Barton Gold
ASX:BGD

ASX Announcement
20 March 2023

Assays Indicate Second Potential 223 Deposit Depth Extension

Further Scope for Near Surface & Depth Extensions, New Shallow Zones

HIGHLIGHTS

- Final assays for diamond and RC drilling on Tunkillia 223 Deposit identify multiple broad and high-grade intersections outside the current JORC (2012) Mineral Resource Estimate (**MRE**) block model, and 25 – 150m below the current open pit model, at key northern target
- Latest results include:

  TKB082: **6m @ 2.51 g/t Au** from 43m
  4m @ 2.88 g/t Au from 50m
  TKB85D: **11.3m @ 4.04 g/t Au** from 174m
  TKB86D: **12.05m @ 0.89 g/t Au** from 219.95m
  TKB88D: **14.8m @ 1.01 g/t Au** from 394m
  TKB89D: **11m @ 3.7g/t Au** from 185m

- Potential to add a 2nd ~300m long zone of depth extension into the existing MRE, following January's identification of a 1st potential ~500m long depth extension[1]
- Shallow high-grade assays next to 223 Deposit also indicate a new zone of shallow quartz vein hosted mineralisation, offering a potential 2020 MRE width expansion and providing follow up target

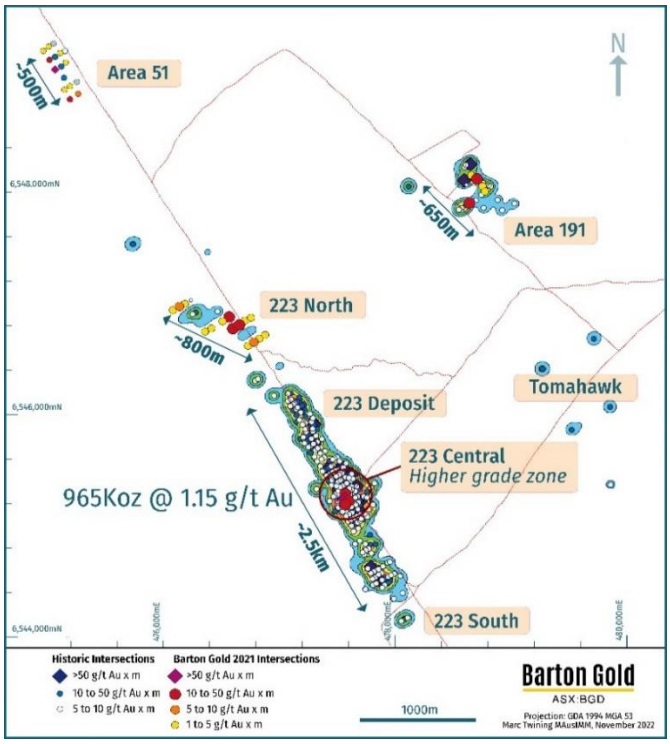

Fig 1 – Tunkillia 223 Deposit & New Gold Zones

Barton Gold Holdings Limited (ASX: **BGD**) (**Barton** or the **Company**) is pleased to report final 223 Deposit diamond drilling (**DD**) results, and additional reverse circulation (**RC**) assays from the 9,214 metres (including diamond pre-collars) recent RC drilling across 37 holes at the Tunkillia Project (**Tunkillia**).

Commenting on the latest assay results, Barton MD Alex Scanlon said:

"We are excited that assays continue to validate our thesis that the 223 Deposit itself has considerable potential for extensions and growth, not only on known mineralisation but also in previously untested areas. These results in particular highlight potential for entirely new shallow high-grade structures adjacent to the 2020 block model.

"We expect to release an updated MRE for the 223 Deposit during the fourth quarter (April – June) of this fiscal year. We are also expecting the results of DD and RC drilling at the regional Area 51 target during April and May."

[1] Refer to Barton ASX announcement dated 25 January 2023

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Further Broad Intersections Below Current MRE Model

In September 2022, Barton commenced a major drilling program targeting depth extensions of the 223 Deposit and the new Area 51 gold zone. **Over 90% of the drilling informing the current JORC (2012) MRE was completed between 1996 and 2008, during which period the USD gold price was mostly below $500/oz. As a result, depth extensions and regional targets at the 223 Deposit were poorly tested.**

In particular, low historical gold prices resulted in generally shallow drilling and poor testing of mineral extensions to depth, resulting in several areas of the 2020 MRE where the Reasonable Prospects for Eventual Economic Extraction (**RPEEE**) analysis constrained estimated JORC Resources to a relatively shallow depth.

Assays published in December 2022 and January 2023 confirmed broad intersections outside the 2020 block model in previously untested areas in the southern end of the 223 Deposit.[2] **These results indicated potential to add mineralisation from a ~500m long 'South Plunge' depth extension into the current MRE.**

The results contained in this release further enhance this picture, with multiple significant assays outside the current block model. **Similarly, these results highlight the potential to add mineralisation from another ~300m long zone, located in the northern end of the 'Main Deeps' target, into the current MRE.**

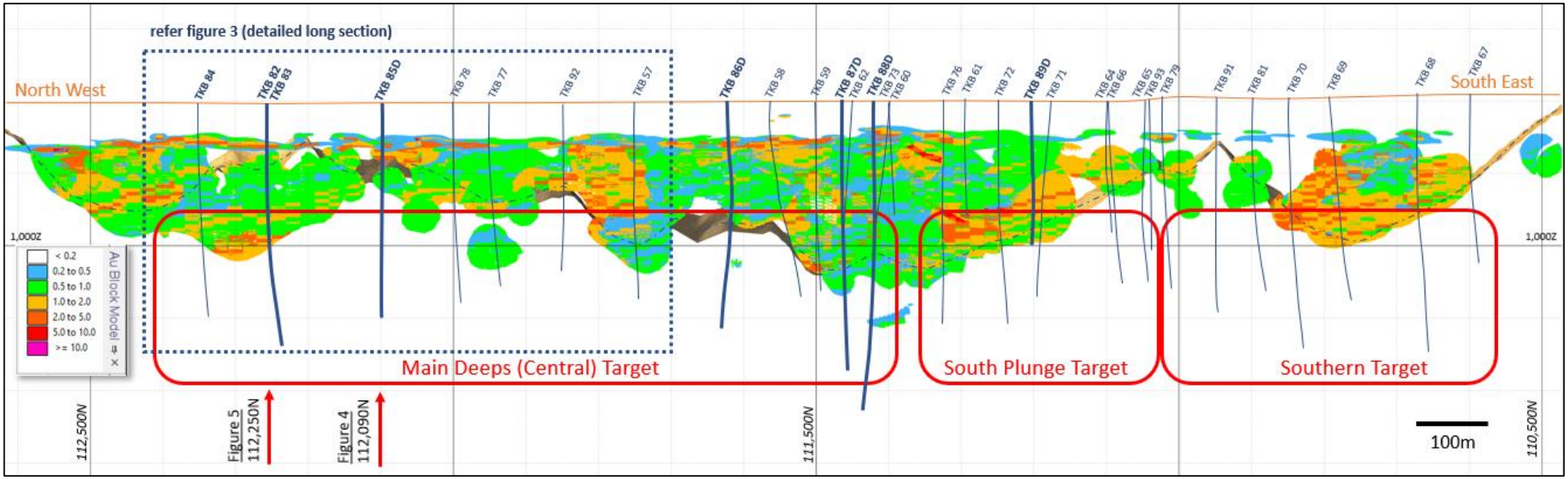

Fig 2 – Tunkillia 223 Deposit Long Section with Drilling Traces for Reported Assays & Cross-Section Locations for Figures 3 – 5 of this Announcement

