

# **ASX ANNOUNCEMENT**

20 December 2021

# Lake Roe Gold Resource Increases 23% to 1.7 Million Ounces

Results point to robust open pit and underground mining potential

### Highlights

- Global Mineral Resource at the Lake Roe Gold Project in WA increases by 314,000oz (23%) to 1.7 million oz since the last update in April 2021 (31.9 million tonnes at 1.6g/t gold<sup>1</sup>)
- Mineral Resource at main Bombora gold deposit has increased to 1.5 million oz (25.9 million tonnes at 1.8g/t gold<sup>1</sup>)
- Higher grade subsets of the Resource indicate outstanding mining potential:-Open Pit Mineral Resource (0.8g/t cut-off above 100mRL)
  - -- 11.2 million tonnes at 1.9g/t Au for 688,000oz (87% Indicated)
  - Underground Mineral Resource (1.8g/t cut-off below 100mRL)
    - -- 4.4 million tonnes at 3.6g/t gold for 501,000oz (11% Indicated)
- × Discovery cost of \$21/oz for new ounces, and \$40/oz for life-of-project ounces

Breaker Managing Director Tom Sanders, said: "This is a fantastic result which highlights the quality, scale and mining potential of our Lake Roe discovery after 314,000m of drilling.

"We believe that the new Resource provides a solid foundation for a long-term mining project with attractive margins at current gold prices. The high-grade growth potential immediately below the open pit Resource is wide open and we are seeing several areas opening up with the grade and continuity that is attractive for underground mining.

"We are looking forward to start the transition from discovery into mine development studies over the ensuing year. Accordingly, we plan to ramp up our drilling to firm up the best areas for development, while expanding the Resource in other areas at the same time.

"Over a five year period we have found 1.7Moz at a cost of A\$40/oz which is exceptional value creation for shareholders. Given the recent high-grade drilling results, and our consistent track record of resource growth since 2018, we have every reason to believe this will continue.

"There are many avenues for growth as Bombora is part of a 9km-long gold system. The discovery potential along the syenite contact to the east of Bombora is very exciting for example, and there is mounting evidence that the mineralised structures at Bombora project into the syenite."

<sup>1</sup> Combined open pit & underground Mineral Resource estimate with cut-off grades of 0.5g/t & 1.0g/t respectively

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Breaker Resources NL (ASX: BRB; **Breaker** or the **Company**) is pleased to report a 23% increase in the Mineral Resource at its Lake Roe Gold Project, 100km east of Kalgoorlie in WA.

Global ounces increased by 314,000oz to 1.68Moz. This follows a 40% increase since the previous Resource update announced in April 2021. The grade at the Bombora depost increased by 13% to 1.8g/t gold.

The new Mineral Resource was generated by independent consultants Optiro Pty Ltd (**Optiro**) and totals 31.9 million tonnes at 1.6g/t gold for 1.68 million ounces as summarised in Table 1 below (previously 27.9 million tonnes at 1.5g/t gold for 1.37 million ounces). A subset of the Resource at higher cut-off grades, designed to assist planned mining studies, is summarised in Table 2.

Lake Roe Global Base Case	Cut-off Grade	Category	Tonnes	Grade	Ounces
		Indicated	15,153,000	1.46	712,000
Bombora Open Pit above 100mRL (87% Indicated)	0.5	Inferred	2,703,000	1.3	111,000
		Subtotal	17,856,000	1.4	824,000
Dearchean Undearchean de dave 100 m Di	1.0	Indicated	710,000	2.88	66,000
Bombora Underground below 100mRL (10% Indicated)		Inferred	7,286,000	2.5	594,000
		Subtotal	7,996,000	2.6	659,000
Total Bombora		Total	25,852,000	1.8	1,483,000
Crescent-Kopai	0.5	Inferred	4,073,000	1.0	132,000
Claypan	0.5	Inferred	2,004,000	1.1	69,000
		Grand Total	31,929,000	1.6	1,684,000

Table 1: Lake Roe Mineral Resource using 0.5g/t and 1.0g/t cut-off grades<sup>2</sup>

Bombora Mine Planning Subset	Cut-off Grade	Category	Tonnes	Grade	Ounces
		Indicated	9,588,000	1.94	599,000
Open Pit above 100mRL	0.8	Inferred	1,611,000	1.7	89,000
		Subtotal	11,199,000	1.9	688,000
	1.8	Indicated	410,000	4.04	53,000
Underground below 100mRL		Inferred	3,979,000	3.5	448,000
		Subtotal	4,388,000	3.6	501,000
Total Bombora		Total	15,587,000	2.4	1,189,000

Table 2: Bombora Mineral Resource Subset (0.8g/t and 1.8g/t gold cut-offs)<sup>2</sup>

The new Mineral Resource builds on a track record of sequential growth since the maiden estimate in April 2018 (Figure 1).



