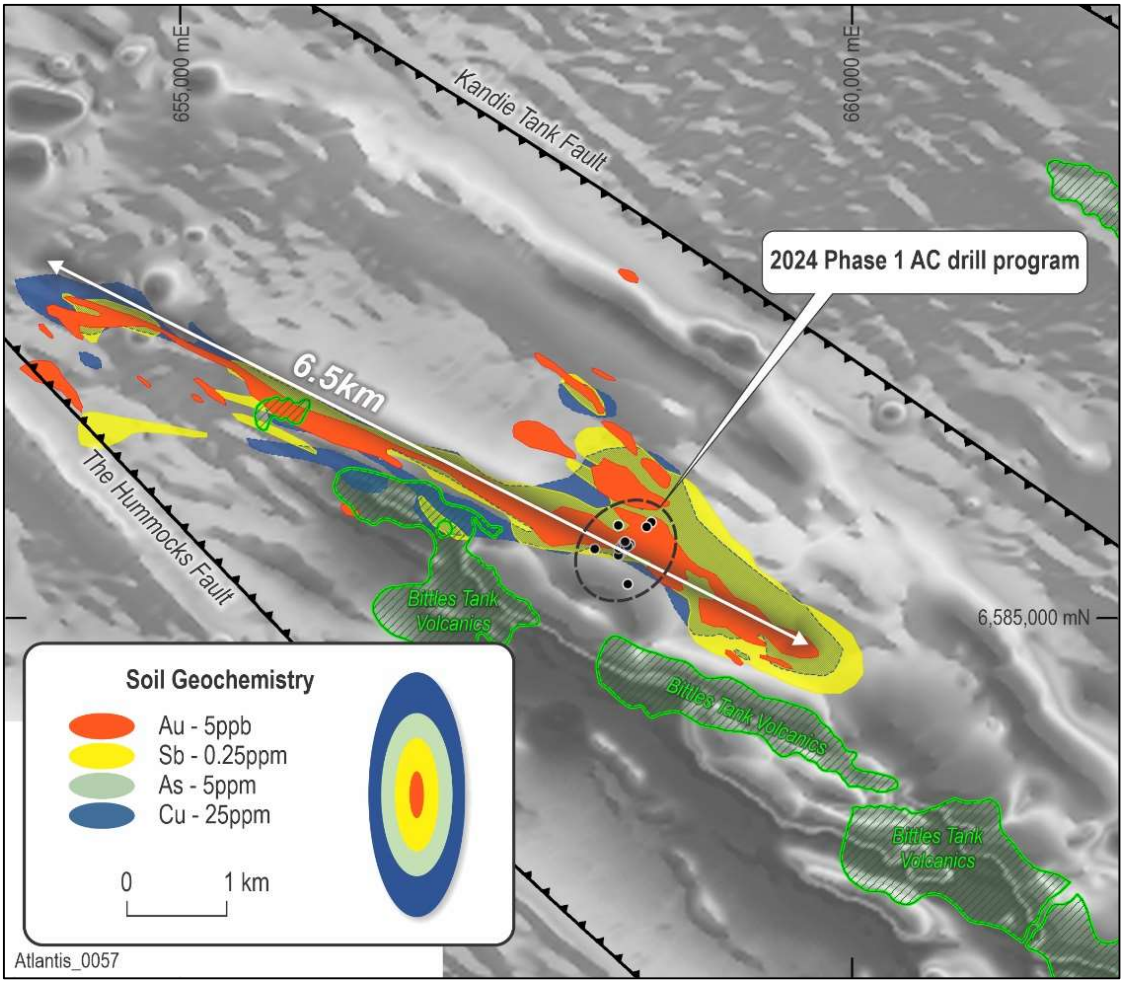


Figure 5. Air Core drill collars in relation to the 6.5km long Gold-Copper and Pathfinder element soil anomaly which defines the Atlantis Prospect & mapped volcanics over grayscale RTP aeromagnetics.

