Barton Gold

ASX Announcement

14 February 2024

Visible High Grade Gold Confirmed at Tunkillia's Area 191

Potential new high-grade system next to existing 1.38Moz Au Resource

HIGHLIGHTS

- Tunkillia JORC Resources recently grew to 1.38Moz Au during December 2023[1]
- **Area 191 high-grade target returns intersection of 3.83m @ 68.0 g/t Au** from 104.1m depth
- Diamond core to assist in structural analysis; gold mineralisation appears concentrated around clusters of high-grade intercepts including:

  LRC001: **10m @ 4.08 g/t Au** from 109m
  LRC218: **11m @ 6.24 g/t Au** from 80m
  LRC224: **2m @ 35.05 g/t Au** from 68m
  LRC514: **8m @ 2.16 g/t Au** from 112m & **8m @ 5.99 g/t Au** from 132m
  LRC536: **16m @ 2.65 g/t Au** from 108m

- JORC Mineral Resource Estimate (**MRE**) modelling also underway at Area 51, where recent shallow high-grade results include **44m @ 1.81 g/t Au** from 64m, *incl.* **6m @ 5.85 g/t Au** (69m) & **1m @ 19.95 g/t Au** (80m)[2]

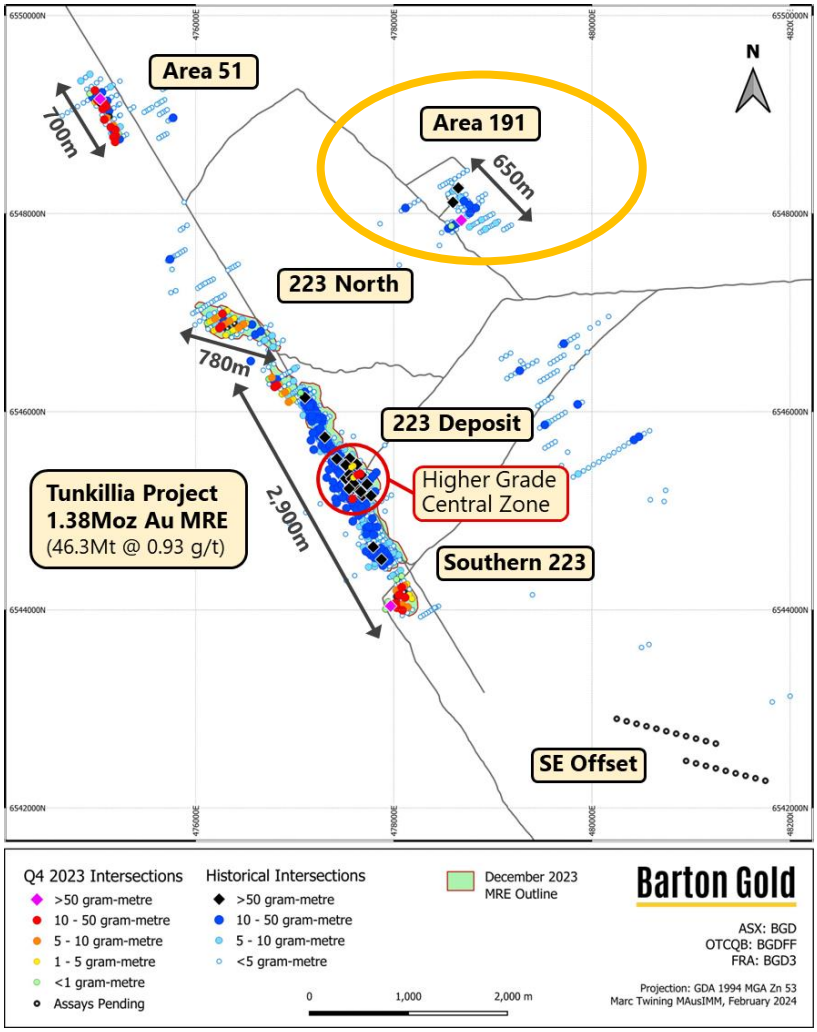

Figure 1 – Tunkillia Gold Project with Q4 2023 drilling

Barton Gold Holdings Limited (ASX:BGD, FRA:BGD3, OTCQB:BGDFF) (**Barton** or the **Company**) is pleased to report drilling results for the Area 191 gold zone at the Tunkillia Gold Project (**Tunkillia**), where recent diamond drilling has returned visible gold mineralisation in an emerging high-grade Resource target.