Figure 1: Lake Roe Mineral Resource Growth Trend 2018-2021

<sup>2</sup> All figures rounded to reflect the appropriate level of confidence (apparent differences may occur due to rounding)



The new Mineral Resource estimate is based on a further 18 diamond drill holes (11,725m) and 8 Reverse Circulation (**RC**) drill holes (1,720m at Bombora South).

Most of the increase in the new estimate is from the Bombora Underground Resource area (245,000oz) where 87% of the new drilling was focused, and where mineralisation remains open along strike and at depth.

The new estimate also includes a small increase in the Bombora open pit area (21,000oz) where limited new RC drilling continued to extend the strike of the Bombora lodes to the south. Mineralisation remains open to the south in this area (Figure 2).

Revised geological models for the nearby satellite deposits of Crescent-Kopai and Claypan (Figure 2) resulted in increased Mineral Resource estimates in each area: the Crescent-Kopai estimate increased by 46,000oz to 132,000oz, and the Claypan estimate increased by 2,000oz to 69,000oz.



Figure 2: RC and Diamond Drilling Colour-coded by Maximum Gold (g/t) on Aircore Maximum Gold Image and Aeromagnetics



The open pit Mineral Resource at Bombora starts 5m from surface and is in a favourable configuration for large-scale open pit mining, assisted by a 150m-wide mineralised zone, and a gold endowment of ~3,800 ounces per vertical metre arising from a high concentration of lodes.

The kilometric-scale continuity of all three lode (mineralised fault) orientations initially established by extensive drilling in the open pit area, extends at depth, significantly de-risking any future underground mining.

A three-dimensional perspective of the Bombora Mineral Resource model by Resource category and lode type is provided in Figures 3 & 4 below, together with associated drilling.



Figure 3: Bombora 3-D Perspective View of Mineral Resource Block Model by Resource Category looking northwest



Figure 4: Bombora 3-D Perspective View of Mineral Resource Block Model by Lode Type looking northwest

New diamond drilling below the open pit resource since the previous Resource estimate in April 2021 has consistently delivered high-grade results on 80m step-outs, continuing to upgrade the grade and growth potential at depth.

The Tura lode (Figure 5 below) now extends over 900m down-plunge, remains open to the south and is one of eight south-plunging steep lodes extending beneath the Bombora deposit.





Figure 5: Long-section of Tura Steep Lode Looking West

The flat-dipping stacked lodes in the northern part of the Bombora deposit (Figure 6) have now been tracked for over a total strike of 2,200m, with the new Resource estimate including a further 280m of strike length since the previous April 2021 estimate. These flat lodes remain open to the north and south, with new flat lodes still being discovered as deeper drilling continues.

There is mounting evidence that mineralised flat faults at Bombora can be projected eastwards into the syenite contact, an emerging area of potential discovery.

The presence of lode stacking is a major advantage for any gold project, significantly increasing the ounces per vertical metre, thereby enhancing the potential economics in open pit or underground mining scenarios (Figure 7).

The Bombora open pit area has an average gold endowment of ~3,800oz per vertical metre with 86% of the mineralisation in the Indicated Resource category, reflecting the high density of drilling (Figure 7). As shown in Figure 7, the decrease in ounces per vertical metre with depth is a direct function of the amount of drilling completed to date.





Figure 6: Bombora North: Perspective View of 2.2km-long Northern Flat Lode Array



Figure 7: Gold Oz per Vertical Metre vs Amount of Drilling



Tonnage-grade and ounces-grade curves for the Lake Roe Mineral Resource without reporting constraints are shown in Figures 8 and 9 respectively.



Figure 8: Tonnage-Grade Curve, Lake Roe Mineral Resource Without Reporting Constraints







### MINERAL RESOURCE ESTIMATE

The Company provides the following information in respect of the Lake Roe Mineral Resource estimate pursuant to ASX Listing Rule 5.8.1, and the 2012 JORC Code. Additional information is contained in Annexure 1 (JORC Code Table 1, Sections 1 to 3).

