

9 April 2025

Errolls Gold Project Provides Exceptional Metallurgical Results

98.4% Gold Recovery Confirms Simple, High-Yield Processing Potential

Highlights:

- **Exceptional gold recoveries of up to 98.4%** in standard cyanide leach tests over 24 hours.
- **High gold head grades** between 5.2g/t and 5.8g/t Au.
- **Significant presence of free gold** — up to **23.5%** identified via gravity separation.
- Submission lodged to DEMIRS to press for an **expedited resolution** of the Errolls Exploration Licence status.
- Plans advancing for a **maiden drill campaign** targeting shallow, high-grade extensions.

Breakthrough Minerals (ASX: BTM “Breakthrough” or “the Company”) is excited to announce outstanding results from metallurgical testwork on samples collected from the Errolls Legacy Prospect which is part of the Company’s recently announced proposed gold acquisition. The Company has reviewed the original data and reporting on gold extraction testwork conducted on a bulk composite RC drill sample collected from five Reverse Circulation (RC) holes drilled at the Errolls Legacy Prospect (Figure 1). The testwork was carried out in 1987 with sample details listed in Table 1 and results provide encouragement that any addition to the gold found as part of the Errolls gold mineralised system may be straightforward to process.

The testwork, undertaken at the respected AMMTEC Laboratory (now ALS) in Perth, confirmed exceptional gold recoveries and strong head grades, reinforcing the Project’s potential for simple and highly efficient gold processing. The flowsheet for this program is shown in Figure 2.

Results from the testwork can be summarized as follows:

- Head assay grades achieved
 - Sample A – 4.77 g/t Au
 - Sample B – 5.14 g/t Au and (as a duplicate) 4.23 g/t Au
- Gold recoveries were 98.4%, 97.3%, 96.9% and 96.1% for the grind sizes 80% <53, 75, 106 and 150 microns
- All calculated head grades were higher than the assay head average of 4.73 g/t Au and ranged from 5.23 – 5.84 g/t Au
- Wilfley table testing reported 23.5% of the gold present as coarse free gold

These results not only validate historical work on the Project but also support the potential for a low-cost, high-margin operation as exploration continues to unlock value.

Executive Director Mr Peretz Schapiro commented: *“We are absolutely thrilled with the metallurgical results from Errolls — 98.4% gold recovery is world-class by any standard. Combined with strong head grades and a high proportion of free gold, this points to a potentially straightforward processing path. These outcomes significantly de-risk the Project from a development perspective and add meaningful upside as we gear up for drilling.”*

Gold Extraction Program Details

A gold extraction test program was conducted on ore from the Errolls workings within the Barambie Greenstone Belt. The program was to include:

- 1) Duplicate head assay for Au
- 2) True SG determination
- 3) Grind establishment
- 4) Time leach cyanidations at 80% passing 150,106, 75 and 53 microns
- 5) Table and amalgamation

Samples

Three bags of samples from RC drillholes were received and amalgamated into a single bulk composite. Table 1 details the drilling data and sample amalgamation and Figure 3 shows the location of the drillholes within the overall project area.

Table 1 – Drillhole Details for metallurgical testwork samples¹

Hole ID	Type	Total Depth	Easting	Northing	RL	Azimuth	Dip	From	To
ER046	RC	35	701793	6976160	495.9	62.5	-60	15	20
ER047	RC	35	701789	6976170	495.9	62.5	-60	15	23
ER053	RC	50	701779	6976143	496	62.5	-60	23	28
ER060	RC	25	701808	6976166	495.9	242	-60	14	20
ER064	RC	35	701804	6976155	495.9	242	-60	18	26

All the sample material received was mixed together to form a bulk composite prior to crushing to -2.0mm. The crushed material was then further mixed and divided to produce subsamples for the test program.