Commenting on the Area 191 drilling results, Barton MD Alex Scanlon said:

"These are the highest-grade assays yet at Tunkillia and suggest the potential for a high-grade system just to the northeast of the current 1.38 million ounce JORC Resource. Such high-grade mineralisation could significantly enhance Tunkillia's development profile. We will certainly review this further as we build out Tunkillia's footprint."

[1] Refer to ASX announcement dated 11 December 2023
[2] Refer to ASX announcement dated 8 February 2024

Barton Gold Holdings Limited
ACN: 633 442 618
ASX: **BGD**
FRA: **BGD3**
OTCQB: **BGDFF**
www.bartongold.com.au

Registered Office
Level 4, 12 Gilles Street
Adelaide, SA 5000 Australia

T +61 8 9322 1587
E contact@bartongold.com.au

Company Directors
Kenneth Williams **Non Executive Chairman**
Alexander Scanlon **Managing Director & CEO**
Christian Paech **Non Executive Director**
Graham Arvidson **Non Executive Director**

Program background

The Area 191 gold zone presently spans some ~250 - 300m width and ~650m strike length along a predominantly N/NW strike orientation. During August 2021 Barton completed 8 reverse circulation (**RC**) holes totalling 1,128m drilling at the target, with shallow high-grade assays complementing drilling results from earlier drilling by prior owners.[3] Mineralisation at Area 191 appears concentrated around clusters of high-grade drill intersections, where key prior drilling results include:

Barton August 2021 program[3]

TKB29: **10m @ 1.31 g/t Au** from 50m
incl ***3m @ 3.45 g/t Au*** *from 55m*
TKB28: **4m @ 3.91 g/t Au** from 115m
incl ***1m @ 7.90 g/t Au*** *from 118m*

Given the significant number of shallow high-grade intersections at Area 191, during October 2023 Barton completed 2 diamond drilling (**DD**) holes at Area 191. The objective of this drilling was to gain additional information regarding the orientation of mineralisation and determine the next steps to pursue a potential JORC Resource.

Historical drilling programs[3,4]

LRC001: **10m @ 4.08 g/t Au** from 109m,
incl ***5m @ 7.67 g/t Au*** *from 110m*
LRC218: **11m @ 6.24 g/t Au** from 80m
incl ***1m @ 60.6 g/t Au*** *from 89m*
LRC224: **2m @ 35.05 g/t Au** from 68m
incl ***1m @ 69.6 g/t Au*** *from 68m*
LRC514: **8m @ 2.16 g/t Au** from 112m &
8m @ 5.99 g/t Au from 132m
incl ***4m @ 11.43 g/t Au*** *from 132m*
LRC536: **16m @ 2.65 g/t Au** from 108m
incl ***4m @ 5.56 g/t Au*** *from 120m*

The key new Area 191 drilling of interest is hole number TKB124D (see Figure 2), drilled at a 90 degree angle to a southeast-northwest trending structure and (from 104.1m depth) **intersecting 3.83m @ 68.0 g/t Au in a quartz vein containing significant gold mineralisation visible in this section of the core.**

A long section of key new and historical drilling assays is shown as Figure 3 on the following page, and a photo of significant visible gold in the split TKB124D core is shown on the following page as Figure 4.

