

### Southern 223 Deposit Drilling Identifies New 300m Gold Zone

#### HIGHLIGHTS

- ~300m of mineralised strike added near southern end of cornerstone 223 Deposit
- Hole TKB189: 55m @ 1.52 g/t Au in new zone offset from 223 Deposit's main strike
- Results follow recent ~300m extension of 223 Deposit mineralisation to the north
- Review of 223 Deposit's JORC Mineral Resource Estimate is underway

Barton Gold Holdings Limited (ASX:BGD, FRA:BGD3, OTCQB:BGDFF) (**Barton** or the **Company**) is pleased to announce further reverse circulation (**RC**) drilling assays from the Tunkillia Gold Project (**Tunkillia**). Results have been received for the 'Southern 223' target on the Company's 1.15Moz Au 223 Deposit.

Key new intersections include:

#### Southern 223

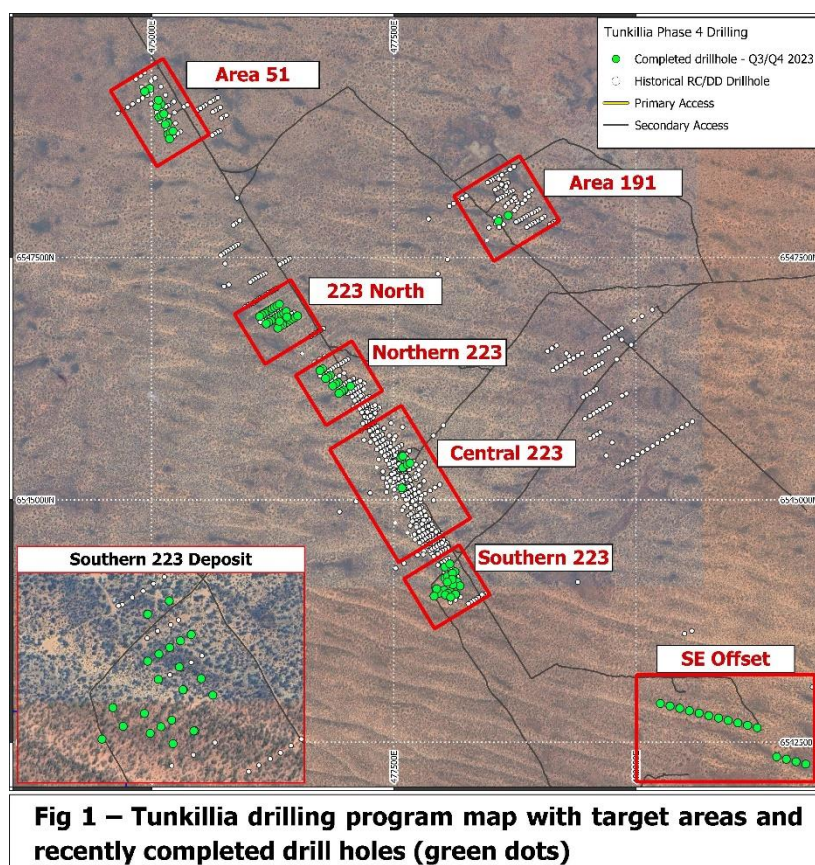
TKB115: **6m @ 2.84 g/t Au** from 189m  
 TKB116: **9m @ 1.05 g/t Au** from 107m  
           **5m @ 1.45 g/t Au** from 122m  
 TKB119: **10m @ 0.78 g/t Au** from 55m  
           **12m @ 1.31 g/t Au** from 119m  
           **13m @ 1.04 g/t Au** from 137m  
 TKB184: **4m @ 1.35 g/t Au** from 67m  
 TKB185: **12m @ 1.97 g/t Au** from 144m  
 TKB188: **15m @ 0.89 g/t Au** from 184m  
           **30m @ 1.07 g/t Au** from 204m  
 TKB189: **55m @ 1.52 g/t Au** from 214m

The mineralisation in hole TKB189 is notably consistent, with low variability in grade along the quoted 55m interval.