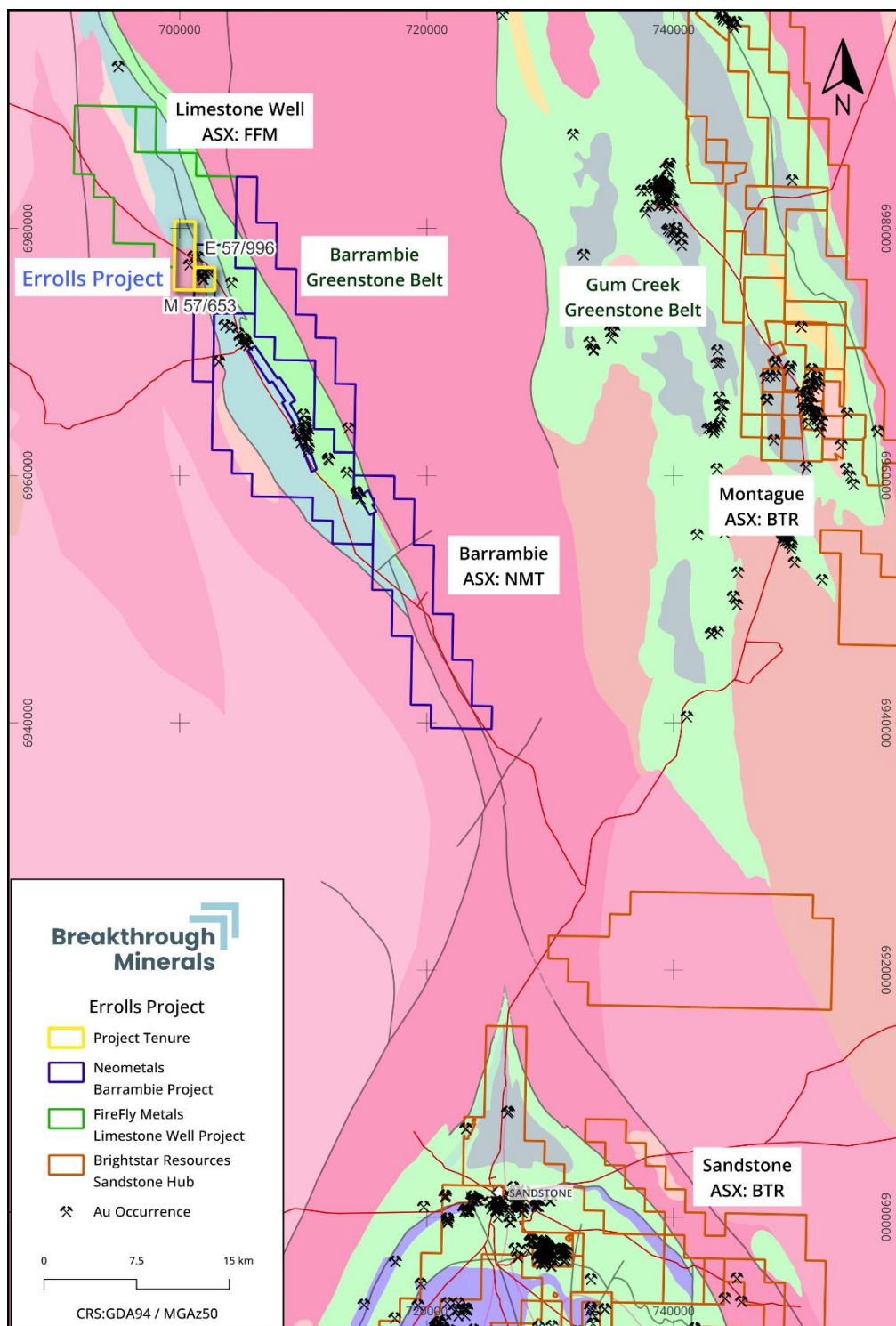
Two subsamples used for assay of Au gave results of:

- Head A – 4.77 g/t Au
- Head B – 5.14, 4.23 g/t Au

Average head assay grade of 4.69 g/t Au

A standard true SG determination was conducted on two samples from the bulk composite (calculated by the weight of a dry sample in air divided by the weight of the sample in air minus the weight of the sample in water) with both samples returning a true SG calculation of 2.69.