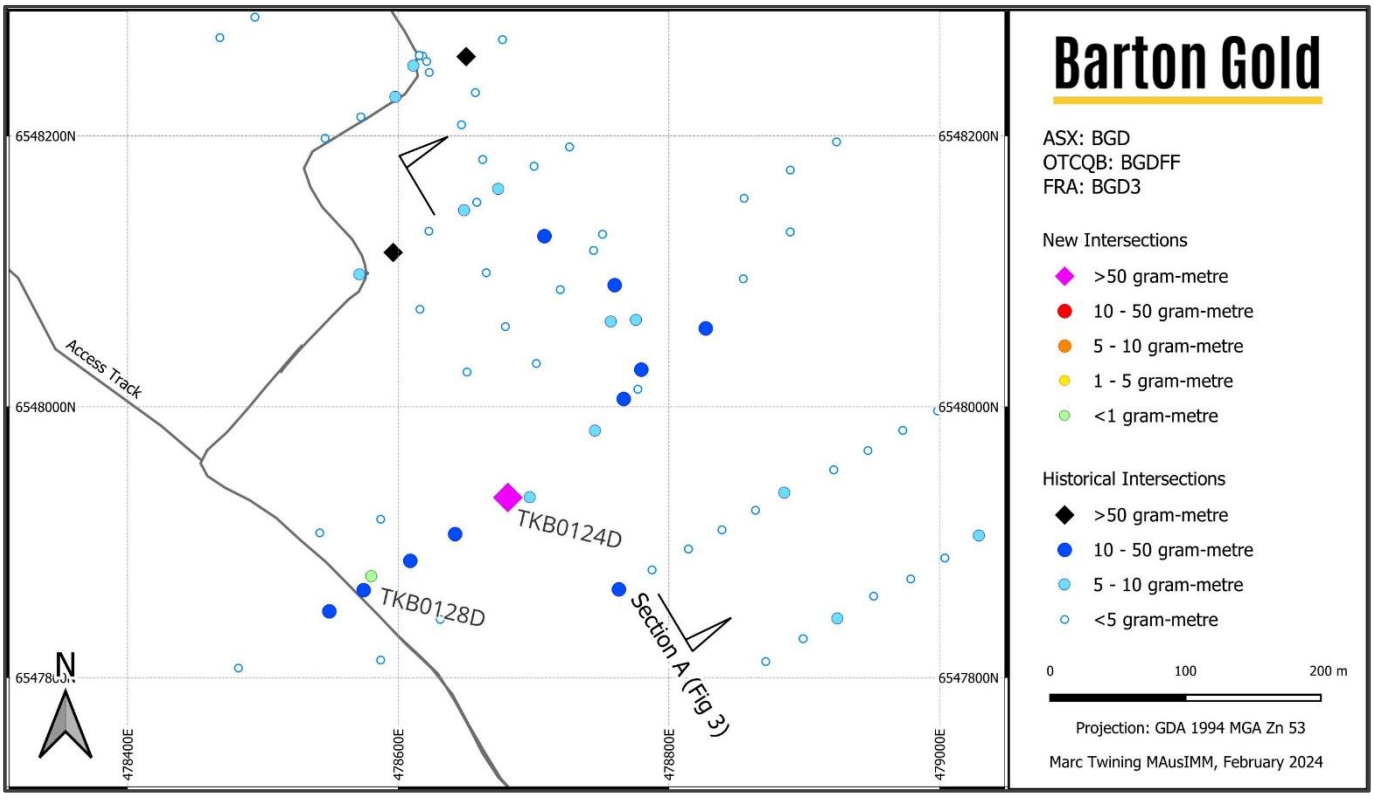

Figure 2 – Tunkillia Area 191 drilling plan showing new and historical drill hole collars

[3] Refer to ASX announcements dated 11 November 2021; noting that mineralised intervals are re-reported applying current reporting criteria.
[4] Only those historical primary intervals grading >40gram-metres are presented; refer to JORC Table 5 for full details of significant intervals

Potential shallow zone of high-grade mineralisation

Prior drilling at Area 191 encountered high-grade gold in multiple locations, but was lacking in structural context. Hole TKB124D was drilled to test the structural model and has confirmed the existence of a north-dipping fault with significant intervals of high-grade gold present in the hanging wall and extending to the north away from the fault. Hole TKB124D therefore appears to confirm prior drilling around this location and indicates the hanging wall zone as a priority up-dip and down-dip target for high-grade mineralisation.