### Lake Roe Mineral Resource Overview

The Lake Roe Mineral Resource update (Tables 3 & 4) was completed by consultants Optiro with guidance provided by Breaker Resources NL, using all data available up to 22 October 2021.

The Mineral Resource has been reported and classified in accordance with the 2012 JORC Code and includes a further 18 diamond drill holes and 44 RC drill holes totalling 17,765 m of drilling since the April 2021 reporting of the Lake Roe Mineral Resource. The Mineral Resource includes revised open pit and underground Mineral Resource estimates at Bombora, and revised estimates for the Crescent-Kopai and Claypan satellite deposits located 2 km to the north, and 1 km southeast of Bombora respectively.

Mineral Resource	Cut-off Grade (g/t Au)	Category	Material Type	Tonnes	Grade (g/t Au)	Ounces
		Indicated	Oxide	225,000	1.29	9,000
			Transitional	1,855,000	1.28	77,000
		Indicated	Fresh	13,073,000	1.49	627,000
			Total	15,153,000	1.46	712,000
			Oxide	113,000	1.2	4,000
Bombora Open Pit	0.5	Inferred	Transitional	459,000	0.9	13,000
(above 100m RL)	0.5	Intelled	Fresh	2,131,000	1.4	94,000
			Total	2,703,000	1.3	111,000
			Oxide	338,000	1.3	14,000
		Total	Transitional	2,314,000	1.2	89,000
		TOTAL	Fresh	15,204,000	1.5	721,000
			Total	17,856,000	1.4	824,000
	1	Indicated	Fresh	710,000	2.88	66,000
Bombora			Total	710,000	2.88	66,000
Underground		Inferred	Fresh	7,286,000	2.5	594,000
Resource			Total	7,286,000	2.5	594,000
(below 100m RL)		Total	Fresh	7,996,000	2.6	659,000
			Total	7,996,000	2.6	659,000
		Open Pit		17,856,000	1.4	824,000
Total Bombora		Undergroun	d	7,996,000	2.6	659,000
		Total		25,852,000	1.8	1,483,000
<b>0</b> 1 K ·			Oxide	37,000	1.3	2,000
Crescent-Kopai Mineral Resource	0.5	lus for manual	Transitional	1,281,000	1.0	41,000
(above 100m RL)	0.5	Inferred	Fresh	2,755,000	1.0	89,000
			Total	4,073,000	1.0	132,000
			Oxide	46,000	0.8	1,000
Claypan Mineral Resource (above 100m RL)	0.5	liefe we -	Transitional	953,000	1.1	34,000
	0.5	Inferred	Fresh	1,005,000	1.1	34,000
			Total	2,004,000	1.1	69,000
		Indic	ated	15,863,000	1.53	778,000
Total Lake Roe Mineral Resource		Infei	rred	16,066,000	1.8	906,000
	To	tal	31,929,000	1.6	1,684,000	

Table 3: Lake Roe Mineral Resource by Material Type using 0.5g/t and 1.0g/t cut-off grades (all figures rounded to reflect the appropriate level of confidence (apparent differences may occur due to rounding)



Mineral Resource	Cut-off Grade (g/t Au)	Category	Material Type	Tonnes	Grade (g/t Au)	Ounces
			Oxide	144,000	1.66	8,000
		Indicated	Transitional	1,103,000	1.73	61,000
		indicated	Fresh	8,341,000	1.98	530,000
			Total	9,588,000	1.94	599,000
			Oxide	66,000	1.6	3,000
Bombora Open Pit	0.8	Inferred	Transitional	157,000	1.4	7,000
(above 100m RL)			Fresh	1,389,000	1.8	78,000
			Total	1,611,000	1.7	89,000
		Total	Oxide	209,000	1.6	11,000
			Transitional	1,259,000	1.7	68,000
			Fresh	9,730,000	1.9	608,000
			Total	11,200,000	1.9	688,000
		Indicated	Fresh	410,000	4.04	53,000
Bombora			Total	410,000	4.04	53,000
Underground	1.8		Fresh	3,979,000	3.5	448,000
Resource	1.0	Inferred	Total	3,979,000	3.5	448,000
(below 100m RL)		Tatal	Fresh	4,388,000	3.6	502,000
		Total	Total	4,388,000	3.6	502,000
	Open Pit		11,200,000	1.9	688,000	
Total Bombora		Underground	b	4,388,000	3.6	501,000
	Total		15,587,000	2.4	1,189,000	