¹ See ASX Announcement released on 31 March 2025 titled – “Breakthrough Secures High-Grade WA Gold Project”



**Figure 1 – Barrambie Greenstone Belt showing Errolls with Sandstone to the south over GSWA
1:500k geology**

Grind Establishment and Optimum Grind for Cyanidation

4 lots of 1 kilogram samples from the bulk composite were ground for various times in the laboratory rod mill. The ground slurries were filtered, dried then size analysis was conducted on the ground product to determine the relationship between grind time and resulting grind size. Table 2 lists the times for 80% passing 150, 106, 75 and 53 microns.

Table 2 - Times recorded for 80% passing various size fractions

P80µm	time (minutes:seconds)
150	2:00
106	7:30
75	18:30
53	26:00

Four 24 hour time leach cyanidation tests were conducted on the ore to determine the optimum grind for cyanidation. Observations from this testwork include:

- (1) The gold recoveries were 98.4%, 97.3%, 96.9% and 96.1% for the grind sizes 80% <53, 75, 106 and 150µm respectively.
- (2) Cyanide consumption ranged from 0.55 kg/t to 0.75 kg/t and lime consumption from 2.44 kg/t to 2.58 kg/t.
- (3) The residue grades were 0.093 g/t, 0.159 g/t, 0.171 g/t and 0.204 g/t Au for the grinds 80% <53, 75, 106 and 150µm respectively.
- (4) All calculated head grades were higher than the assay head average of 4.73 g/t Au and ranged from 5.23 to 5.84 g/t Au.
- (5) Dissolved oxygen levels were satisfactory throughout all tests.
- (6) The size assay conducted on the 80% <53µm residue showed an even gold distribution. The calculated head however was higher at 0.141 g/t. This would give a gold recovery of 97.6% and a calculated head of 5.84 g/t Au.

Table and Amalgamation

In order to establish the presence and extent of coarse free gold a 5.00 kilogram sample taken from the bulk composite was tabled and the concentrate amalgamated.

The sample was ground to be approximately ~300µm and passed over a Wilfley table with the concentrate, middling and tailings collected. The results from this work showed a presence of 23.5% coarse free metal.