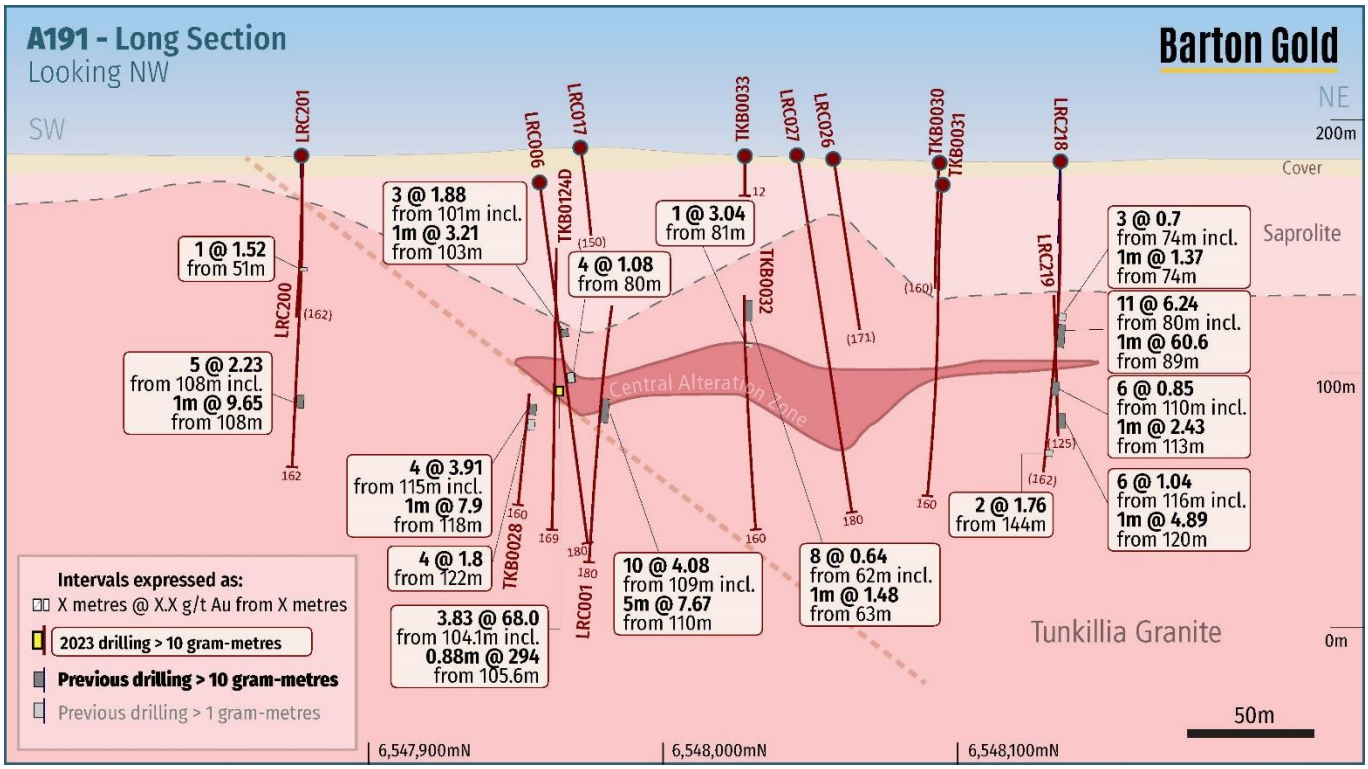

Figure 3 – Area 191 long section looking (grid) west

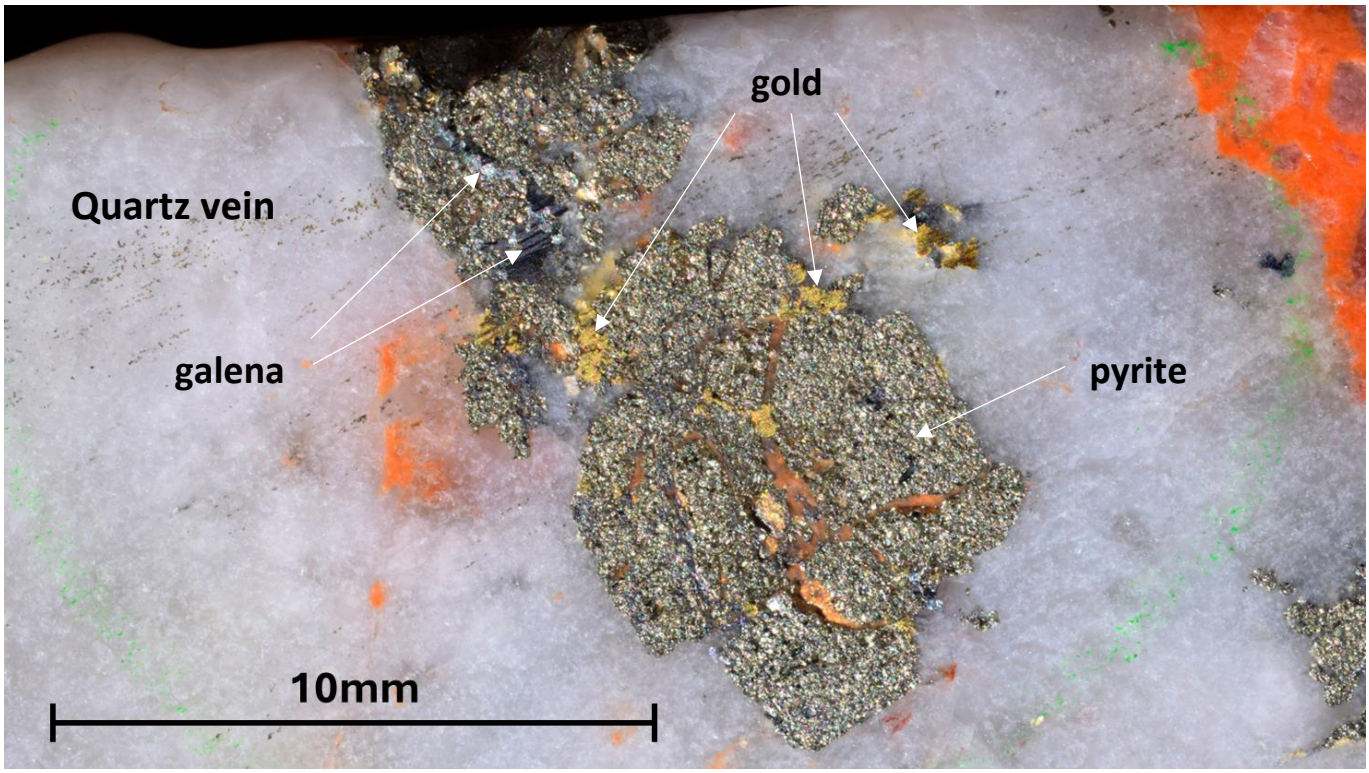

Figure 4 – Significant visible gold in a quartz vein, intercepted 104.1m down hole (TKB124D)

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

For further information, please contact:

Alexander Scanlon	Shannon Coates
Managing Director	Company Secretary
a.scanlon@bartongold.com.au	cosec@bartongold.com.au
+61 425 226 649	+61 8 9322 1587