[2] Refer to ASX announcements dated 15 December 2022 and 25 January 2023

Results from recent drilling at the northern end of the 'Main Deeps' target area have identified new mineralised positions that lie outside of but close to the 2020 MRE pit shell and may have the potential to expand the resource in this area. Together with historical and recently published drill holes TKB0083 and TKB0078 [3], **new assay results from drill holes TKB0082 and TKB0085D indicate broad and potentially continuous zones of mineralisation along a ~300m strike extent, all located approximately 25 – 150m below the currently modelled 2020 MRE indicative open pit shell. A new shallow structure is also indicated.**

Figure 3 depicts significant intervals that are either outside the 2020 MRE pit shell or not previously included in the 2020 block model. Recently completed drilling traces are presented in bold red with historical drilling traces in blue. Only intervals grading greater than 5 gram-metres are presented, with intervals grading greater than 10 gram-metres presented in bold font.

The consistency of these intercepts along this ~300m long strike increases potential to add a significant portion of this area into JORC Mineral Resource classification in due course.

Key recent assays outside and/or below the 2020 block model shown in Figure 3 include:

TKB82: **6m @ 2.51 g/t Au** from 43m
4m @ 2.88 g/t Au from 50m
TKB83: **9m @ 2.50 g/t Au** from 61m*
20m @ 1.00 g/t Au from 263m*
TKB85D: **11.3m @ 4.04 g/t Au** from 174m
9m @ 2.20 g/t Au from 225m*
TKB78: **12m @ 0.87 g/t Au** from 205m*

Historical intercepts shown in Figure 3 (all outside the 2020 block model) include:

LRC449: **24m @ 1.37 g/t Au** from 197m*
LRC411: **3m @ 9.47 g/t Au** from 144m*
LRC055: **1m @ 12.6 g/t Au** from 141m*

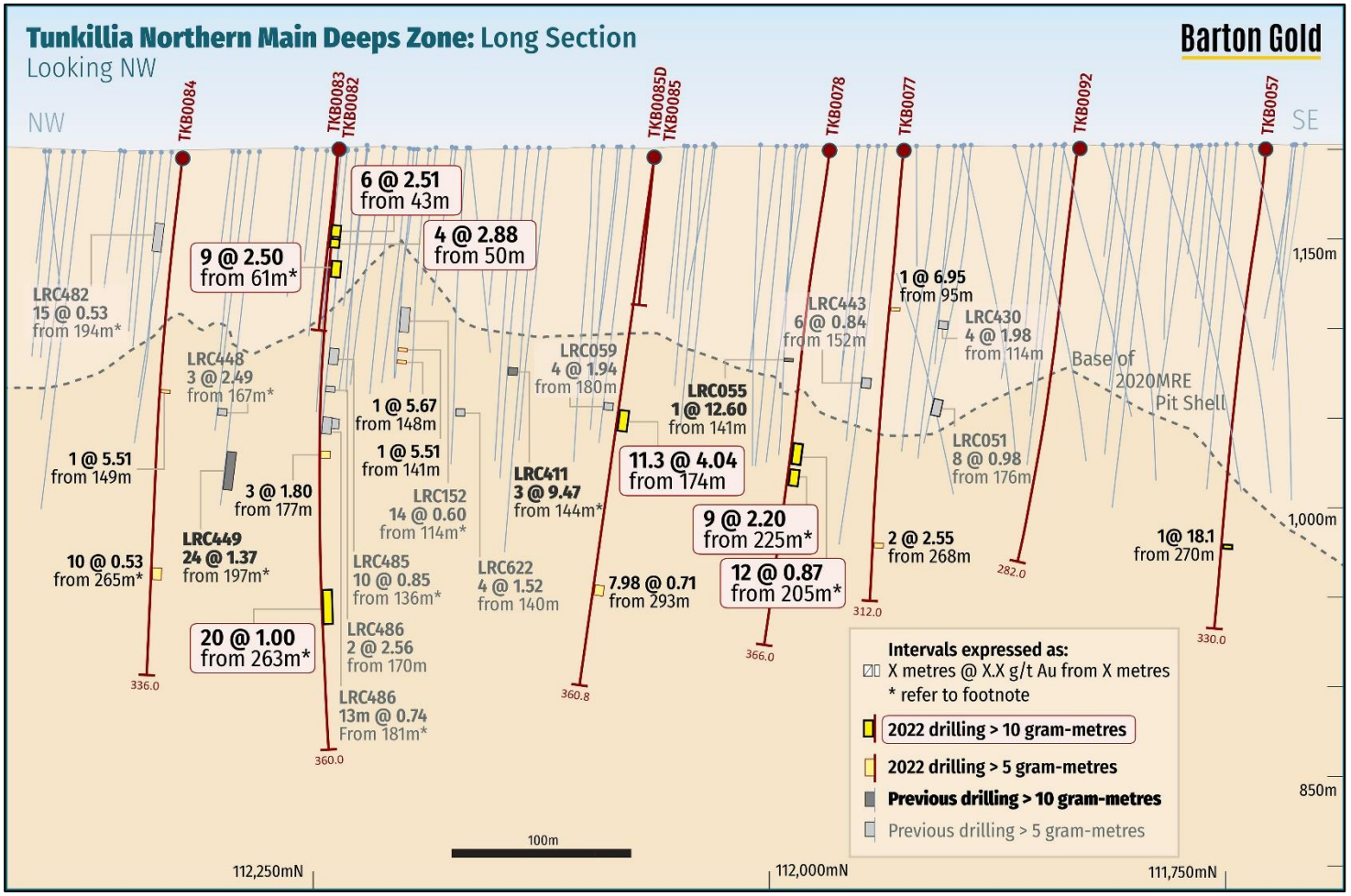

Fig 3 – Long Section of Northern 'Main Deeps' Target, Showing Key Intercepts Outside 2020 Block Model

[3] Refer to ASX announcement dated 25 January 2023
* calculated applying a 0.3 g/t Au cut off and allowing 2 consecutive >0.1 g/t Au dilution intervals; ref Table 1 "Data Aggregation Methods"

Hole TKB85D results confirms the main zone of mineralisation continues at depth beneath the current MRE pit shell. TKB85D results also include **11.3m @ 4.04 g/t Au** from 174m in a previously untested position, potentially linking to new mineralisation reported in hole TKB78 (Figure 3) approximately 100m to the south, which included intervals of **12m @ 0.87 g/t Au** from 205m* and **9m @ 2.2g/t Au** from 225m*.