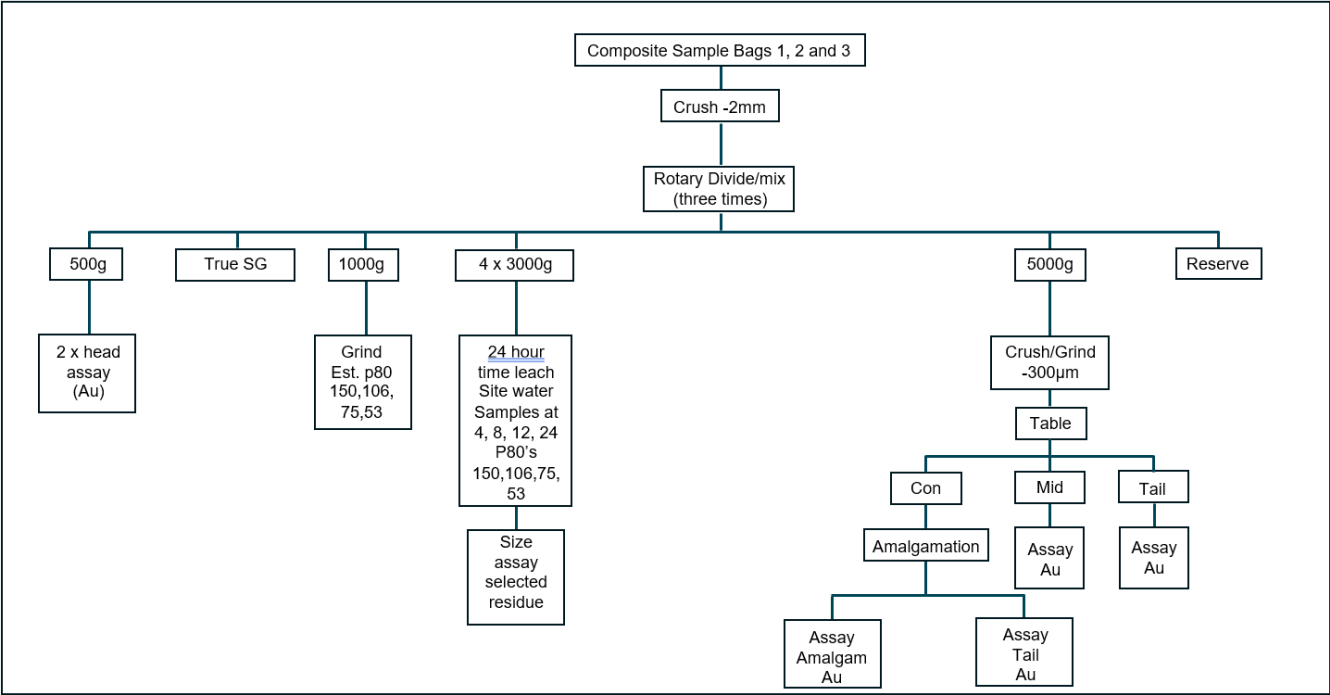


Figure 2 – Testwork Flowsheet – Errolls Project

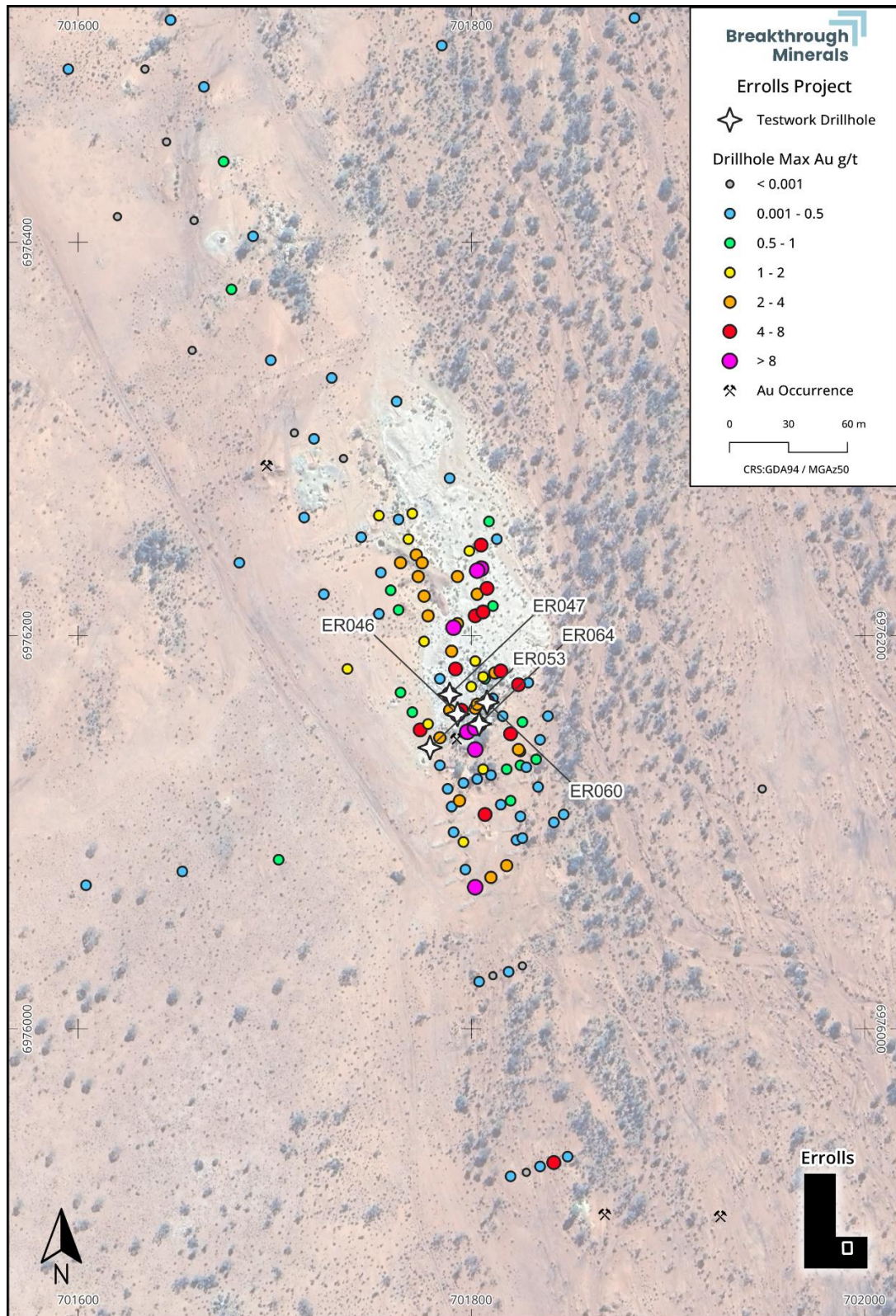


Figure 3 – Drill collar plan coloured by maximum downhole gold and highlighting the locations of the holes used in the metallurgical testwork program

Exploration – Next Steps

Following completion of the transaction, Breakthrough intends to move quickly to complete a maiden drilling program targeting additional high grade, shallow gold mineralisation at the Errolls Gold Project. Figure 4 shows the likely initial drillhole targets.

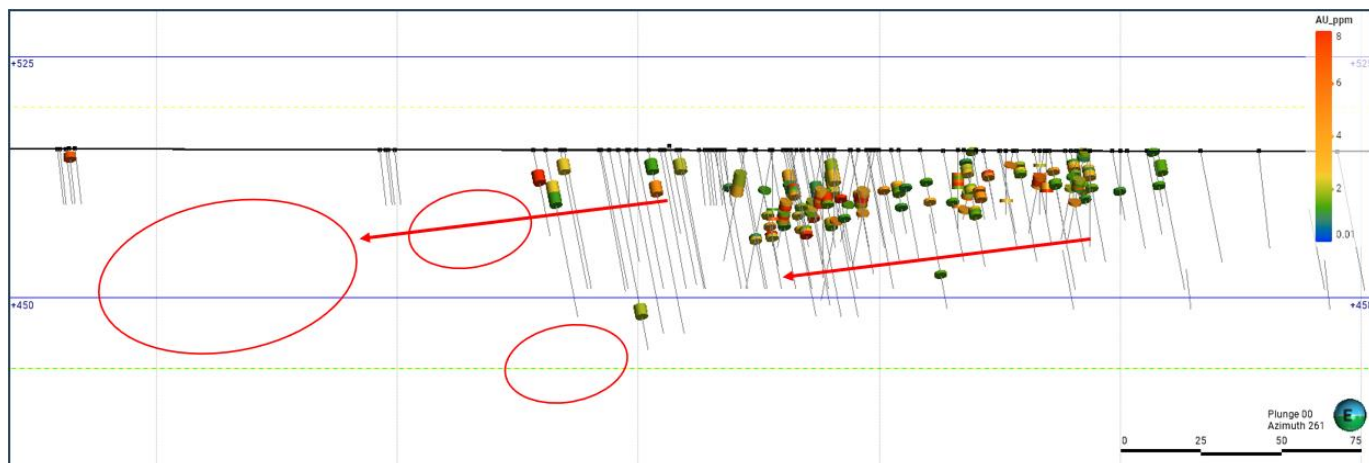


Figure 4 – Errolls Legacy Prospect Long Section (looking west) with red circles indicating drill target areas

Tenure Update

As detailed in the announcement dated 31 March 2025, the completion of the transaction to acquire the Errolls Gold Project is subject to resolution of the current forfeiture application 726596 commenced by the Department of Energy, Mines, Industry Regulation and Safety on 6 February 2025. To this end a detailed submission has been lodged by Kyarra Minerals Pty Ltd in response to the forfeiture application with further information to be made available to the market as it comes to hand.