Table 4: Bombora Mineral Resource Subset (using 0.8g/t and 1.8g/t gold cut-offs)

### Geology and Geological Interpretation

### **Regional Setting**

The Lake Roe Gold Project is a greenfields discovery concealed by transported cover between two operating gold mines on the southern extension of the 22Moz Laverton Tectonic Zone, 100km east of Kalgoorlie, Western Australia (Figure 10).



Figure 10: Lake Roe Gold in relation to High Flux Zones in the Kalgoorlie-Kurnalpi Rift (Witt et al 2018)



### Regional Setting (contd)

The 100%-owned ~700km<sup>2</sup> project comprises one granted Mining Lease, ten Exploration Licences and one Exploration Licence application covering 50km of prospective strike.

The Lake Roe Project straddles two converging craton-scale shear zones associated with gold mineralisation at regional scale, the Roe/Keith-Kilkenny Shear Zone and the Claypan Shear Zone (Figure 11). The project is underlain by greenstone and granitoid rocks belonging to the Kurnalpi Terrane of the Archean Yilgarn Craton.

Gold mineralisation at Lake Roe is associated with regular, stacked, NNW-trending kilometricscale steep, flat and west-dipping (variably mineralised) faults which extend over a 9km strike length adjacent to the regional-scale Claypan Shear Zone (Figure 12).

The kilometric-scale continuity of all three lode (mineralised fault) orientations has been established by extensive drilling (314,000m) commencing in the open pit part of the Bombora Mineral Resource (86% Indicated).

Wide-spaced (80m) drilling below the open pit Mineral Resource, and along strike, has extended the observed continuity. This continuity de-risks future mining and the growing predictability assists in discovering more gold. There is mounting evidence that mineralised flat faults at Bombora can be projected eastwards into the syenite contact, an emerging area of potential discovery.



Figure 11: Lake Roe District Geology



Figure 12: Lake Roe District Geology



The three fault orientations form in the same stress regime with the flat and west-dipping (conjugate) faults forming in areas of compression on the steep faults. Together, they form a wellorganised network of mineralised structures with a repetitive pattern that can be continuously followed to the north, the South and at depth.

### Deposit Geology & Geological Interpretation

#### Bombora

Gold at the main Bombora deposit occurs in a network of stacked flat, steep and west-dipping lodes that show a regular and predictable pattern. Gold mineralisation starts 5m below surface (the base of transported cover) and extends to ~800m below surface, the deepest extent of drilling.

Gold mineralisation is best developed in (but is not restricted to) the upper 100m-150m thick, ironrich quartz dolerite portion of the east-dipping Bombora Sill (stratabound; Figure 13). This style of mineralisation is the dominant style of gold mineralisation in Western Australia, occurring in many significant gold deposits across the WA Goldfields.

The geometry and relationship between the three mineralised lode types at Bombora is depicted in cross section in Figure 13. As depicted, the north-plunging flat lodes are up to 150m wide, with true thicknesses varying between 2m and 15m. The steep Tura-type lodes are typically 2-5m in thickness with a common up-dip continuity of 150m to 250m. The west-dipping lodes are typically 1-3m wide with approximate up-dip continuity of 150m (bounded by the iron-rich dolerite).





Steep lodes occur in sub-vertical ductile (dip-slip) shear zones over the 3.7km strike length of the Bombora gold deposit. They form gently south-plunging intersections with the favourable quartz dolerite host (Figure 14). Mineralisation in steep lodes is associated with silica-albite-sulphide alteration. These structures are interpreted to be the initial fluid pathway within the deposit.



Figure 14: Bombora Long Section Looking West Showing Main Lode Elements

Steep lodes account for approximately 29% of the estimated gold resource at Bombora. The overall distribution of gold in the steep, flat and west-dipping lodes is summarised in Figures 15 & 16 below.

Flat lodes occur in gently north- to northeast-dipping (5-30°), sinistral-reverse faults. They host highgrade laminated quartz-sulphide rich zones (typically 3m thick), with sulphidised gold-bearing haloes commonly up to 10m to 15m wide at a 0.5g/t Au lower cut-off grade. They have gentle north plunging intersections with the quartz dolerite (Figure 14). Flat lodes account for approximately 47% of the estimated gold resource at Bombora.