Competent Persons Statement

The information in this announcement that relates to 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 and development company with **a total attributable 1.5Moz Au JORC Mineral Resources endowment** (47.2Mt @ 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

- **1.38Moz Au Mineral Resources (46.3Mt @ 0.93 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 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	Mr Ian Taylor (Consultant)	AusIMM	Fellow
Challenger Mineral Resource	Mr Dale Sims (Consultant)	AusIMM / AIG	Fellow / Member

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 dated 11 December 2023. Total Barton attributable JORC (2012) Mineral Resources include 798koz Au (25.8Mt @ 1.0 g/t) in Indicated and 661koz Au (21.3Mt @ 1.0 g/t) in Inferred categories.**

JORC Table 1 – Tunkillia Gold Project

Section 1 Sampling Techniques and Data

Criteria	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.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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*	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 modelling or grade estimations of the results reported in the accompanying Announcement. RC drilling programs have used a Metzke cone splitter (or similar) 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 drilling has 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. The sample preparation for drilling conducted in 2022 and 2023 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. The sample preparation of the one-metre sampling for Barton Gold's 2021 RC drill program 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 ¾" RC drilling techniques undertaken by Kennedy Drilling using a SREPS SR650 drilling rig with auxiliary compressor. The diamond drilling program used a UDR1200 drill rig provided by Resolution Drilling, drilling NQ (47.6mm diameter) size drill core, using a standard tube configuration. Diamond drill holes were precollared with rotary mud drilling through the strongly weathered (clay) upper parts of each drill hole. 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.
Drill sample recovery *Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	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 <3% 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. Recoveries for diamond drill core were measured and recorded. No quantitative recoveries were recorded from pre 2021 RC drilling. However, consistent sample weights were noted within mineralised zones in previous reports. No quantitative recoveries have been recorded from previous diamond

Criteria	Commentary
	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. 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. 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.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* *The total length and percentage of the relevant intersections logged.*	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. From 2023 Barton has stored all drilling data in an in-house managed MS Access database. All diamond core was photographed. Structural measurements were made on core oriented using either a spear and Ezy-Mark (pre-Barton) or Reflex (Barton) core orientation devices. Core is stored on site and at the South Australian Government's Adelaide Core Library. 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* *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	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. The RC drilling program used an Ox sampling system 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. 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. 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-orignal sample intervals (2022 drilling) or 1 for each 50-original sample intervals (2023 drilling). 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 their only QAQC, this effectively accounts for 57% of the holes used in the current resource estimation. Sample sizes are considered to be appropriate to the grain size of the material being sampled.
Quality of assay data and laboratory tests *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (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 (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 40g lead collection fire assay with AAS finish to a 0.01 ppm detection limit. 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. 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 were

Criteria	Commentary
	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) Analytical techniques have varied somewhat over the projects history. No geophysical studies were used in the course of Barton Gold drilling programs. Barton Gold's RC and diamond drilling programs included a comprehensive QAQC component with Field Duplicate samples taken at every 16th (2021 drilling), 25th sample (2022 drilling) or 50th sample (2023 drilling); Certified Standards (selection of OREAS CRM's considered most appropriate for expected grade and composition) were inserted randomly in sequence for at every 20th (2021 drilling), 25th (2022 drilling) or 50th sample (2023) 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. Variances between some higher grade pairs of field duplicates was recorded, but attributed to variability in the distribution of mineralisation (vein related) and not as a consequence of analytical processes. There was no evidence of material cross-contamination in the submitted blank samples. 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). 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. 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 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 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.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	Alternative company personnel have verified significant intersections. No twinned holes were undertaken on the 2023 program reported 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.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	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. No adjustments were made to any assay data in this release. All 2023 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 an Axis Champ gyro system which provided measurements at 10m intervals up and down hole.