**Commenting on the Tunkillia drilling assays, Barton MD Alex Scanlon said:**

*"We are encouraged to see further broad zones of mineralisation in a key target at the southern end of the 223 Deposit. Combined with last week's assays from the northern end of the 223 Deposit, we have added a total of approximately 600m new mineralisation along strike, or around 30% of the April 2023 JORC Resource footprint.*

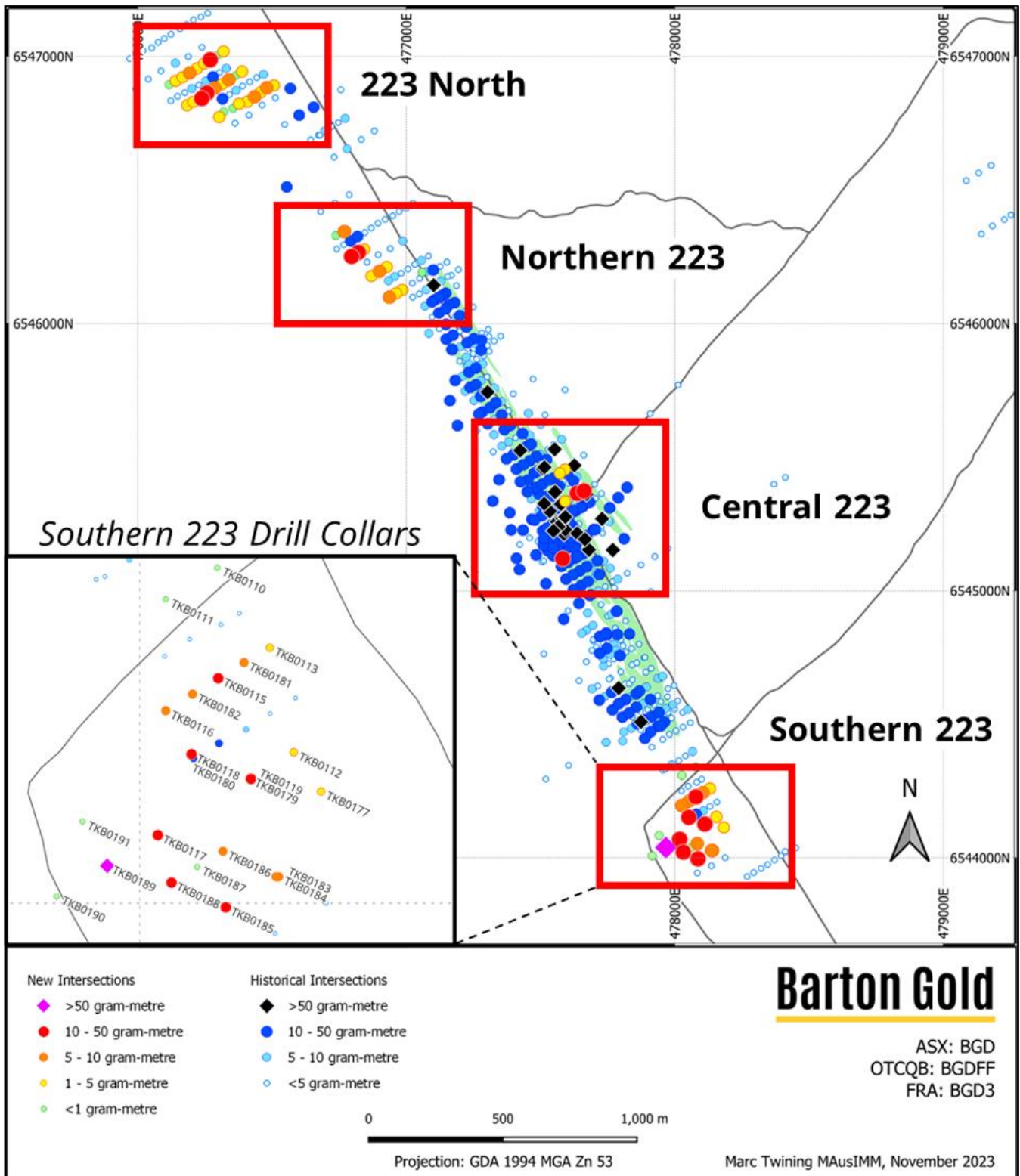
*"Updated 223 Deposit modeling is underway. Our objective is to confirm additional low-cost growth in the long-term JORC Resources base, while awaiting assay results from the surrounding growth and discovery targets."*



## Drilling Program Overview

On 26 April 2023 Barton announced an updated JORC Mineral Resource Estimate (**MRE**) for the 223 Deposit of 1.15Moz Au (38Mt @ 0.94 g/t), adding 189koz Au at a cost of only ~A\$12 / ounce (all in).<sup>1</sup>

Follow up drilling targeting 223 Deposit extensions and regional targets started early September 2023.<sup>2</sup> 23 RC drill holes totalling 4,938m have been completed at the Southern 223 target, to evaluate potential extension of the 223 Deposit's mineralisation and support further growth of the 223 Deposit's MRE.