[7] Refer ASX Announcement dated 28/05/2024

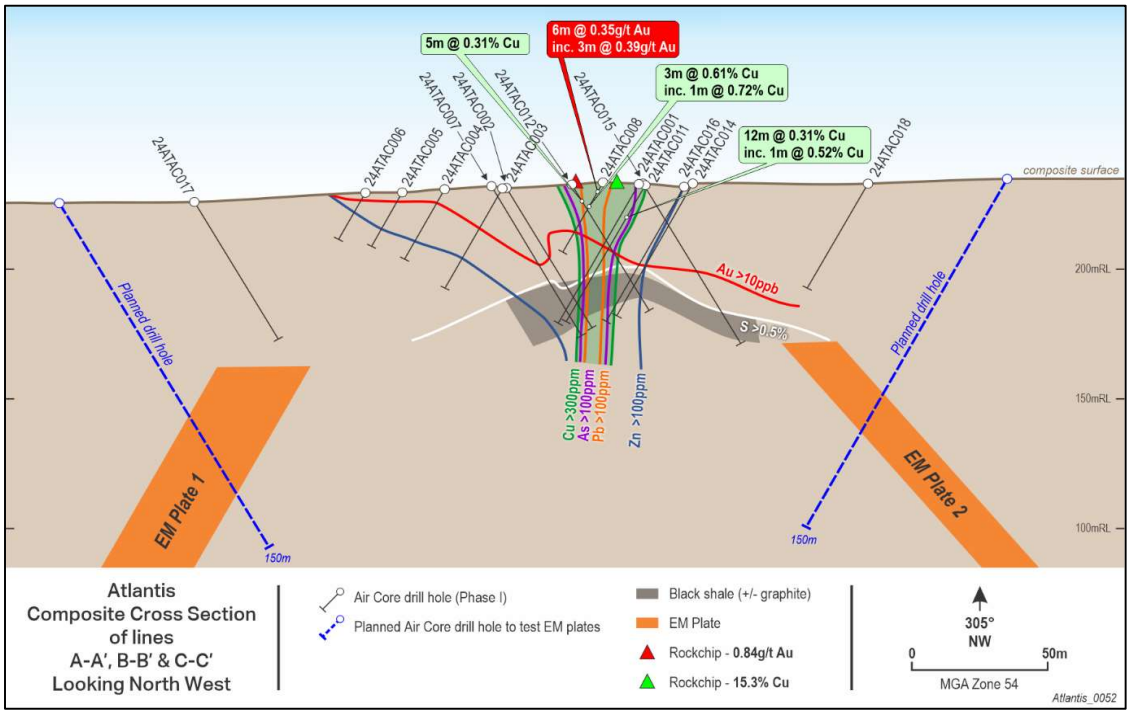


Figure 6. Composite cross section (sections A, B & C combined) of Atlantis April 2024 AC drill traces and anomalous multi-element geochemistry contours and zonation from Pb to As-Cu to distal Zn.

Alteration observed in the field is predominantly silica, however secondary alkali feldspar, K-feldspar, biotite (retrograde to chlorite) and sericite/muscovite has been observed petrographically and is likely to represent a potassic peak metamorphic metasomatic event. Fe-carbonate alteration has been observed to cross-cut the earlier alteration assemblage and may represent a second, cooler fluid event.

In drilling, no sulphides other than pyrite were observed in hand specimen (although malachite was observed in the weathered zone), however very fine to ultra fine-grained Fe-sulphides are observed petrographically intergrown with, interstitial to, and included within, the quartz, alkali feldspar, biotite and Fe-rich carbonate alteration assemblage. Sulphides are observed as pyrite, arsentiferous pyrite, pyrrhotite, arsenopyrite and chalcopyrite in polished thin section work. Highly anomalous Pb and Zn assays (Pb max 0.95%, Zn max 0.15%) also suggest that Galena and Sphalerite are also likely to be present in the samples. In previous petrological studies on the outcropping mineralisation at Atlantis, vein-related sulphides were determined to include galena along with arsenopyrite and chalcopyrite.

Update and Forward Program

In the last week of June, a drill rig was mobilised to test the EM conductors as a priority. The program was unfortunately terminated early due to another significant rain event. Fortunately drill holes were completed into each of the conductors which has facilitated the down hole EM survey to commence as planned. Note all assays from this second phase of drilling are pending.

The results of the downhole EM geophysical survey will be assessed in conjunction with the receipt of assays from the Phase II drilling and the petrological analysis of drill chips.

The identification of any off-hole conductors, which could represent an accumulation of sulphides, would represent priority drill target/s for further assessment.

Additional drilling on the Company's Bellagio, Royal Oak and Pipeline Prospects is also planned.

PROSPECT	ACTIVITY	OBJECTIVE	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Atlantis Cu-Au Prospect	AC Drilling	Phase I drill testing (first ever drill test)		✓						
	AC Drilling	Phase II drill testing					✓			
	Geophysics	Define drill targets								
	RC Drilling	Test off hole EM Condutors								
Bellagio Au Prospect	AC Drilling	Define gold zone footprint								
	AC Drilling	Target depth extensions		✓						
	AC Drilling	Target E-W trending Central Gold Zone								
Royal Oak Fault	Geophysics	Define faults and trap sites								
	Geochemistry	Define targets along prospective fault			✓	✓				
	AC Drilling	Phase I drill testing of priority targets								
Pipeline Prospects	AC Drilling	Phase I drill testing of priority targets								