Criteria	Commentary
	All Barton diamond holes were surveyed using a single-shot gyro tool at 15m or 30m intervals during drilling operations. 488 out of a total of 556 drillhole collars from drilling prior to 2021 across the broader Tunkillia project 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. 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 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.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	Barton's diamond drilling program at the A191 project 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.
Orientation of data in relation to geological structure *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	Barton's diamond drill program was orientated to optimally test predicted mineralised structures and stratigraphic positions to provide were possible unbiased samples and data to improve the understanding of the geological setting. Drill sections are orientated local grid E–W, perpendicular to the main mineralised lenses. The majority of previous drillholes used to test primary mineralisation positions are drilled at -60 degrees and at a range of azimuths. 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*.	Diamond drill core was either cut on site or 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. Drill core dispatched from site was 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. 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	Commentary
Mineral tenement and land tenure status *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	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 EL6845, EL6639 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 6845, EL6639 and EL5901 on 2nd February 2021. 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). There are no joint ventures over the Tunkillia Project tenure. 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 20 km2 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 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. 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

Criteria	Commentary
	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 across the Tunkillia project (including Area 51) from west to east include variably sheared chlorite-biotite-rich augen gneiss (Tunkillia Augen Gneiss) grading into a highly chloritised and mylonitised phyllonitic shear. The phyllonitic 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. 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. Relationships between dyke emplacement and the mineralisation remain unclear. The dykes appear to cross-cut mineralisation at most of the Tunkillia project prospects and deposits 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 positions across the Tunkillia project has undergone extensive weathering which formed a leached kaolinitic profile capped by a silcrete layer. No palaeochannels are observed at Area 223 or Area 51 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.
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.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person*	A tabulation of the drilling program mentioned in this announcement are presented in Tables 2 & 3. Past exploration relevant to the Area191 project area and mentioned in this release is presented in Tables 4 & 5.

Criteria	Commentary
should clearly explain why this is the case.	
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 either • 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. • 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 • 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 • No metal equivalents were calculated
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 there is uncertainty as to the true width mineralisation.
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 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).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Mineralisation at the deposits and prospects across the Tunkillia project 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 models. 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 have been included in the body of this Announcement.

Table 2: Drillhole Collar Details for Barton Gold Area 191 (Tunkillia) September-October 2023 Diamond Drilling Program mentioned in this Announcement

Hole ID	Easting	Northing	RL	DIP	TAZ	Total Depth (EOH)	Type*	Completion	Target
TKB124D	478681	6547933	185	-60	53	168.9	RM/DD	24/09/23	Area 191
TKB128D	478580	6547875	186	-60	53	170.26	RM/DD	04/10/23	Area 191

*RC=Reverse Circulation, RM/DD=Rotary Mud pre-collar with Diamond Core tail.

Table 3: Significant Intersections for Barton Gold Area 191 (Tunkillia) September-October 2023 Diamond Drilling Program Mentioned in this Announcement[2]

Hole ID	From	To	Metres[1]	Au (g/t)	Comments &/or including
TKB124D	104.1	107.93	3.83	68.0	**including** 0.88m @ 294 g/t Au from 105.6m

[1] Note - Not true widths.

[2] 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.