**Fig 2 – Tunkillia Project plan showing new and historical drill hole collars**

<sup>1</sup> Refer to ASX announcements dated 26 April 2023

<sup>2</sup> Refer to ASX announcements dated 30 August, 25 September, and 2 / 9 / 16 / 30 October 2023



## Southern 223 Gold Zone

Barton's new geophysical modeling for the Tunkillia mineral system previously indicated the potential to identify new gold mineralisation in previously untested areas near to, or offset from, the 223 Deposit.

As with mineralisation identified to the north of the 223 Deposit, drilling results indicate that the new ~300m of mineralisation identified near the southern end of the 223 Deposit is offset from the main strike trend of the April 2023 JORC Mineral Resources block model.

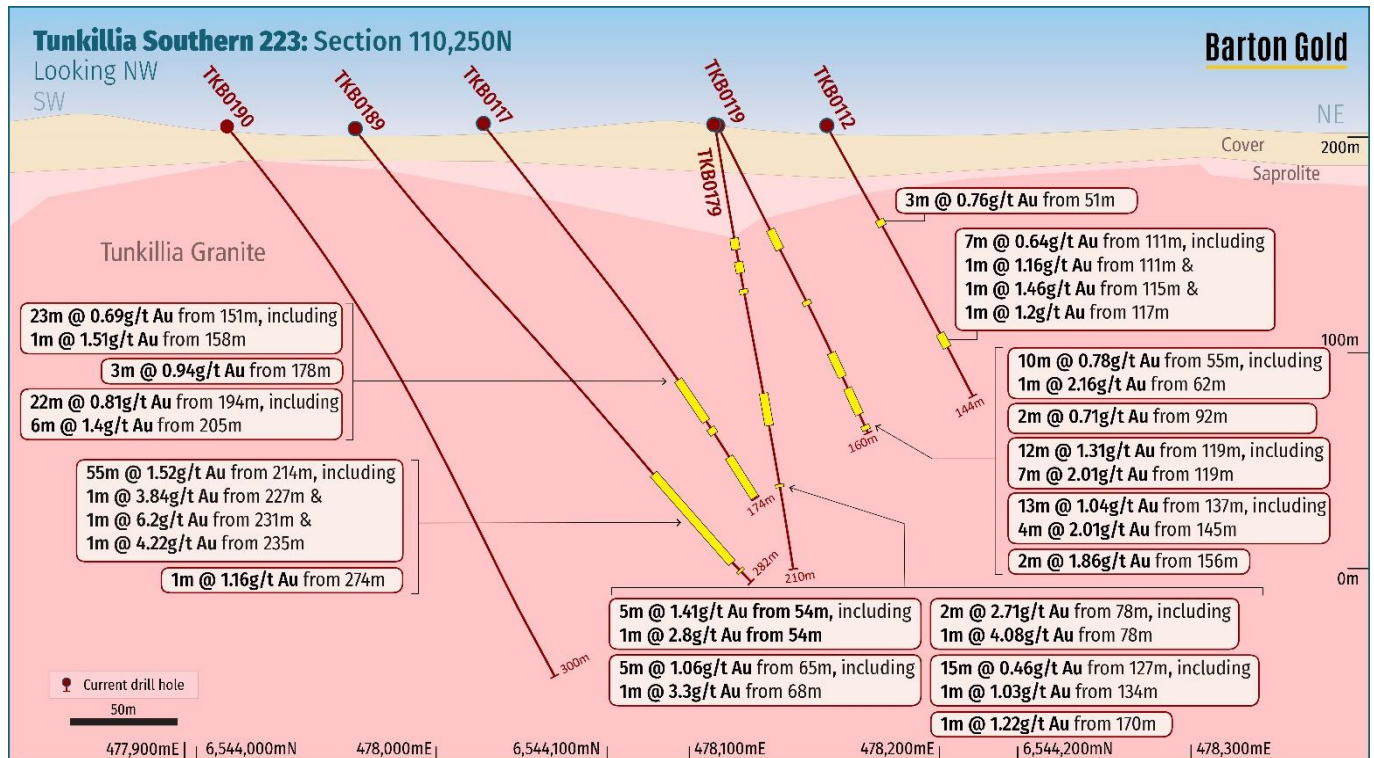


Fig 3 - Tunkillia 223 Deposit southern extension cross-section 110,250N with key intersections