West lodes occur in moderately (40-50°) west-dipping shear zones, which have sub-horizontal intersections with the quartz dolerite. Mineralisation occurs as with fault-parallel quartz-sulphide veins and/or flat-lying tension veinlets. Key examples of west lodes include the Harmat Fault, Quarries and Wobbegong structures. West lodes account for approximately 21% of the estimated gold resource at Bombora.

A ~30m-40m wide swarm of moderately west-dipping, biotite-(ex)pyroxene-calcite lamprophyre dykes runs the full length of the Bombora deposit, sub-parallel to mineralised west lodes. Individual dykes are typically 1m to 10m in true thickness. Crosscutting relationships indicate that the lamprophyres post-date the primary gold mineralisation.

Minor quartz stockwork (breccia) mineralisation (~3% of contained gold) is associated with the west-dipping lodes, particularly around the Harmat Fault between 6601600mN and 6601800mN (Figure 15).





Figure 15: Bombora–Distribution of Ounces in Flat, West, Steep Lodes and Breccia (Stockwork) Zones by Northing (0.5g/t Au cut-off grade)



Figure 16: Bombora–Distribution of Ounces in Flat, West, Steep Lodes and Breccia (Stockwork) Zones by RL (Surface = ~310mRL; 0.5g/t Au cut-off grade)



Crescent-Kopai

Gold mineralisation at the Crescent-Kopai deposit, 2km to the north of Bombora, occurs over a 1,700m by 300m area near the eastern branch of the Claypan Shear (Figures 2 & 12). The Mineral Resource starts at 10m below surface (base of cover) and extends to 160m below surface (maximum drill depth).

The drilling pattern is on a nominal 100m x 40m spacing with local infill to 40m x 20m in the southern (Crescent) area.

Gold occurs within 1m to 20m thick, flat-lying mineralised fault zones with quartz veining accompanied by silica, albite and sulphide alteration, locally overprinted by biotite and carbonate (Figure 17). Mineralisation remains open in several areas.



Figure 17: Crescent-Kopai: Perspective View of Block Model Looking Northwest Colour-Coded by Grade (g/t Au) (blocks below 0.25g/t shown in blue)

The host rocks consist of an east-dipping package of mafic to intermediate volcanics, local metasediments and black shales, intruded by narrow bodies of fractionated dolerite and localised lamprophyre. A late barren Proterozoic dyke cuts the mineralisation in the northern part of the deposit. Transported lake sediment over the zone is typically 5m to 10m thick. The weathering is shallow, with a stripped upper saprolite, and a top of fresh rock at ~35m deep.



### Claypan

The Claypan deposit is located 1km southeast of Bombora, near the eastern branch of the Claypan Shear, adjacent to the Swan Lake Syenite (Figures 2 & 12).

Gold occurs in a flat, gently north-plunging mineralised shear over a 700m x 600m area (Figure 18). The Mineral Resource starts at 20m below surface (base of cover) and has been constrained to 190mRL or ~120m below surface. The on-section width of mineralisation ranges from 2m to 15m.

Gold is accompanied by shearing with variable amounts of quartz veining, and silica, biotite, chlorite and pyrite alteration.

The host rocks consist of a mixed package of steeply dipping basalt and dolerite with subordinate sediment and localised lamprophyre intrusions.

Drilling is at a preliminary level on a nominal drill spacing of 200m x 80m and comprises two drill lines with reconnaissance intersections along strike. Mineralisation remains open in all directions.



Figure 18: Claypan: Perspective View of Block Model Looking Northwest Colour-Coded by Grade (g/t Au)

### Drilling & Drilling Techniques

RC drilling at the Lake Roe Gold Project commenced on 9 February 2016. To date 1,697 RC holes, 143 orientated diamond holes and 153 RC pre-collared (orientated) diamond holes have been drilled for a total of 314,223m of which 23% (72,978m) is orientated diamond core.

An additional 17,765m of reverse circulation and diamond drilling has been completed since the release of the Resource update in April 2021. The updated Mineral Resource estimate is based



on a further 18 diamond drill holes (11,725m) and 8 RC drill holes (1,720m at Bombora South). A further 36 RC drill holes completed were exploratory in nature and were not directly involved in the estimate. Revised estimates for the Crescent-Kopai and Claypan are based on the inclusion of new assay data and a reinterpretation of the previous resource models.