Competent Person Statement

The information in this announcement that relates to exploration results is based on, and fairly represents information and supporting documentation compiled by William Dix, who provides technical services to Breakthrough Minerals under a shared services agreement between Breakthrough and Trinex Minerals. Mr Dix is a director and shareholder of Breakthrough Minerals. Mr Dix is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Dix has sufficient experience of relevance to the style of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Dix consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Summary Information

The following disclaimer applies to this announcement and any information contained in it. The information in this announcement is general background information only and does not purport to be complete. It should be read in conjunction with the Company's other periodic and continuous disclosure announcements lodged with ASX, which are available at www.asx.com.au. You are advised to read this disclaimer carefully before making any other use of this announcement or any information contained in this announcement.

Forward Looking Statements

This announcement includes forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the

use of words like "will", "progress", "anticipate", "intend", "expect", "may", "seek", "towards", "enable" and similar words or expressions containing same. The forward-looking statements reflect the Company's views and assumptions with respect to future events as of the date of this announcement and are subject to a variety of unpredictable risks, uncertainties, and other unknowns. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, many of which are beyond our ability to control or predict. Given these uncertainties, no one should place undue reliance on any forward-looking statements attributable to the Company, or any of its affiliates or persons acting on its behalf. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Neither the Company nor any other person, gives any representation, warranty, assurance, nor will guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. To the maximum extent permitted by law, the Company and each of its advisors, affiliates, related bodies corporate, directors, officers, partners, employees and agents disclaim any responsibility for the accuracy or completeness of any forward-looking statements whether as a result of new information, future events or results or otherwise.

ENDS:

This release is approved by the Board of Breakthrough Minerals Limited

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Breakthrough Minerals (ASX:BTM) is an environmentally responsible, diversified mining and energy group with a core focus on growth opportunities in the resources sector.

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> The Errolls project has had extensive reverse circulation drilling by Samson Exploration NL in the late 1980s to early 1990s, and Kyarra Minerals Pty Ltd in 2021. From five RC drillholes completed by Samson, 100.5 kg of mineralised material was collected for metallurgical testwork completed in 1988 to determine gold recoveries and optimal grind size. No drilling has been completed by Breakthrough with review and interpretation of historical exploration is ongoing. All sampling techniques as discussed in section 1 are as reported in historical reports by other companies and cannot be completely verified by Breakthrough.
Drilling techniques	<ul style="list-style-type: none"> <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> 	<ul style="list-style-type: none"> Drillholes used for metallurgical testwork were reverse circulation (RC).
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature</i> 	<ul style="list-style-type: none"> Recoveries and methods to determine it are unknown for historical drilling.

Criteria	JORC Code explanation	Commentary
	<p><i>of the samples.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> It is unknown if a relationship exists between recovery and grade.
Logging	<ul style="list-style-type: none"> <i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> All historical drilling was qualitatively logged for geology. No geotechnical logging is known.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> A total of 100.5 kg of material was collected from mineralised intervals of 5 RC drill holes Sample material was mixed to form a bulk composite and crushed to -2mm, then further mixed and rotary split. Four 1 kg sub-samples were collected for grind time testwork. Four 3 kg sub-samples were collected for cyanide leach recovery testwork. One 5 kg sub-sample was collected for gravity recovery testwork. One 500 g sub-sample was collected to establish head grade. Sub-samples were ground using a rod mill to 80% passing 150 µm, 106 µm, 75 µm, and 53 µm.
Quality of assay data and	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures</i> 	<ul style="list-style-type: none"> Metallurgical testwork was completed by