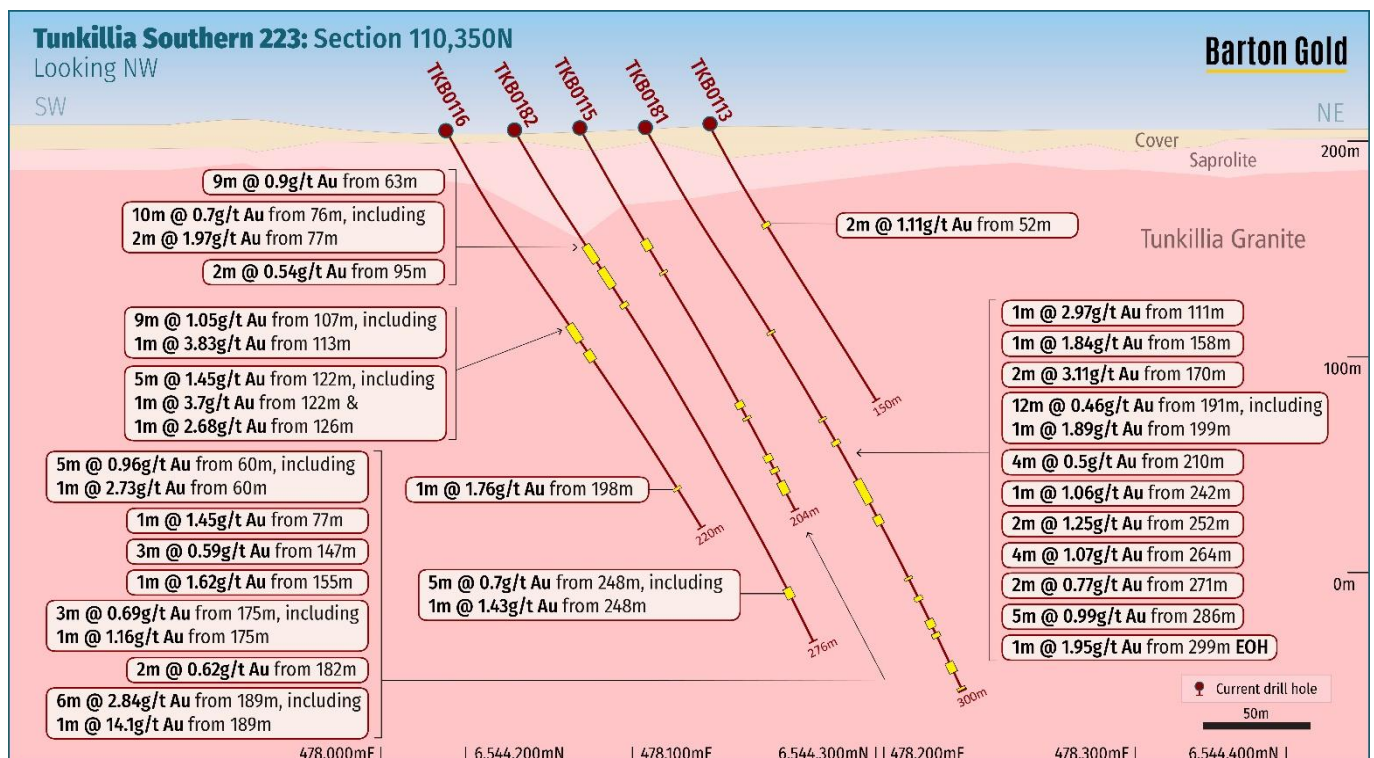


Fig 4 - Tunkillia 223 Deposit southern extension cross-section 110,350N with key intersections

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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, OTCQB and Frankfurt stock exchange listed Australian gold exploration company with a **total attributable 1.3Moz Au JORC Mineral Resources endowment** (40.6Mt @ 1.0 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
- Under-explored asset with untapped scale potential

### Tunkillia Gold Project

- 1.15Moz Au Mineral Resources (38Mt @ 0.94 g/t Au)\***
- District-scale structures with advanced satellite targets

### Infrastructure

- 650ktpa CIP process plant, mine village, 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 qualify 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	Mr Ian Taylor (Consultant)	AusIMM	Fellow
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](http://www.bartongold.com.au) or on the ASX website [www.asx.com.au](http://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 dated 26 April 2023. Total Barton attributable JORC (2012) Mineral Resources include 679koz Au (22.2Mt @ 1.0 g/t) in Indicated and 618koz Au (18.36Mt @ 1.0 g/t) in Inferred categories. Pursuant to Barton's ASX announcement of 1 September 2023 it is anticipated that total JORC Mineral Resources will reduce by ~61.4koz Au.