All drill holes have been surveyed (collar locations), downhole surveyed, logged, sampled, and all diamond core is photographed. RC drilling was undertaken using a face-sampling percussion hammer with 51/2" bits. Diamond core is HQ3, HQ or NQ2. Core is orientated using Reflex orientation tools, with core initially cleaned and pieced together at the drill site, and fully orientated by BRB field staff at the Lake Roe core yard.

#### Bombora

Drilling has occurred on a nominal spacing of 40m x 20m with a closer drill pattern of 20m x 20m (or in some areas 20m x 10m) completed approximately every 200m along strike. Most of the early drill holes were angled to the west. More recent deeper drilling is east-orientated, which allows the intersection of all three lodes orientations at depth, and provides more data to properly assess the west-dipping lodes in the open pit area above 100mRL (~210m below surface).

### Crescent-Kopai

The geological interpretation is based on 280 RC holes and three orientated diamond holes totalling 30,597m.

#### Claypan

The mineralisation interpretation is based on 53 RC holes and five orientated diamond holes totalling 8,266m.

### Sampling Techniques & Analysis Method

RC samples were collected from a trailer or rig-mounted cyclone in a green plastic bag over 1m intervals. The dry sample was riffle split to produce a 3kg representative sample, which was placed on the ground with the remaining bulk sample in rows of 20. Any damp or wet samples were kept in the green plastic bag, placed in the rows of samples and a representative spear or scoop sample taken.

If the 4m composite sample was anomalous (Au>0.1g/t), the original 1m samples were riffle split (87.5%-12.5%) by a stand-alone multi-tiered riffle splitter. The majority of the samples were recorded as dry and minimal wet samples were encountered. RC sample duplicates were obtained by re-splitting the remaining bulk sample contained in a plastic bag in the field using the multi-tier riffle splitter.

Diamond core is drilled HQ3, HQ or NQ2, dependent upon ground conditions. Half core samples were taken with a diamond saw on 1m intervals or on geological boundaries where appropriate (minimum 0.4m to maximum of 1.2m). Duplicate samples are submitted as quarter core. Half core samples are retained and stored in core trays.

Sampling was undertaken using BRB sampling protocols and QAQC procedures which are in line with industry standard practice, including insertion of Certified Reference Material (**CRM**) standards and duplicate samples. 3kg samples were sent to MinAnalytical Laboratory Services Australia (**MinAnalytical**) in Kalgoorlie or Perth. Samples were sorted, dried, crushed to 10mm,



pulverised to -75µm and split to produce either a 30g or 50g charge for fire assay analysis for gold.

Quality control procedures involved the use of CRMs along with sample duplicates (submitted as quarter core or re-splits). Selected samples are also re-analysed to confirm anomalous results. MinAnalytical's internal QAQC procedures included insertion of certified standards, blanks, check replicates and fineness checks.

#### Data Review

All drill holes used in the Mineral Resource have been drilled since 2016 and Breaker has used industry standard drilling and sampling techniques since this time. The use and insertion of CRM standards, blanks, field and laboratory duplicates are in accordance with industry standards. The database is considered adequate to support a Mineral Resource estimate.

#### MINERAL RESOURCE ESTIMATION METHODOLOGY

#### Wireframe Modelling

Weathering surfaces and three-dimensional lithology wireframes were generated by Breaker using Leapfrog software at both Bombora and Kopai-Crescent projects. Leapfrog software was used by Optiro to produce solids representing late-stage lamprophyre dykes which are assumed to post-date the mineralisation. Weathering and lithology solids have been used to code both the input data and block models. At Claypan a detailed three-dimensional lithological model has not yet been developed; the host lithology has been treated as undifferentiated mafic and sedimentary rocks.

Three-dimensional solids were created to constrain the mineralisation using a combination of Datamine RM and Leapfrog software. A nominal 0.1 g/t gold threshold to a depth of 100 mRL was used to define mineralised structures, and this was increased to 0.3 g/t gold below 100 mRL to represent the high-grade mineralisation potential at Bombora. Internal dilution was restricted to a length of less than ~20% of the mineralised intercept downhole and a minimum downhole length of 1 to 2 m was used to maintain geological continuity within the interpretation. Mineralisation wireframes were developed for the Bombora, Claypan and Kopai-Crescent deposits.