➢Consistent news flow for investors

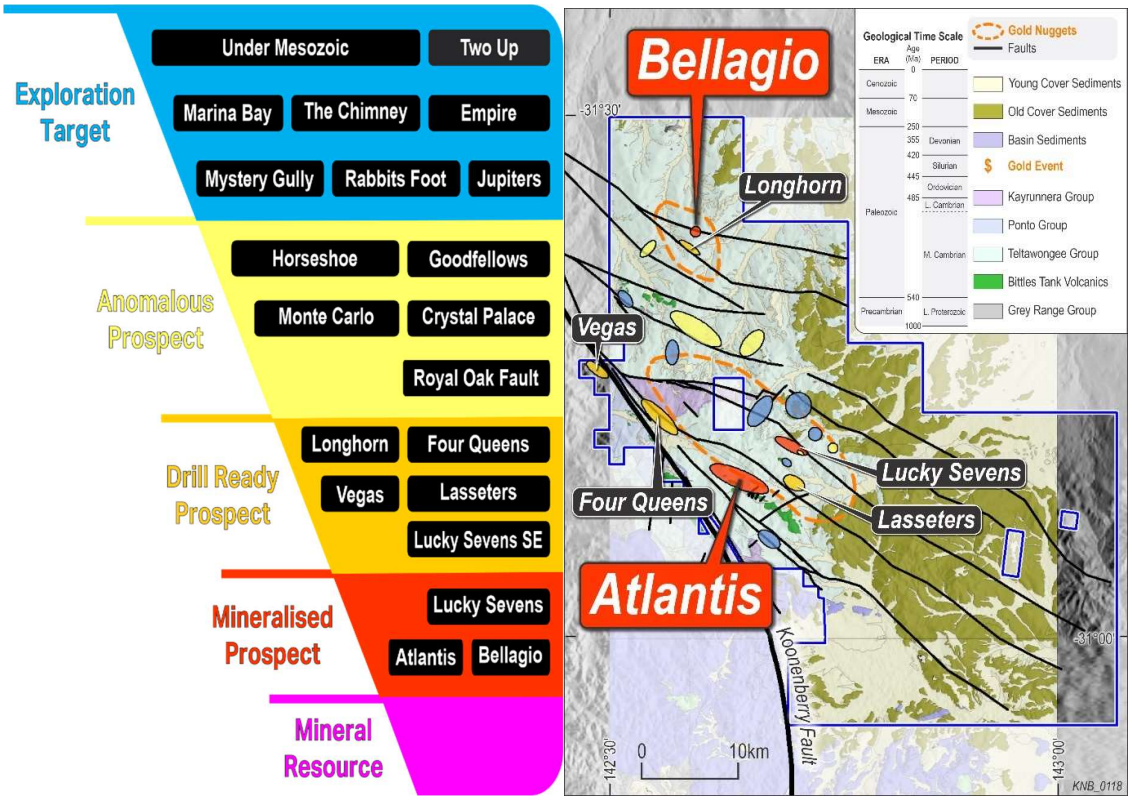
Table 1. Planned Forward Work Program. Please note that planned discovery activity is indicative and subject to change due to various factors including significant rain events.

-ENDS-.

ABOUT KOONENBERRY GOLD

Koonenberry Gold Ltd is a minerals explorer based in Australia aiming to create value for shareholders through exploration at the Company's 100%-owned Koonenberry Gold Project. The Project is located in north-western New South Wales, approximately 160km north-east of the major mining and cultural centre of Broken Hill and 40km west of the opal mining town of White Cliffs. Good access is available via main roads connecting Broken Hill, White Cliffs and Tibooburra. The Project covers 2,060km^2 of granted EL's in a consolidated tenement package.

With abundant evidence of high-grade mineralisation in multiple bedrock sources and a pipeline of emerging targets, the tenement package offers a compelling district scale Greenfields discovery opportunity in an underexplored and emerging province. Koonenberry Gold holds a dominant position in the Koonenberry Belt in NSW which is believed to be an extension of the Stawell Zone in Western Victoria and therefore has the potential for the discovery of significant gold deposits.



Koonenberry Gold Prospects and pipeline of discovery opportunities.

This ASX release was authorised by the Board of the Company.