## 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) and diamond drilling 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 modelling or grade estimations 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 cone splitter manufactured by Sandvik (Egan Drilling) or Ox Engineering (Kennedy Drilling) attached to the cyclone. One-metre splits were constrained by chute and butterfly valves to derive a 2-4kg split on the cyclone. Field duplicate were derived from a second chute from the cyclone, derived at the same time as the primary sample
	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 for drilling the subject of this release 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 charge for fire assay analysis (gold only).  The sample preparation of the one-metre sampling for Barton Gold's 2021 RC drill program (drill holes TKB001-036) was conducted by Intertek Genalysis (Adelaide) using method SP1 where the 2-3kg split sample received at the laboratory is weighed, dried, crushed to 3mm, pulverized to 75 micron and split to provide a 50g sample for fire assay and adequate pulverized material for multi-element analysis.  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 sampled through an on-rig splitter system. The majority of core samples were taken as 1 metre lengths and half-cored.
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 by Barton Gold used a face-sampling 5 3/4" RC drilling techniques undertaken by Egan Drilling and Kennedy Drilling. Both drilling companies use air delivery systems comprising primary and auxiliary compressors plus booster, delivering nominal air capacities of approximately 1000psi/2000cfm.  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.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	During drilling programs 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 <1% of sampling overall. No reduced sample weights were recorded with wet intervals and a review of results 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.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The RC drilling was closely monitored by the site geologist to ensure optimal recovery and that samples were considered representative.
	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, grain size, 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.
	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.
Subsampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	No diamond core drilling reported in this release
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	The RC drilling program used a Sandvik (Egan Drilling) or Ox Engineering (Kennedy Drilling) 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 (>99%) of samples were dry and when samples were wet they were recorded in the sampling records. The pressure and volume of air used for the RC drilling was adequate to ensure the majority of drill samples were kept dry.
	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.
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	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 either 1 for each 16-original sample intervals (2021 drilling), 1 for each 22-original sample intervals (2022 drilling), or 1 for each 47-original sample intervals (2023 drilling).  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 current resource estimation.
	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.
Quality of assay data and laboratory	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the	Barton Gold (2022 & 2023) – 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



tests	technique is considered partial or total.	<p>40g lead collection fire assay with AAS finish to a 0.01 ppm detection limit.</p> <p>Barton Gold (2021) – 2-4kg splits were sent to Intertek Genalysis in Adelaide for preparation and analysis using 50g fire assay techniques for gold and ICPOES/MS for multielement geochemistry. Whilst preparation and some fire assays were undertaken in Adelaide Intertek also sent some batches to their Perth laboratories for analysis. Intertek's FA50/OE04 method uses a 50 g lead collection fire assay with ICP-OES / MS finish to a 0.005 ppm detection limit. Multielement samples were analysed using Intertek's method 4A/MS48 which is a 4-acid digest followed by analysis using ICP-OES and MS for 48 elements.</p> <p>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 &gt;1ppm were repeated using fire assay (FA25/AAS). If a fire assay was taken then this became the "official" assay. All other elements were determined using multi-acid digest (AT/OES)</p> <p>Analytical techniques have varied somewhat over the projects history.</p>
	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 the course of Barton Gold drilling programs.
	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.	<p>Barton Gold's RC and diamond drilling programs included a comprehensive QAQC component with Field Duplicate samples taken at every 16<sup>th</sup> or 25<sup>th</sup> sample; Certified Reference Materials ("CRMs, or standards"; a selection of OREAS CRM's considered most appropriate for expected grade and composition) were inserted randomly in sequence for at every 20<sup>th</sup> (2021 drilling), 25<sup>th</sup> (2022 drilling), or 50<sup>th</sup> (2023 drilling) sample submitted; blanks were inserted in sequence at every 50<sup>th</sup> sample submitted. Additionally, the laboratories provided their internal QAQC which included check samples, CRM's, blanks and repeats.</p> <p>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.</p> <p>Both Intertek and 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).</p> <p>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 &amp; 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.</p>
		<p>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.</p> <p>Field duplicate results provide a guide to sample precision. The expected scatter (due to high nugget effect) is monitored and is expected to remain within a range. The CRMs reasonably</p>



		demonstrated the accuracy of the laboratory. Pulp repeats demonstrated acceptable performance.
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 2023 program reported in this release. A number of historic RC holes have been twinned by diamond holes, confirming the position of the mineralised envelopes and grade characteristics in the system
	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 or dedicated software (Micromine Geobank) in the field which includes comprehensive interval validation processes. Field data is subsequently uploaded into an Access Database. 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 2023 RC collars were sited using a Garmin hand-held GPS system, with drill collars picked up using a Leica DGPS system post-drilling (<0.1m accuracy). 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. 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.
	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 program at the 223 deposit and adjacent prospect areas 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.