#### Input Data

Input data for the Mineral Resource was limited to reverse circulation (RC), diamond (DD) and holes with RC pre-collars with diamond tails only. Input data was coded within the mineralisation domains and then composited into 1 m lengths. Domains were grouped according to mineralisation style, orientation and geological confidence for analysis. Within some domains, high grade subdomains representing intersection shoots between various structures were identified and estimated separately.

#### Top Cuts and Variography

Top cut analysis was undertaken on the domain orientation groups using population disintegration techniques, in conjunction with geostatistical analysis. Top cuts were applied to each domain group and ranged from 5 g/t gold to 40 g/t gold across the deposits. Variography was completed using Supervisor software. Ranges of the variograms were between 40 m by 49 m by 3.5 m to 140 m by 90 m by 6 m at Bombora, 150 m by 75 m by 5 m at Claypan and extending to 165 m by 145 m by 3 m at Kopai-Crescent. Modelled nuggets were consistent with the style of



mineralisation. Kriging neighbourhood analysis using the variography was undertaken to optimise the block size, search distances and minimum/maximum sample numbers used for the estimation of mineralised domains.

### Block Modelling

A block model was created to encompass the Bombora and Claypan mineralisation. A separate block model was created for the Kopai-Crescent mineralisation to the north. A parent block size of 10 m by 10 m by 5 m was used, with sub-blocking allowed to 1 m by 1 m by 0.5 m for domain resolution in both models. The block models were coded with mineralisation, lithology and oxidation domains for estimation and to assign bulk density.

At all deposits, block model grades were estimated using Ordinary Kriging grade interpolation techniques into mineralisation domains with greater than 25 samples. At Bombora and Claypan, dynamic anisotropy was also used to orientate the search ellipse into the local plane of mineralisation. Each domain was populated with gold grades using a three-pass estimation utilising hard boundary conditions between domains. At Bombora and Claypan, pass one was set to the range of the variogram and utilised a minimum of 8 and a maximum of 32 samples. In the second pass the search range was expanded by a factor of 2 while the number of samples remained constant. In the final pass the search range was expanded by a factor of 5 and the minimum number of samples reduced to 6. At Kopai-Crescent, the first search utilised a minimum of 8 and a maximum of 18 samples using a search set to approximately two thirds the range of the variogram for each estimation domain. In the second pass the search range was expanded by a factor of 2 while the number of the search ellipse was increased by a factor of 5 and the minimum number of 2 while the number of samples remained constant. In the third pass the search set to approximately two thirds the range of the variogram for each estimation domain. In the second pass the search range was expanded by a factor of 2 while the number of samples remained constant. In the third pass the search ellipse was increased by a factor of 5 and the minimum number of samples reduced to 4. At all deposits, un-estimated blocks were assigned the domain average grade.

Domains with less than 25 samples were estimated using Nearest Neighbour interpolation (Bombora and Claypan) or assigned the mean domain average grade (Kopai-Crescent). Within the total Lake Roe Mineral Resource, 60% of the blocks (by volume) have been estimated in the first pass, 22% within the second pass and 12% within the final pass. Nearest Neighbour interpolation contributes 5% of the total volume, with the remaining 1% of blocks having grades assigned.

#### Bulk Density

Bulk density data is routinely collected during the diamond drill core sampling process, focussing on mineralised material. At Bombora and within the fresh material, a total of 1,961 determinations, calculated by the water immersion method, were available for analysis. Wireline gamma density logging geophysical data has been collected to assist and supplement core-specific gravity data within the transported and oxidised material. Minimal density data exists for the Claypan and Kopai-Crescent deposits; as such, values were assigned based on geologically similar units at Bombora. Bulk density values have been assigned to the Mineral Resource based on lithology and oxidation state and ranged from 1.93 to 2.95 t/m<sup>3</sup> for the mineralised domains.

#### Mineral Resource Validation and Classification

The Mineral Resource estimate has been validated both visually and statistically. For all estimated domains, block model grades (domain and global) have been validated against the declustered and top cut input composite grades. Swath plots in northing, easting and elevation were also examined and a visual comparison of the input composite grades versus the estimated block grades in three-dimension, plan and cross-section was completed.