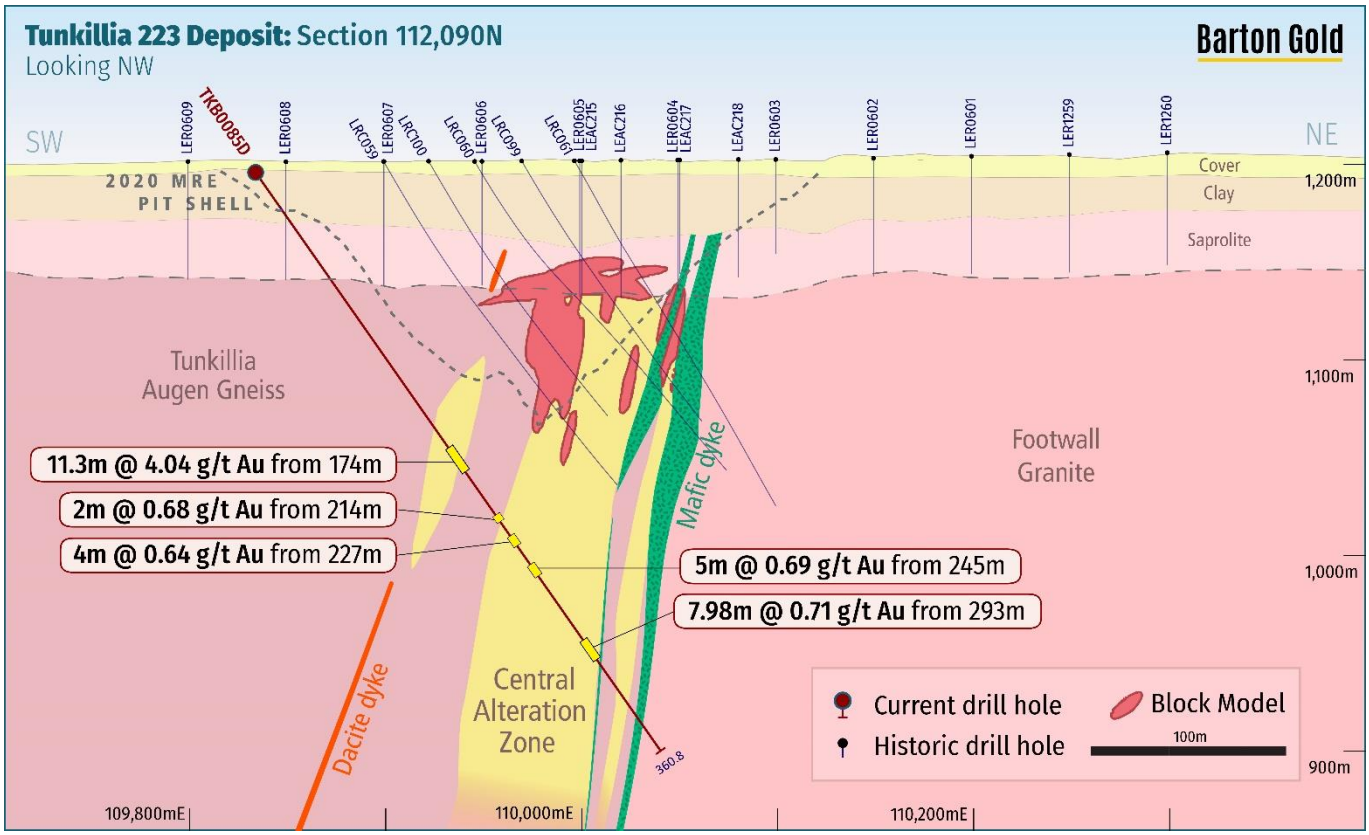

Fig 4 – Tunkillia DD Hole TKB85D

~150m north of TKB85D, and as reported on 25 January 2023, hole TKB83 assays indicated potential shallow block model and pit extensions. TKB83 was a redrill of previously abandoned hole TKB82.

TKB82 samples were assayed to confirm the results from TKB83 (**9m @ 2.5 g/t Au** from 61m*). Further to TKB82 results of **6m @ 2.51 g/t Au** from 43m and **4m @ 2.88 g/t Au** from 50m, and the relative position of the downhole intersections and logged quartz veins in TKB83, Barton now believes this mineralisation represents a hanging wall quartz vein hosted zone with untested potential for additional mineralisation.

This indicates further potential for new zones of mineralisation in untested areas.

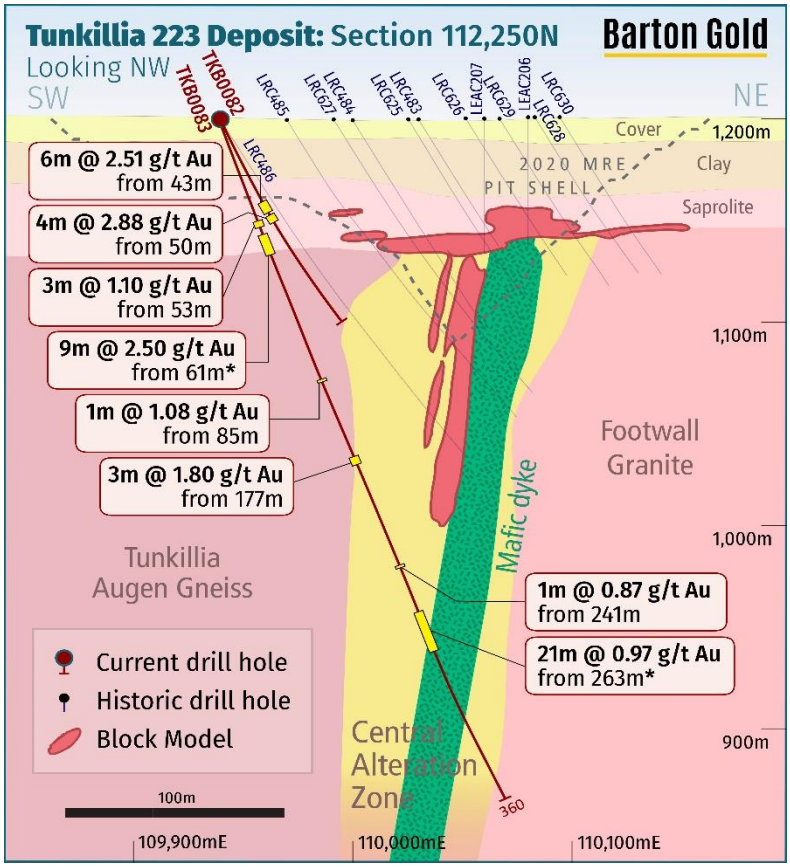

Fig 5 – Tunkillia RC Drill Holes TKB0082 & TKB0083

* Refer to ASX announcement dated 25 January 2023; calculated applying a 0.3 g/t Au cut off and allowing 2 consecutive >0.1 g/t Au dilution intervals; ref Table 1 "Data Aggregation Methods"

Authorised by the Board of Directors of Barton Gold Holdings Limited.