		<p>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.</p> <p>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.</p>
	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.	On section drill spacing generally ranges from 20-30m, increasing to 50 metres with the majority of drilling on section and perpendicular to strike. Drilling completed at the 223 North prospect area is interpreted to have drilled obliquely to the strike direction of mineralisation. The 223 deposit has been drilled to a maximum depth of 360 metres below surface and is not closed off down dip. Metallurgical testwork has been conducted on cored samples.
	Whether sample compositing has been applied.	no sample compositing is applicable to this release.
<i>Orientation of data in relation to geological structure</i>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	<p>Barton's RC and diamond drill program was orientated to optimally test predicted mineralised structures and stratigraphic positions to provide were possible unbiased samples.</p> <p>Historic holes have been drilled at several orientations, and the orientation of relevant mineralisation-hosting geological structures varies considerably.</p> <p>Drill sections are orientated local grid E-W, perpendicular to the main mineralised lenses.</p> <p>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.</p>
	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.
<i>Sample security</i>	The measures taken to ensure sample security.	<p>Barton Gold staff oversaw the sampling on the RC drill rig and maintained oversight of sample security whilst onsite during the drilling programs. Split samples were inserted into pre-printed calico bags. These tied bags were, in batches of 5, ziplocked into labelled poly-weave 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.</p> <p>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.</p>
<i>Audits or reviews</i>	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.	<p>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.</p> <p>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.</p> <p>Most of the South Australian tenements held by WPG Resources were bought by current owner Barton Gold Pty Ltd on 1st November 2019.</p> <p>The three current tenements comprise EL6845, EL6639 and EL5901 which have a combined area of 1,362 km<sup>2</sup>.</p> <p>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.</p> <p>Barton Gold's negotiations with GRAC secured a signed Native Title Mining Agreement for Exploration for EL's 6845, EL6639 and EL5901 on 2nd February 2021.</p> <p>Barton's Exploration Licences 6845, 6639 and 5901 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).</p> <p>There are no joint ventures over the Tunkillia Project tenure.</p>
	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.	<p>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 20 km<sup>2</sup> 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.</p> <p>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.</p> <p>In June 2003, Helix finalised the acquisition of AngloGold's 49% interest and returned 100% of the project to Helix.</p> <p>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.</p> <p>In April-June 2004 Helix completed an 8000 m 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.</p>
		<p>Studies were completed by Resource Evaluations Pty Ltd in June 2004 looking at resource estimates and optimisation studies based on the available drilling.</p> <p>A Joint Venture commenced between Helix and Minotaur Exploration Ltd in April 2005 where Minotaur assumed operation</p>

Criteria	JORC Code explanation	Commentary
		<p>and management of the project. Minotaur undertook an intense exploration effort in the immediate surrounds of the Area 223 resource, and regionally.</p> <p>In 2007, Minotaur re-appraised the Area 223 resource using recent drilling and separated distinct oxide and sulphide domains.</p> <p>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.</p> <p>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.</p> <p>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.</p>
Geology	Deposit type, geological setting and style of mineralisation.	<p>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.</p> <p>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 Yarlbinda Shear Zone.</p> <p>The Yarlbinda 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.</p> <p>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.</p> <p>Development of Cu-Au +/- U mineralisation at Olympic Dam and Prominent Hill and gold dominant mineralisation at Tunkillia and Tarcoola occurred during this period.</p> <p>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.</p>
		<p>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.</p> <p>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.</p> <p>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.</p>