Criteria	JORC Code explanation	Commentary
laboratory tests	<p><i>used and whether the technique is considered partial or total.</i></p> <ul style="list-style-type: none"> <i>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.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<p>AMMTEC of Balcatta, WA.</p> <ul style="list-style-type: none"> Gold analyses used within the testwork was completed by Analabs, Balcatta, WA. Solids were assayed by a 50 g lead collection fire assay; solutions were assayed by MIBK extracted with AAS finish Grind time was measured on four samples with 80% passing 150 µm, 106 µm, 75 µm, and 53 µm 24 hour cyanide leach tests were completed to measure recoveries on the four different grind sizes to determine optimal grind size. Gravity recovery was determined from a concentrate produced from a Wilfley table, with a 5 g mercury amalgam.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> Intersections originally drilled by Samson have been verified by Breakthrough from what data is currently available. No twinned holes are known to have been completed. Data procedures for historical drilling are unknown. No adjustments to assay data are known.
Location of data points	<ul style="list-style-type: none"> <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other</i> 	<ul style="list-style-type: none"> Historical drill collars were located using georeferenced maps

Criteria	JORC Code explanation	Commentary
	<p><i>locations used in Mineral Resource estimation.</i></p> <ul style="list-style-type: none"> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<p>and confirmed in the field with a handheld GPS with a $\pm 3\text{m}$ accuracy.</p> <ul style="list-style-type: none"> No downhole surveys were completed on all historical drilling. Coordinates and maps are in GDA94 / MGA zone 50. Drillhole elevation is from SRTM 1 second DEM.
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>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.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> Historical drilling is typically at 10-20x10-20m spacing. No Mineral Resource or Ore Reserve is reported.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i> 	<ul style="list-style-type: none"> Historical drilling indicates the mineralisation is flat-lying to dipping 30° to the west. Historical drilling is typically perpendicular to the interpreted mineralisation orientation, therefore sampling is considered unbiased.
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Sample security of historical drilling is unknown.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No audits are known. Review of historical drilling is ongoing by Breakthrough.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The Errolls Gold Project comprises pending mining lease M 57/653 and exploration licence E 57/996. • E57/996 is subject to Forfeiture Application 726596 commenced by the Department on 6 February 2025 for non-compliance with expenditure conditions. • M57/653 has been applied for by Kyarra Minerals Pty Ltd under s.67 of the Mining Act to convert part of E57/996 to a mining lease. • Errolls Gold Project is being acquired by Breakthrough from previous owner Kyarra Minerals Pty Ltd as detailed in this announcement.
Exploration done by other parties	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • Extensive gold exploration was completed at Errolls by Samson Exploration NL. This exploration is detailed in WAMEX reports A22002, A26406, A30688, A40046, & A44301. • Metallurgical testwork from 1988 is detailed in WAMEX report A30688. • Initial exploration by Kyarra Minerals Pty Ltd is detailed in public WAMEX report A114350. • As part of the acquisition detailed in this announcement, historical data has been reviewed by

Criteria	JORC Code explanation	Commentary
		Breakthrough, with review ongoing.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> Mineralisation style at the Errolls project is orogenic lode gold, with gold hosted in quartz veins associated with a NNW shear zone. The shear zone forms a contact between Archean granite and mafics. Mineralisation as drilled is primarily within the 'oxide' zone.
Drill hole Information	<ul style="list-style-type: none"> <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i> 	<ul style="list-style-type: none"> See Table 1.
Data aggregation methods	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>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</i> 	<ul style="list-style-type: none"> No data aggregation methods are used. No metal equivalent values are reported.

Criteria	JORC Code explanation	Commentary
	<p><i>examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> Historical drilling indicates the mineralisation is flat-lying to dipping 30° to the west. Reported intersections are down-hole length. This is interpreted to approximate true width.
Diagrams	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Maps are included in the body of the announcement.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All relevant information is reported.
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> No substantial new information is available other than that reported above.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this</i> 	<ul style="list-style-type: none"> Future plans for the project include exploration RC drilling and pending results from this then detailed studies on aspects of the project including metallurgy

Criteria	JORC Code explanation	Commentary
	<i>information is not commercially sensitive.</i>	