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Competent Persons Statement

The information in this announcement that relates to new Exploration Results for the Tunkillia Gold Project (including drilling, sampling, geophysical surveys and geological interpretation) is based upon, and fairly represents, information and supporting documentation compiled by Mr Marc Twining BSc (Hons). Mr Twining is an employee of Barton Gold Holdings Ltd and is a Member of the Australasian Institute of Mining and Metallurgy Geoscientists (AusIMM Member 112811) and has sufficient experience with the style of mineralisation, the deposit type 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" (The JORC Code). Mr Twining consents to the inclusion in this announcement of the matters based upon this information in the form and context in which it appears.

About Barton Gold

Barton Gold is an ASX listed Australian gold exploration company with **a total attributable ~1.1Moz Au JORC (2012) Mineral Resources endowment** (28.68Mt @ 1.2 g/t Au), a pipeline of advanced exploration projects and brownfield mines, and **100% ownership of the only regional gold mill** in the central Gawler Craton of South Australia.*

Tarcoola Gold Project

- Existing brownfield open pit mine within trucking distance of Barton's processing plant
- Significant mineral extensions
- Under-explored asset with untapped scale potential

Tunkillia Gold Project

- **965koz Au Mineral Resources (26.1Mt @ 1.15 g/t Au)***
- Host structure extends 7km north and 7km south
- District-scale structures with advanced satellite targets

Infrastructure

- 650ktpa CIP process plant, mine village, workshop, labs and airstrip
- Tarcoola ~40 person lodging to support mine operations
- Tunkillia camp to support dedicated project team

Competent Persons Statement & Previously Reported Information

The information in this announcement that relates to the historic Exploration Results and Mineral Resources as listed in the table below is based on, and fairly represents, information and supporting documentation prepared by the Competent Person whose name appears in the same row, who is an employee of or independent consultant to the Company and is a Member or Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM), Australian Institute of Geoscientists (AIG) or a Recognised Professional Organisation (RPO). Each person named in the table below has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he has undertaken to quality as a Competent Person as defined in the JORC Code 2012.

Activity	Competent Person	Membership	Status
Tarcoola Mineral Resource	Dr Andrew Fowler (Consultant)	AusIMM	Member
Tarcoola Exploration Results (until 15 Nov 2021)	Mr Colin Skidmore (Consultant)	AIG	Member
Tarcoola Exploration Results (after 15 Nov 2021)	Mr Marc Twining (Employee)	AusIMM	Member
Tunkillia Exploration Results (until 15 Nov 2021)	Mr Colin Skidmore (Consultant)	AIG	Member
Tunkillia Exploration Results (after 15 Nov 2021)	Mr Marc Twining (Employee)	AusIMM	Member
Tunkillia Mineral Resource	Dr Andrew Fowler (Consultant)	AusIMM	Member
Challenger Mineral Resource	Mr Dale Sims (Consultant)	AusIMM / AIG	Fellow / Member
Western Gawler Craton JV Mineral Resource	Mr Richard Maddocks (Consultant)	AusIMM	Fellow

The information relating to historic Exploration Results and Mineral Resources in this announcement is extracted from the Company's Prospectus dated 14 May 2021 or as otherwise noted in this announcement, available from the Company's website at www.bartongold.com.au or on the ASX website www.asx.com.au. The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results and Mineral Resource information included in previous announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the Prospectus continue to apply and have not materially changed. The Company confirms that the form and context in which the applicable Competent Persons' findings are presented have not been materially modified from the previous announcements.

Cautionary Statement Regarding Forward-Looking Information

This document may contain forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "believe", "plan", "expect", "target" and "intend" and statements than an event or result "may", "will", "should", "would", "could", or "might" occur or be achieved and other similar expressions. Forward-looking information is subject to business, legal and economic risks and uncertainties and other factors that could cause actual results to differ materially from those contained in forward-looking statements. Such factors include, among other things, risks relating to property interests, the global economic climate, commodity prices, sovereign and legal risks, and environmental risks. Forward-looking statements are based upon estimates and opinions at the date the statements are made. Barton undertakes no obligation to update these forward-looking statements for events or circumstances that occur subsequent to such dates or to update or keep current any of the information contained herein. Any estimates or projections as to events that may occur in the future (including projections of revenue, expense, net income and performance) are based upon the best judgment of Barton from information available as of the date of this document. There is no guarantee that any of these estimates or projections will be achieved. Actual results will vary from the projections and such variations may be material. Nothing contained herein is, or shall be relied upon as, a promise or representation as to the past or future. Any reliance placed by the reader on this document, or on any forward-looking statement contained in or referred to in this document will be solely at the readers own risk, and readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof.

* Refer to Barton Prospectus dated 14 May 2021 and ASX announcement 14 October 2021.

JORC Table 1 – Tunkillia Gold Project

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. 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.	Sampling during Barton Gold's RC drill programs at Tunkillia was obtained through reverse circulation (RC) methods. Historic RC and diamond drilling methods were also used in drilling campaigns completed since the mid-1990s. Rotary air-blast (RAB) and aircore drilling has also been completed. These holes were used to guide interpretation but were not used for previous grade estimations or modelling of the results reported in the accompanying Announcement.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The drilling program used a Metzke cone splitter attached to the cyclone. One-metre splits were constrained by chute and butterfly valves to derive a 2-4kg split on the cyclone. Samples above 1m depth were not collected. Diamond core for current drilling as been sawn in half using an automated core saw. Field duplicates were derived from using quarter core for the designated interval Historic diamond core has been sawn in half or quarter using a core saw. For early RC drillholes (1996–1997), the 1 metre samples were collected through a cyclone and collected in poly bags. Samples were initially taken as 4 metre spear composites and then re-assayed at 1 metre intervals if the initial sample returned a grade above a certain threshold. RC drillholes drilled post-1997 were
	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 (e.g. "RC 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 (e.g. submarine nodules) may warrant disclosure of detailed information.	The sample preparation of the one-metre sampling for Barton Gold's RC and diamond drill program was conducted by Bureau Veritas (Adelaide) using method FA1 where the 2-3kg split sample received at the laboratory is weighed, dried, crushed to 10mm, pulverized to 75 micron and split to provide a 40g sample for fire assay analysis. Pre-2003 samples were sent to Analabs for analysis. Post 2003 samples were sent to Intertek Genalysis Laboratory for assay. Gold values were determined by aqua regia digest (B/ETA or B/SAAS) and any values returning >1ppm/0.5ppm were repeated using fire assay (FA25/AAS). If a fire assay was completed then this was selected as the "official" assay. All other elements were determined using multi-acid digest (AT/OES)
Drilling techniques	Drill type (e.g. core, RC, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	The RC drilling program by Barton Gold used a face-sampling 5 ¾" RC drilling techniques undertaken by Bullion Drilling using a Schramm T685WS drilling rig with auxiliary compressor. The diamond drilling program used a UDR1200 drill rig provided by Resolution Drilling, drilling NQ2 (50.7mm diameter) size drill core, using a standard tube configuration. Diamond drill holes were precollared with either RC drilling or rotary mud techniques. Drill core was oriented (bottom of hole) using the Axis Champ orientation system. Historically slimline RC drilling used a face-sampling hammer bit with a diameter of ~90mm. All other RC drillholes were drilled using a "standard size" hammer (ranging from 120mm–136mm). Diamond drillholes have been pre-drilled to fresh rock using a RC pre-collar or cored from surface, with a range of diameters used: NQ, PQ, HQ