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
TKB028	478642	6547906	186	-60	60	160	RC	04/09/21	Area 191
TKB029	478708	6548126	183	-60	60	160	RC	05/09/21	Area 191
TKB032	478757	6548063	183	-60	240	160	RC	06/09/21	Area 191
TKB034	478658	6548151	183	-60	60	160	RC	07/09/21	Area 191
TKB035	478777	6548013	184	-60	60	160	RC	07/09/21	Area 191
LRC001	478780	6548027	184	-60	224	180	RC	20/10/96	Area 191
LRC002	478827	6548058	183	-60	224	180	RC	22/10/96	Area 191
LRC005	478767	6548006	185	-60	44	180	RC	28/10/96	Area 191
LRC006	478697	6547933	186	-60	46	180	RC	31/10/96	Area 191
LRC199	478815	6547897	190	-60	53	162	RC	12/07/97	Area 191
LRC200	478788	6547881	190	-60	53	162	RC	13/07/97	Area 191
LRC201	478763	6547867	190	-60	53	162	RC	14/07/97	Area 191
LRC218	478596	6548114	183	-60	59	162	RC	29/07/97	Area 191
LRC219	478572	6548099	188	-60	59	125	RC	30/07/97	Area 191
LRC224	478650	6548259	181	-60	59	162	RC	02/08/97	Area 191
LRC471	478760	6548090	183	-60	148	168	RC	29/04/04	Area 191
LRC506	478118	6548059	189	-60	59	196	RC	02/12/05	Area 191
LRC514	478574	6547865	187	-60	59	198	RC	16/05/06	Area 191
LRC536	478609	6547886	186	-62	59	150	RC	23/06/06	Area 191
LRC537	478549	6547849	187	-59	59	180	RC	23/06/06	Area 191
WB2	478611	6548	181	-90	6	90	RC	25/05/04	Area 191

*RC=Reverse Circulation, RM/DD=Rotary Mud pre-collar with Diamond Core tail.

[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 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
TKB028	85	90	5	0.57	
TKB028	115	119	**4**	**3.91**	including 1m @ 7.9g/t Au from 118m
TKB028	122	126	4	1.8	
TKB029	50	60	**10**	**1.31**	including **3m @ 3.45g/t Au** from 55m
TKB032	62	70	8	0.64	including 1m @ 1.48g/t Au from 63m
TKB032	81	82	1	3.04	
TKB034	40	44	4	1.13	including 1m @ 2.2g/t Au from 42m
TKB034	49	52	3	1.02	
TKB034	107	108	1	1.05	
TKB034	112	113	1	1.05	
TKB035	64	78	14	0.66	including 2m @ 1.7g/t Au from 64m
LRC001	109	119	**10**	**4.08**	including **5m @ 7.67g/t Au** from 110m
LRC002	63	68	5	0.65	
LRC002	71	84 (EOH)	**13**	**1.97**	including 1m @ 6.25g/t Au from 83m
LRC005	75	82	**7**	**2.63**	including **2m @ 6.52g/t Au** from 78m
LRC005	85	87	2	0.99	
LRC006	80	84	4	1.08	
LRC006	101	104	3	1.88	Including 1m @ 3.21g/t Au from 103m
LRC199	51	55	4	0.84	including 1m @ 1.52g/t Au from 51m
LRC200	51	52	1	1.52	
LRC201	108	113	**5**	**2.23**	including 1m @ 9.65g/t Au from 108m
LRC218	74	77	3	0.7	including 1m @ 1.37g/t Au from 74m
LRC218	80	91	**11**	**6.24**	including **1m @ 60.6g/t Au** from 89m
LRC218	110	116	6	0.85	including 1m @ 2.43g/t Au from 113m
LRC218	144	146	2	1.76	
LRC219	116	122	6	1.04	including 1m @ 4.89g/t Au from 120m
LRC224	68	70	**2**	**35.1**	including **1m @ 69.6g/t Au** from 68m
LRC506	149	158	**9**	**3.13**	including **1m @ 13.84g/t Au** from 153m
LRC514*	112	120	**8**	**2.16**	
LRC514*	132	140	**8**	**5.99**	including **4m @ 11.43g/t Au** from 132m
LRC536*	108	124	**16**	**2.65**	including **4m @ 5.56g/t Au** from 120m
LRC536*	128	136	8	0.69	
LRC537*	124	148	**24**	**0.97**	
LRC471	63	69	**6**	**2.26**	including 1m @ 9.98g/t Au from 66m
LRC471	74	84	**10**	**1.01**	including 1m @ 4.8g/t Au from 75m
LRC471	101	105	4	0.92	including 1m @ 1.84g/t Au from 102m
WB2*	80	84	4	1.39	

[1] Note - Not true widths.

* Note – 4m composite samples.