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		<p>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.</p> <p>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.</p>
Drillhole information	<p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Easting and northing of the drillhole collar</li> <li><input type="checkbox"/> Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drillhole collar</li> <li><input type="checkbox"/> Dip and azimuth of the hole</li> <li><input type="checkbox"/> Downhole length and interception depth</li> <li><input type="checkbox"/> Hole length.</li> </ul>	A tabulation of the drilling program mentioned in this announcement are presented in Tables 2 & 3.
Data aggregation methods	<p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>Reported intersections used the following criteria:</p> <ul style="list-style-type: none"> <li>• Reported intervals have been determined by applying either</li> <li>• a) a 0.5g/t Au cut-off (minimum 1gram-metre accumulation, ie the multiple of the interval in metres and the weighted average grade) and allowing for a maximum of two consecutive intervals of dilution, OR.</li> <li>• b) a 0.3g/t Au cut-off (minimum 5gram-metre accumulation) and allowing for a maximum of two consecutive intervals of dilution. This is considered appropriate to convey the significant widths of mineralisation that characterise parts of the Tunkillia project</li> <li>• No high-grade cut-offs were applied</li> <li>• No metal equivalents were calculated</li> </ul>
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</p> <p>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”).</p>	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. Relevant commentary relating to diagrams is discussed under the heading of Balanced Reporting.
Balanced	Where comprehensive reporting of all	Balanced reporting of Exploration Results is presented.

Criteria	JORC Code explanation	Commentary
reporting	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.	
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.	<p>Extensive geological, geophysical, geochemical, geotechnical and metallurgical datasets are available for the Tunkillia project area.</p> <p>Other datasets including gravity that was sourced from open-file datasets (SA DEM).</p> <p>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 Yarlbirinda Shear Zone.</p> <p>Other data includes gradient array IP, biogeochemical sampling, CHIM/MMI geochemical sampling and spectral scanning of reverse circulation drill chips.</p>
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).	<p>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 the current model.</p> <p>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.</p>
	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-October 2023 RC Drilling Program mentioned in this Announcement**

Hole ID	Easting	Northing	RL	DIP	TAZ	Total Depth (EOH)	Type	Completion	Target
TKB0110	478078	6544338	204	-60	58	138	RC	8/09/2023	Southern 223
TKB0111	478026	6544306	203	-60	58	150	RC	9/09/2023	Southern 223
TKB0112	478155	6544150	206	-60	58	144	RC	10/09/2023	Southern 223
TKB0113	478130	6544255	207	-60	58	150	RC	10/09/2023	Southern 223
TKB0115	478082	6544224	205	-60	58	204	RC	13/09/2023	Southern 223
TKB0116	478027	6544194	204	-60	58	220	RC	14/09/2023	Southern 223
TKB0117	478023	6544059	207	-50	58	216	RC	15/09/2023	Southern 223
TKB0118	478055	6544153	207	-70	58	220	RC	17/09/2023	Southern 223
TKB0119	478113	6544126	207	-62	58	160	RC	17/09/2023	Southern 223
TKB0177	478174	6544106	208	-85	58	174	RC	11/10/2023	Southern 223
TKB0179	478109	6544124	208	-80	58	210	RC	13/10/2023	Southern 223
TKB0180	478052	6544152	207	-85	58	234	RC	14/10/2023	Southern 223
TKB0181	478109	6544240	206	-60	58	300	RC	16/10/2023	Southern 223
TKB0182	478059	6544212	204	-60	58	276	RC	17/10/2023	Southern 223
TKB0183	478133	6544033	209	-65	58	192	RC	13/10/2023	Southern 223
TKB0184	478135	6544035	209	-55	58	192	RC	14/10/2023	Southern 223
TKB0185	478083	6544003	206	-60	58	222	RC	15/10/2023	Southern 223
TKB0186	478084	6544054	208	-55	58	204	RC	15/10/2023	Southern 223
TKB0187	478054	6544039	207	-60	58	222	RC	16/10/2023	Southern 223
TKB0188	478030	6544025	206	-60	58	234	RC	17/10/2023	Southern 223
TKB0189	477970	6544039	205	-50	58	282	RC	22/10/2023	Southern 223
TKB0190	477920	6544010	205	-50	58	300	RC	23/10/2023	Southern 223
TKB0191	477941	6544082	206	-60	58	294	RC	25/10/2023	Southern 223

**Table 3: Significant Intersections for Barton Gold 2023 Tunkillia RC Drilling Program Mentioned in this Announcement<sup>2</sup>**