Criteria	JORC Code explanation	Commentary
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	During the drilling program drilling recoveries were qualitatively described for each drilled interval in the field database along with an estimation of moisture content. In general recoveries were good, in the order of 30-40kg for each one-metre interval. Water was encountered in some drill holes and wet samples were collected from some intervals, although wet samples comprise <3% of all sampling from this program. No reduced sample weights were recorded with wet intervals and review of results by does not indicate contamination between adjacent samples. Samples submitted to the laboratory were weighed on a dry, as-received basis and reported along with assay results. No quantitative recoveries were recorded from RC drilling. However, consistent sample weights were noted within mineralised zones in previous reports. No quantitative recoveries have been recorded from diamond drilling through mineralised zones. However, previous MRE and geological reports indicate there has been negligible loss through mineralised zones. Recoveries of 90-100% were achieved in geotechnical drilling of the saprolite for geotechnical assessment. Recoveries for diamond drill core were measured and recorded.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The RC and diamond drilling was closely monitored by the site geologist to ensure optimal recovery and that samples were considered representative. Historically, HQ triple tube (HQ3) drilling was used for some holes to maximise core recovery. Re-entry holes were not triple-tubed as they were drilled straight into fresh bedrock. Drilling rates were controlled, and short drill runs were often used through the oxide zone to maximise core recovery.
	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.	No relationship between grade and recovery has been identified.
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.	All drilling programs electronically logged a number of parameters direct into a database including: Stratigraphy, lithology, weathering, primary and secondary colour, texture, grainsize, alteration type-style-intensity and mineralisation type-style-percentage. Historically RC chips and diamond core were logged by experienced geologists as a hard copy or into a DataShed database. All diamond core was photographed. Structural measurements were made on core oriented using spear and Ezy-Mark core orientation devices. Core is stored on site and at GSSA's Adelaide Core Library.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is generally qualitative in nature.
	The total length and percentage of the relevant intersections logged.	All diamond core and RC drilling has been geologically logged.

Criteria	JORC Code explanation	Commentary
Subsampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond drill core was sawn in half with one half taken for sampling. Sample lengths were generally 1m although at times were sampled to geological intervals. Selected intervals of whole core were used for geotechnical test work. Selected intervals of sawn half and quarter core and RC chip samples were used for metallurgical test work. Selected intervals of sawn half and quarter core and RC chip samples were used for metallurgical test work. No information is available as to whether the RC chip samples used for metallurgical test work was riffle split or tube sampled.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	The RC drilling program used a Metzke cone splitter mounted on the cyclone with one-metre splits constrained by chute and butterfly valves to derive a 2-4kg split on the cyclone. The majority (>97%) of samples were dry and when samples were wet they were recorded in the sampling records
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The majority of the historical RC samples have been collected at 1 metre intervals using a rifle splitter attached to the drill rig. Periodically between 1996 and 2011, within the strongly weathered portion, samples were collected over 4m intervals. The sample was speared to achieve a representative portion from the interval. For AC drilling, a 1 m sampling interval was applied from surface. All dry samples were caught in a bucket beneath the cyclone and then split through a two-tier riffle splitter to produce a sample of about 2-3 kg. Wet samples were caught in green sample retention bags and then spear sampled, although there were very few wet samples as the drilling depths are too shallow to encounter large volumes of water.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	Subsampling is performed during the preparation stage according to the assay laboratories' internal protocols.
	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.	During the RC drilling program a field duplicate was collected off a second chute on the cyclone splitter at a frequency of 1 for each 16-original sample intervals. Field duplicates for diamond core were obtained by submitting quarter core for the selected intervals (ie half core was retained for all field duplicate intervals) Early drillholes up until 2006 utilised field duplicates and blanks as
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered to be appropriate to the grain size of the material being sampled.

Criteria	JORC Code explanation	Commentary
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.	2-4kg splits were sent to Bureau Veritas in Adelaide for preparation and analysis using 40g fire assay techniques for gold. . Bureau Veritas' FA1 method uses a 40g lead collection fire assay with AAS finish to a 0.01 ppm detection limit. . Analytical techniques have varied somewhat over the projects history.
	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.	No geophysical studies were used in this latest drilling program.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Barton Gold's RC and diamond drilling program included a comprehensive QAQC component with Field Duplicate samples taken at every 25th sample; Certified Standards (selection of OREAS CRM's considered most appropriate for expected grade and composition) were inserted randomly in sequence for at every 25th sample submitted; blanks were inserted in sequence at every 50th sample submitted. Additionally, the laboratories provided their internal QAQC which included check samples, CRM's, blanks and repeats. Analysis of the duplicate samples was reasonable given the majority fell below detection. There was no evidence of cross-contamination in the submitted blank samples. Bureau Veritas' analysis for gold using fire assay performed well with all batches falling within the +/-3SD test of the expected value for the given standards (3 OREAS CRM's). Historically, the amount of sampling and analytical QC data that has been collected has varied over the project's history. Early drillholes up until 2006 utilised field duplicates and blanks as their only QAQC, this effectively accounts for 57% of the holes used in the estimation. Post 2006, QAQC samples were submitted in the form of field duplicates and Certified Reference Standards from Ore Research & Exploration Pty Ltd. Standards were submitted every 20th sample and field duplicates every 50th sample. No material concerns were highlighted in the analysis of QAQC data.

Criteria	JORC Code explanation	Commentary
		Tunkillia Gold used blanks to monitor carry-over contamination and no significant issues were detected. Field duplicates were used to assess sample precision, while CRMs were used to assess analytical accuracy. Some pulps were also sent to an umpire laboratory as a further check on analytical accuracy. Field duplicate results provide some confidence sample precision. The scatter which is observed is understandable given the moderate to high nugget effect evident at Tarcoola. The CRMs reasonably demonstrated the accuracy of the laboratory. Pulp repeats were higher than the original results, which did cause some concern however, given the CRM results the Competent Person had reasonable confidence in the accuracy of the primary laboratory.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Alternative company personnel have verified significant intersections.
	The use of twinned holes.	No twinned holes were undertaken on the program reported in this release,.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All data collected in the reported program including collar details, drilling records, sampling records and geological logs are recorded directly into spreadsheets in the field which includes comprehensive interval validation processes. Gyro downhole surveys and Assay results were provided in digital format. All relevant historical data was entered into a DataShed database where various validation checks were performed. Data was exported into an Access Database.
	Discuss any adjustment to assay data.	No adjustments were made to any assay data in this release
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	All 2022 RC and diamond drill collars were sited using a Garmin hand-held GPS system. The RL was generated from the LiDAR survey collected at the completion of drilling. All Barton RC holes were downhole surveyed using a Reflex EZ-Gyro system which provided measurements at 10m intervals up and down hole. All Barton diamond holes were surveyed using a single-shot gyro tool at 15m intervals during drilling operations. 488 out of a total of 556 drillhole collars from drilling prior to 2021 were located using DGPS survey techniques. The raw data for 30% of these have been located and verified. Earlier collars were located by measuring off a local grid system. 384 drillholes were surveyed using a down-hole survey instrument. 50 holes were surveyed in the rod and therefore do not have azimuth data. The remaining holes do not have downhole surveys. No AC holes were surveyed