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REFERENCES

- Peters, J.,24/09/2021. Koonenberry Gold Pty Ltd Independent Geologist's Report - Koonenberry Gold Project 10 May 2021 contained in Koonenberry Gold Ltd Prospectus.
- Direen, N.G., 2021. Seismic Reinterpretation of reprocessed data for Koonenberry Gold Limited.
- 29/04/2022 KNB (ASX). Quarterly Activities Report for the period ended 31 March 2022.
- 24/05/2022 KNB (ASX). Structural Studies Update.
- 28/07/2022 KNB (ASX). Quarterly Activities Report for the period ending 30 June 2022.
- 15/08/2022 KNB (ASX). Drilling commences at Lucky Sevens high grade gold Prospect.
- 10/10/2022 KNB (ASX). Completes drilling at Lucky Sevens high grade gold Prospect.
- 24/10/2022 KNB (ASX). Quarterly Activities Report for the period ending 30 September 2022.
- 28/11/2022 KNB (ASX). Lucky Sevens high grade gold Prospect update.
- 21/12/2022 KNB (ASX). Maiden RC Drilling Results for Lucky Sevens Gold Prospect.
- 24/02/2023 KNB (ASX). Commencement of Field Work.
- 01/03/2023 KNB (ASX). EM Geophysical Survey Underway at Atlantis Au-Cu Prospect.
- 21/03/2023 KNB (ASX). EM Conductor detected at Atlantis Au-Cu Prospect.
- 03/04/2023 KNB (ASX). Exciting 22.5g/t Gold in quartz vein outcrop at Bellagio Prospect.
- 26/04/2023 KNB (ASX). Quarterly Activities Report for the period ended 31 March 2023.
- 31/05/2023 KNB (ASX). Bellagio Prospect and Regional Project Update.
- 25/07/2023 KNB (ASX). Quarterly Activities Report for the period ended 30 June 2023.
- 04/08/2023 KNB (ASX). Approval to commence maiden drilling program at Bellagio.
- 06/09/2023 KNB (ASX). Drilling Program Update for Bellagio Gold Prospect.
- 03/10/2023 KNB (ASX). Bellagio Gold Prospect Encouraging Initial Drill Results.
- 07/09/2023 KNB (ASX). Addendum to Bellagio Update Announcement.
- 23/10/2023 KNB (ASX). Quarterly Activities Report for the period ended 30 September 2023.
- 30/10/2023 KNB (ASX). Widespread gold mineralisation identified from first pass drilling at Bellagio.
- 20/11/2023 KNB (ASX). High impact follow up drilling to commence at Bellagio.
- 12/12/2023 KNB (ASX). Bellagio Drilling Intersects Visible Gold and Widespread Alteration.
- 31/01/2024 KNB (ASX). Quarterly Activities Report for the period ended 31 December 2023.
- 05/02/2024 KNB (ASX). Bellagio Phase II drilling defines widespread gold mineralisation.
- 10/04/2024 KNB (ASX). Commencement of drilling at Atlantis Cu-Au Prospect
- 19/04/2024 KNB (ASX). Project update
- 30/04/2024 KNB (ASX). Quarterly Activities Report for the period ended 31 March 2024.
- 28/05/2024 KNB (ASX). Copper mineralisation intersected at Atlantis.
- 13/06/2024 KNB (ASX). Bellagio gold footprint extended and new targets defined.
- 19/06/2024 KNB (ASX). Drilling to test priority Cu-Au targets at Atlantis
- 23/07/2024 KNB (ASX). Quarterly Activities Report for the period ended 30 June 2024.
- 04/06/2024 G11 (ASX). High Grade Copper Intercepts at Wilandra Central.

Competent Persons Statement

The information in this announcement that relates to exploration results is based on information compiled under the supervision of Mr Paul Wittwer, who is a Member of the Australian Institute of Geoscientists (AIG) and the Australian Institute of Mining and Metallurgy (AusIMM) and is the Exploration Manager of Koonenberry Gold Limited. Mr Wittwer has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves." Mr Wittwer consents to the inclusion in this report of the matter based on his information in the form and context in which it appears. Where reference is made to previous announcements of exploration results in this announcement, the Company confirms that it is not aware of any new information or data that materially affects the information and results included in those announcements.

Forward looking statements

This announcement may include forward looking statements and opinion. Often, but not always, forward looking statements can be identified by the use of forward looking words such as "may", "will", "expect" "intend", "plan", "estimate", "anticipate", "continue", "outlook" and "guidance" or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs. Forward looking statements are based on Koonenberry and its Management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect Koonenberry's business and operations in future. Koonenberry does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that Koonenberry's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by Koonenberry or Management or beyond Koonenberry's control. Although Koonenberry attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of Koonenberry. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law in providing this information Koonenberry does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any changes in events, conditions, or circumstances on which any such statement is based.

Cautionary statement on visual estimates of mineralisation

Any references in this announcement to visual results are from visual estimates by qualified geologists. Laboratory assays are required for representative estimates of quantifiable elemental values. Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

Proximate resources and statements

This announcement may contain references to other parties either nearby or proximate to Koonenberry Gold's projects and/or references that may have topographical or geological similarities to Koonenberry Gold's projects, including the Stawell Gold Mine in Western Victoria and the Wilandra Central project adjacent to the Koonenberry Gold Project. It is important to note that such exploration results, discoveries or geological similarities do not in any way guarantee that the Company will have any exploration success at all, or in delineating a Mineral Resource on any of Koonenberry Gold's Projects.