Hole ID	From	To	Metres <sup>1</sup>	Au (g/t)	Comments &/or including
TKB0112	51	54	3	0.76	
TKB0112	111	118	7	0.64	including 1m @ 1.16g/t Au from 111m & 1m @ 1.46g/t Au from 115m & 1m @ 1.2g/t Au from 117m
TKB0113	52	54	2	1.11	
TKB0115	60	65	5	0.96	including 1m @ 2.73g/t Au from 60m
TKB0115	77	78	1	1.45	
TKB0115	147	150	3	0.59	
TKB0115	155	156	1	1.62	
TKB0115	175	178	3	0.69	including 1m @ 1.16g/t Au from 175m
TKB0115	182	184	2	0.62	
TKB0115	189	195	6	2.84	including 1m @ 14.1g/t Au from 189m
TKB0116	107	116	9	1.05	including 1m @ 3.83g/t Au from 113m
TKB0116	122	127	5	1.45	including 1m @ 3.7g/t Au from 122m & 1m @ 2.68g/t Au from 126m
TKB0116	198	199	1	1.76	
TKB0117	151	174	23	0.69	including 1m @ 1.51g/t Au from 158m
TKB0117	178	181	3	0.94	
TKB0117	194	216	22	0.81	including 6m @ 1.4g/t Au from 205m
TKB0118	103	123	20	0.51	
TKB0118	126	131	5	0.83	including 2m @ 1.39g/t Au from 126m
TKB0118	139	141	2	1.97	
TKB0118	165	167	2	1.18	
TKB0119	55	65	10	0.78	including 1m @ 2.16g/t Au from 62m
TKB0119	92	94	2	0.71	
TKB0119	119	131	12	1.31	including 7m @ 2.01g/t Au from 119m
TKB0119	137	150	13	1.04	including 4m @ 2.01g/t Au from 145m
TKB0119	156	158	2	1.86	
TKB0177	124	125	1	1.12	
TKB0177	150	152	2	0.935	
TKB0179	54	59	5	1.41	including 1m @ 2.8g/t Au from 54m
TKB0179	65	70	5	1.06	including 1m @ 3.3g/t Au from 68m
TKB0179	78	80	2	2.71	including 1m @ 4.08g/t Au from 78m
TKB0179	127	142	15	0.46	including 1m @ 1.03g/t Au from 134m
TKB0179	170	171	1	1.22	
TKB0180	224	234	10	0.66	including 5m @ 0.98g/t Au from 225m
TKB0181	111	112	1	2.97	
TKB0181	158	159	1	1.84	
TKB0181	170	172	2	3.11	
TKB0181	191	203	12	0.46	including 1m @ 1.89g/t Au from 199m
TKB0181	210	214	4	0.5	
TKB0181	242	243	1	1.06	
TKB0181	252	254	2	1.25	
TKB0181	264	268	4	1.07	
TKB0181	271	273	2	0.77	



Hole ID	From	To	Metres <sup>1</sup>	Au (g/t)	Comments &/or including
TKB0181	286	291	5	0.99	
TKB0181	299	300 (EOH)	1	1.95	
TKB0183	56	72	16	0.54	including 2m @ 1.36g/t Au from 61m
TKB0184	67	71	4	1.35	
TKB0185	76	79	3	0.75	
TKB0185	132	140	8	0.89	
TKB0185	144	156	12	1.97	including 4m @ 4.99g/t Au from 151m & including 1m @ 14.8g/t Au from 152m
TKB0185	175	177	2	0.86	
TKB0185	129	139	10	0.78	including 1m @ 3.59g/t Au from 136m
TKB0186	81	97	16	0.42	including 1m @ 1.16g/t Au from 90m & 1m @ 1.26g/t Au from 96m
TKB0186	159	165	6	0.82	
TKB0186	175	179	4	0.52	
TKB0182	63	72	9	0.9	
TKB0182	76	86	10	0.7	including 2m @ 1.97g/t Au from 77m
TKB0182	95	97	2	0.54	
TKB0182	248	253	5	0.7	including 1m @ 1.43g/t Au from 248m
TKB0188	184	199	15	0.89	
TKB0188	204	234	30	1.07	
TKB0189	214	269	55	1.52	including 1m @ 3.84g/t Au from 227m & 1m @ 6.2g/t Au from 231m & 1m @ 4.22g/t Au from 235m
TKB0189	274	275	1	1.16	

<sup>1</sup> Note - Not true widths.

<sup>2</sup> Note – Primary intervals calculated by applying either a 0.5g/t Au cut-off (minimum 1gram-metre accumulation) OR applying a 0.3g/t Au cut-off (minimum 5gram-metre accumulation) and allowing up to 2m internal dilution in either instance. Included intervals are selected to ensure balanced and representative reporting of mineralisation within primary intervals.