Criteria	JORC Code explanation	Commentary
	Specification of the grid system used.	All site data is reported in Geocentric Datum of Australia 1994 (GDA94) and Vertical Datum in Australian Height Datum (AHD). The map projection is MGA Zone 53. Historic Survey Data has been converted to GDA94. Historically the Tunkillia Project uses the Remington local grid which is rotated 31.37 degrees west of the MGA 94 grid with a local origin of 110,000E and 111,500N Transformation Formula Local E = 110000 + ((MGA94_E - 477614.802) cos a) + ((MGA94_N - 6545289.018) sin a)) Local N = 111500 + ((MGA94_N - 6545289.018) cos a) - (MGA94_E - 477614.802) sin a)) Where angle a = 31.37 Local RL = mRL_MGA+1009.232
	Quality and adequacy of topographic control.	In September 2021 Barton engaged Aerometrex to collect LiDAR and high-resolution ortho-imagery over the entire Tunkillia project area. All datasets are levelled to the LiDAR survey
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Barton's RC and diamond drilling program at the 223 deposit was conducted at variable spacing as dictated by existing drilling and the aims of the program to provide continuity with the existing drill coverage. The spacings are considered appropriate for the reporting of exploration results. Historically drilling has been undertaken at various spacings. The drilling incorporated in the resource database extends from local grid co-ordinates 109,930N to 113,870N and 109,430E to 110,390E. Sections are on a 25 metre spacing from 111,250N to 111,850N outside of this drill sections extend to 50m between 110,600N to 112,600N. Drill sections extend to 100m+ for the remainder of Area 223. On section, drill spacing generally ranges from 20-30m, increasing to 50 metres with the majority of drilling on section and perpendicular to strike. The resource has been drilled to a maximum depth of 360 metres below surface and is not closed off down dip.
	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.	Only exploration results are being reported from the completed drilling contained within this release
	Whether sample compositing has been applied.	Sample compositing was not applied.
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.	Barton's RC and diamond drill program was orientated to optimally test predicted mineralised structures and stratigraphic positions to provide were possible unbiased samples. Historic holes have been drilled at several orientations, and the orientation of relevant mineralisation-hosting geological structures varies considerably. Drill sections are orientated local grid E–W, perpendicular to the main mineralised lenses. The majority of drillholes used to define the steeply west dipping primary mineralisation are drilled towards the east at -60 degrees. Drillholes targeting the oxide resource have been drilled vertically. Some of the initial exploration drillholes have been drilled oblique to the strike of mineralisation.

Criteria	JORC Code explanation	Commentary
	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.	The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.
Sample security	The measures taken to ensure sample security.	Barton Gold staff oversaw the sampling on the RC drill rig and maintained oversight of sample security whilst onsite during the drilling program. Split samples were inserted into pre-printed calico bags. These tied bags were, in batches of 5, ziplocked into labelled polyweave bags which were inserted into ziplocked Bulka-bags. The bulka bags were strapped onto pallets and loaded by a Barton Gold representative on to a semitrailer for transport to the laboratories in Adelaide and Perth. The trailers were not unloaded whilst in transit. Diamond drill core was transported from the project site to Adelaide and cut by experienced and reputable service providers. The core cutting agents undertook sampling of the drill core and subsequent delivery of samples to the laboratory. Barton Gold staff undertook regular visits during core cutting and sampling processes to verify the integrity of processes being undertaken Barton does not have detailed information in regard to sample security measures taken by previous owners of the Tunkillia project. However, Barton understands that these procedures have been in accordance with commonly adopted standard industry practices
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	An internal peer review of the exploration data processes has been completed by Barton Gold which has included a detailed review of the assay, survey and QAQC data.

Section 2 Reporting of Exploration Results

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 Tunkillia Project area is located 530 km north-west of Adelaide in South Australia's Gawler Craton. It is 100% owned by Tunkillia 2 Pty Ltd which is a wholly owned subsidiary of Barton Gold Holdings Limited. The project comprises two exploration licences that were grouped into an Amalgamated Expenditure Agreement on 4th October 2012 and Joint Venture Reporting on 21st January 2013. Most of the South Australian tenements held by WPG Resources were bought by current owner Barton Gold Pty Ltd on 1st November 2019. The three current tenements comprise EL6499, EL5790 and EL5901 which have a combined area of 1,362 km2. The Tunkillia Project was under three overlapping Native Title claims which are now grouped into a single organisation, the Gawler Ranges Aboriginal Corporation (GRAC) that represents all three groups. Barton Gold's negotiations with GRAC secured a signed Native Title Mining Agreement for Exploration for EL's 5790, 5901 and 6499 on 2nd February 2021. Barton's Exploration Licences 5901, 5790 and 6499 are subject to South Australian State royalties and entitled to a reduced 'new mine' State royalty rate of 2% of the value of minerals recovered until 30 June 2026, and are also subject to total 2.5% private royalties (gross product). There are no joint ventures over the Tunkillia Project tenure.
	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.	There are no known impediments to obtaining future licences.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Exploration in the Tunkillia area commenced in 1996 with a regional geochemical survey by Helix Resources who established the local Remington grid. Infill sampling delineated the Tunkillia Prospect as a 20km2 geochemical gold in calcrete anomaly. Subsequent RAB drilling led to the discovery of the Area 223 deposit in late 1996. RC drilling in early 1997 further enhanced the discovery. A joint venture was formed with Acacia who took over management of the project with subsequent exploration carried out as the Gawler Craton Joint Venture. The JV later involved AngloGold Australasia Ltd following its takeover of Acacia. In June 2003, Helix finalised the acquisition of AngloGold's 49% interest and returned 100% of the project to Helix An independent resource assessment by Snowden Mining Industry Consultants prompted an extensive 12,000m RC program to infill the Area 223 resource. A re-interpretation of the aeromagnetic data identified new exploration targets away from the known resource outlining mineralisation at Tomahawk and Areas 191. In April-June 2004 Helix completed an 8000m RC drilling program testing areas of the Area 223 North and South mineralisation and exploration concepts at Area 191 and the central part of the shear zone.

Criteria	JORC Code explanation	Commentary
		Studies were completed by Resource Evaluations Pty Ltd in June 2004 looking at resource estimates and optimisation studies based on the available drilling. A Joint Venture commenced between Helix and Minotaur Exploration Ltd in April 2005 where Minotaur assumed operation and management of the project. Minotaur undertook an intense exploration effort in the immediate surrounds of the Area 223 resource, and regionally. In 2007, Minotaur re-appraised the Area 223 resource using recent drilling and separated distinct oxide and sulphide domains. In January 2012, Mungana acquired the 55% interest in the Tunkillia Gold Project via the acquisition of Minotaur's wholly owned subsidiary Minotaur Ventures Pty Ltd. WPG Resources acquired 70% of the project in May 2014 through the acquisition of the Tarcoola and Tunkillia projects from Mungana Goldmines Ltd. In Nov 2014 WPG moved to 100% ownership of the Tunkillia gold project by acquiring the 30% owned by Helix Resources. WPG Resources completed work on calcrete samples over a number of targets along the Tunkillia "Line of Lode". Drilling of selected Area 51 and Tomahawk Extended areas included ten RC holes for 1,641m. No further work was undertaken by WPG Resources until the project was purchased by Barton Gold in late 2019.
Geology	Deposit type, geological setting and style of mineralisation.	The Tunkillia Project extends over a large portion of the Central Gawler Craton of South Australia which is bound to the east by the Gawler Range Volcanic Province. The central portion of the Gawler Craton consists of a variety of geological units and is structurally complex. Archaean metamorphic rocks and greenstone-belt units are distributed along WSW–ENE trends. During the Palaeoproterozoic, granitoids including the Tunkillia Suite were emplaced possibly with associated deformation. During these deformation episodes, major shear zones developed, including the east-trending Yerda and Oolabinnia Shear Zones and north-trending Yarlbrinda Shear Zone. The Yarlbrinda Shear Zone and Yerda Shear Zone are up to several kilometres wide with ductile shearing and deformation probably occurring before ~1600 Ma and before Mesoproterozoic anorogenic magmatism. During the Mesoproterozoic, widespread anorogenic magmatism across the central portion of the craton resulted the Gawler Range Volcanics, Hiltaba Suite granite (1595-1575 Ma) and emplacement of minor gabbroic plugs. Development of Cu-Au +/- U mineralisation at Olympic Dam and Prominent Hill and gold dominant mineralisation at Tunkillia and Tarcoola occurred during this period. Typical lithologies encountered in the Area 223 deposit from west to east include variably sheared chlorite-biotite-rich augen gneiss (Tunkillia Augen Gneiss) grading into a highly chloritised and mylonitised phyllitic shear. The phyllitic shear zone grades into a weakly gneissic unit to the east which is variably altered by sericite to form the central alteration zone. This unit has a sheared contact with the footwall granite.

Criteria	JORC Code explanation	Commentary
		The host rocks have been intruded by at least two later episodes of dyke emplacement. The mafic dyke appears to form the footwall to the main mineralisation at Area 223. Clear relationships between dyke emplacement and the mineralisation remain unclear. The dykes appear to cross-cut mineralisation at Area 223 and are unmineralised in fresh rock. But in the weathered zone gold occurs within the weathered dyke and also to east of this apparent 'bounding' lithology. The main mineralisation appears to occur within en-echelon sets of quartz-sulphide tension veins predominately bounded by duplex shears, with brittle fractures extending into the hanging wall. The mineralised sequence at Area 223 has undergone extensive weathering which formed a leached kaolinitic profile capped by a silcrete layer. No palaeochannels are observed at Area 223 although they do occur elsewhere in the Tunkillia area. At 50-60 metres depth near the base of the weathering profile a zone of supergene mineralisation is developed which shows some enrichment compared with the underlying primary lodes. Gold appears to have been laterally dispersed over a distance of tens of metres within the oxide zone. The Area51 prospect is located only strike from the 223 Deposit and is characterised by a very similar geological setting to the 223 Deposit. The controls that relate to gold mineralisation and the processes by which gold mineralisation was formed are considered at this preliminary stage to be very similar to the 223 Deposit
Drillhole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: □ Easting and northing of the drillhole collar □ Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drillhole collar □ Dip and azimuth of the hole □ Downhole length and interception depth □ Hole length.	A tabulation of the drilling program including the details of historic holes mentioned in this announcement are presented in Tables 2 - 5.

Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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 metal equivalent values should be clearly stated.	Reported intersections used the following criteria: • Reported intervals have been determined by applying a 0.5g/t Au cut-off and allowing for a maximum of two consecutive intervals of dilution provided the intervals are >0.1g/t Au • In some specific instances reporting of intervals by applying a 0.3g/t Au cut-off (and allowing for a maximum of two consecutive intervals of dilution provided the intervals are >0.1g/t Au) is considered appropriate to convey the significant width of mineralisation. A minimum interval threshold of 5 gram-metres (ie the multiple of the interval in metres and the weighted average grade) is also applied when using the 0.3g/t Au cut-off grade. Reported intervals where this protocol has been applied are clearly highlighted in the body of the text, associated diagrams and tables within this release. • No high-grade cut-offs were applied • Results for quarter-core field duplicates from diamond drilling were averaged across the pair of samples to provide a result consistent with routine half-core sampling. • Internal dilution of up to 2m was included provided > 0.1 g/t Au • No metal equivalents were calculated

Criteria	**JORC Code explanation**	**Commentary**
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 drillhole 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 (e.g. "downhole length, true width not known").	Drillholes have been designed to intersect the mineralisation zone as perpendicular as possible. Reported intercepts are downhole length and true width can generally be estimated because the dip of the mineralisation is known.
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 drillhole collar locations and appropriate sectional views.	See Figures included 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.	Balanced reporting of Exploration Results is presented

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.	Extensive geological, geophysical, geochemical, geotechnical and metallurgical datasets are available for the Tunkillia project area. Other datasets including gravity that was sourced from open-file datasets (SA DEM). Historical data acquired by previous owners included detailed aeromagnetic, TEMPEST airborne EM and in-fill gravity surveys completed over parts of the tenement area and mostly focussed on the Yarlbrinda Shear Zone. Other data includes gradient array IP, biogeochemical sampling, CHIM/MMI geochemical sampling and spectral scanning of reverse circulation drill chips.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	The mineralisation at Tunkillia remains open along strike and downdip with potential for additional gold mineralisation at the Area 223 deposit and in other parallel structures in the area including Area 51, Tomahawk and Area 191. Barton Gold is planning further drilling work which will be focused on testing for dip and strike extensions and to confirm grade and geological continuity within by the current model. While geophysical coverage already exists, additional geophysical exploration techniques may be undertaken as the project continues and may include magnetic surveys and ground-based gravity.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams have been included in the body of this Announcement.

Table 2: Drillhole Collar Details for Barton Gold Tunkillia September-November 2022 RC Drilling Program

Hole ID	Easting	Northing	RL	DIP	TAZ	Total Depth (EOH)	Type	Completion	Target
TKB0085D	477160	6545712	1198	-55	058	360.8	DD	7/1/23	223
TKB0086D	477747	6544837	1200	-60	058	373.6	DD	29/11/22	223
TKB0087D	477790	6544751	1201	-60	058	448.3	DD	15/12/22	223
TKB0088D	477325	6545522	1204	-60	058	534.8	DD	9/12/22	223
TKB0089D	477687	6544981	1205	-65	058	228.9	DD	18/12/22	223

Table 3: Significant Intersections for Barton Gold September-November 2022 Tunkillia RC & Diamond Drilling Program Mentioned in this Announcement[2] (Intervals >10gram-metres highlighted in bold font)

Hole ID	From	To	Metres[1]	Au (g/t)	Comments &/or including
TKB0082	43	49	6	2.51	Including 1m @ 5.50 g/t Au [45m], plus
					1m @ 4.61 g/t Au [48m]
TKB0082	50	54	4	2.88	Including 1m @ 6.80 g/t Au [52m]
TKB0085D	167.35	168	0.65	2.89	
TKB0085D	174	185.3	11.3	4.04	Including 1m @ 35.9 g/t Au [176m]
TKB0085D	184	185.3	1.3	0.88	
TKB0085D	214	216	2	0.68	
TKB0085D	227	231	4	0.64	
TKB0085D	236	237	1	0.54	
TKB0085D	245	250	5	0.69	Including 1m @ 1.23 g/t Au [245m], &
					1m @ 1.36 g/t Au [249m]
TKB0085D	293	300.98	7.98	0.71	Including 1m @ 1.99 g/t Au [293m]
TKB0086D	212.8	215	2.2	1.22	
TKB0086D	219.95	232	12.05	0.89	
TKB0086D	241.32	242.22	0.9	1.85	
TKB0086D	246	251	5	0.65	
TKB0086D	328.21	328.75	0.54	0.53	
TKB0086D	340	343	3	1.34	Including 1m @ 3.02 g/t Au [342m]
TKB0087D	308	309	1	0.54	
TKB0087D	319	321	2	1.54	
TKB0087D	335	336	1	1.99	
TKB0087D	353	354	1	31.2	
TKB0087D	356	357	1	1.98	
TKB0087D	385	386	1	3.32	
TKB0087D	392	393	1	0.66	
TKB0087D	405	406	1	1.29	
TKB0087D	411	412	1	1.76	
TKB0087D	415	416	1	0.53	
TKB0087D	418	420	2	0.64	
TKB0087D	425	426	1	1.12	
TKB0087D	429	437.19	8.19	1.09	Including 1m @ 2.03 g/t Au [429m]
TKB0088D	294.85	306	11.15	0.63	
TKB0088D	322	323	1	1	

Hole ID	From	To	Metres[1]	Au (g/t)	Comments &/or including
TKB0088D	343	344	1	0.78	
TKB0088D	354	355	1	3.57	
TKB0088D	358	359	1	13.3	
TKB0088D	388.62	390	1.38	0.7	
TKB0088D	394	408.8	14.8	1.01	Including 1m @ 5.29 g/t Au [398m]
TKB0088D	452	453.6	1.6	0.52	
TKB0088D	519	520	1	0.89	
TKB0089D	64	69.3	5.3	0.98	
TKB0089D	71	75	4	1.17	
TKB0089D	84	85	1	1.33	
TKB0089D	86	87	1	0.65	
TKB0089D	118	119.1	1.1	1.98	
TKB0089D	147	148.2	1.2	1.12	
TKB0089D	150	151	1	0.64	
TKB0089D	156	157	1	0.94	
TKB0089D	162	163	1	0.83	
TKB0089D	167.15	169	1.85	0.7	
TKB0089D	174.2	180.95	6.75	0.75	
TKB0089D	185	196	11	3.7	Including 1m @ 23.7 g/t Au [192m]
TKB0089D	210.3	210.8	0.5	0.74	
TKB0089D	212	213	1	0.65	

[1] Note - Not true widths.

[2] Note – Calculated applying a 0.5g/t Au cut-off and allowing up to 2m internal dilution provided dilution is >0.1g/t Au.

Table 4: Drillhole Collar Details for Historical Drill Holes Mentioned in this Announcement

Hole ID	Easting	Northing	RL	DIP	TAZ	Total Depth (EOH)	Type	Completion	Target
LRC 051	477326.6	6545584.0	1198.9	-60	058	204	RC	27/2/97	223
LRC 055	477312.3	6545684.7	1196.6	-60	058	204	RC	7/3/97	223
LRC 059	477219.4	6545746.4	1196.6	-60	058	204	RC	15/3/97	223
LRC 152	477223.9	6545875.1	1199.9	-60	058	162	RC	15/6/97	223
LRC 411	477233.7	6545818.0	1201.2	-60	057	210	RC	27/8/03	223
LRC 430	477387.8	6545619.1	1202.0	-60	058	140	RC	19/9/03	223
LRC 433	477329.3	6545641.0	1201.9	-60	057	192	RC	21/9/03	223
LRC 448	477174.4	6545956.7	1198.6	-60	057	178	RC	3/10/03	223
LRC 449	477148.6	6545941.4	1198.8	-60	057	228	RC	4/10/03	223
LRC 482	477122.7	6545980.8	1195.6	-60	057	204	RC	8/5/03	223
LRC 485	477200.8	6545912.7	1197.4	-60	057	180	RC	9/5/03	223
LRC 486	477175.1	6545898.1	1199.5	-60	057	198	RC	10/5/03	223
LRC 662	477872.0	6544548.0	1213.3	-60	058	180	RC	7/12/12	223

Table 5: Significant Intersections for Historical Drilling Mentioned in this Announcement[2] (Intervals >10gram-metres highlighted in bold font)

Hole ID	From	To	Metres[1]	Au (g/t)	Comments &/or including
LRC 051	176	184	8	0.98	Including 1m @ 2.62 g/t Au [176m]
LRC 055	141	142	1	12.6	
LRC 059	180	184	4	1.94	4m composite sample
LRC 152	114	128	14	0.6*	
LRC 152	141	142	1	5.51	
LRC 152	148	149	1	5.67	
LRC 411	144	147	3	9.47*	Including 2m @ 14.0 g/t Au [144m]
LRC 430	114	118	4	1.98	Including 1m @ 4.93 g/t Au [114m]
LRC 433	152	158	6	0.84	Including 1m @ 2.38 g/t Au [154m]
LRC 448	167	170	3	2.49*	Including 1m @ 5.03 g/t Au [167m]
LRC 449	197	221	24	1.37*	Including 1m @ 5.14 g/t Au [197m], &
					2m @ 4.14 g/t Au [216m]
LRC 482	178	193	15	0.53*	Including 1m @ 1.95 g/t Au [182m]
LRC 485	136	146	10	0.85*	Including 1m @ 2.87 g/t Au [140m], &
					1m @ 2.00 g/t Au [143m]
LRC 486	170	172	2	2.56	Including 1m @ 4.07 g/t Au [170m]
LRC 486	181	194	13	0.74*	Including 2m @ 2.10 g/t Au [190m]
LRC 662	140	144	4	1.52	

[1] Note - Not true widths.

[2] Note – Calculated applying a 0.5g/t Au cut-off and allowing up to 2m internal dilution provided dilution is >0.1g/t Au.

* Note – Calculated applying a 0.3g/t Au cut-off and allowing up to 2m internal dilution provided dilution is >0.1g/t Au. Refer to Table 1 'Data Aggregation Methods'