The Mineral Resource has been classified into Indicated and Inferred Resources following the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC Code 2012). No Measured Mineral Resources have been defined. The classification was assigned based on the robustness of the input data, drill hole spacing, geological confidence and grade continuity. The classification reflects the Competent Person's view of the deposit.

Indicated Resources have been assigned to mineralisation domains where the drill hole spacing is 40 m by 40 m or less and the geological confidence is high, with the mineralisation interpretation well supported with structural information gathered from diamond drilling. The domains are predominantly estimated in the first search pass. The Indicated Resources are limited to the main area of Bombora, to a depth of 350 m below surface (-35 mRL).

Inferred Resources were assigned to mineralisation domains with a drill hole spacing of between 40 m to 200 m with moderate geological and grade confidence. These areas may have limited diamond drilling, or the host geology is less well understood. Typically, these areas are estimated in the second or third pass. The Inferred Resources include both the Claypan and Kopai-Crescent deposits, as well as the extension of Bombora below the 100 mRL.

Areas with high extrapolation, greater than 200 m drill spacing and low geological or grade continuity or confidence remain unclassified and have not been reported within the Mineral Resource.

### REPORTING AND REASONABLE PROSPECTS OF EVENTUAL ECONOMIC EXTRACTION

For reporting purposes an indicative cut-off grade of 0.5g/t Au was used above 100mRL (within 210m of surface) for areas with assumed open pit mining potential. A 0.5g/t Au cut-off grade is commonly used as a lower limit of economic extraction in many medium scale open pit mines of this nature. Reasonable prospects for eventual economic extraction in whole or part above 100mRL are supported by the high-grade nature of the mineralisation when higher cut-off grades are applied (eg. Table 1: Bombora 0.8g/t Au subset); by the established and indicative continuity of mineralisation; and by an average gold endowment of approximately 3,800oz per vertical metre.

The depth (RL) transition from assumed open pit to underground mining at Bombora will be guided by further drilling and future mining studies which will determine the scale and extent of potential mining activities.

An indicative minimum cut-off grade of 1.0g/t Au was used below 100mRL for areas with assumed underground mining potential for reporting purposes. Reasonable prospects for eventual economic extraction in whole or part are supported by the high-grade nature of the mineralisation when higher cut-off grades are applied (eg. Table 1: Bombora 1.8g/t Au subset), and by the evident continuity of mineralisation over large distances an aspect supported by high density drilling in the open pit area; and by similar mined grades in other similar deposits in Western Australia.

Ongoing drilling success and future mining studies may extend the open pit mining potential below 100mRL, and similarly may extend the underground mining potential above 100mRL.



### **MINING & METALLURGICAL PARAMETERS**

No detailed mining studies have been completed and mining dilution assumptions have not been factored into the Mineral Resource estimate. The mining method above 100m RL is assumed to be by open pit, using medium scale equipment and excavators. The mining method below 100m RL is assumed to be by a combination of bulk and selective underground stoping methods.

The scale and extent of assumed mining activities will be determined by future mining studies. The cut-off grades and reporting parameters may change in the future due to a variety of factors, including the scale of operation, the success of ongoing drilling activities and the gold price.

Internal dilution was restricted to a length of less than ~20% of the mineralised intercept downhole and a minimum downhole length of 1m to 2m was used to maintain geological continuity within the interpretation.

Metallurgical testwork indicates gold recoveries in the range of 96% to 99% in oxide and fresh mineralisation in fresh water, and 92% recovery using saline groundwater (ASX Releases 15 January 2018 & 9 February 2021).

The metallurgical testwork points to low-cost gold processing based on modest hardness and a relatively coarse grind size of 106µm to 125µm. The testwork also indicates a high level of gravity gold (ranging from 31% to 90%). The testwork did not identify any significant problematic issues of concern.

Authorised by the Board of Directors

Tom Sanders Managing Director Breaker Resources NL

20 December 2021

For further information on Breaker Resources NL please visit the Company's website at <u>www.breakerresources.com.au</u>, or contact:

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<u>Media</u> Paul Armstrong/Nicholas Read Read Corporate Tel: +61 8 9388 1474



#### REFERENCE

Witt et al (2018), The tectonic setting and evolution of the 2.7Ga Kalgoorlie-Kurnalpi Rift, a world-class Archean gold province, Mineralium Deposita 55. 10.1007/s00126-017-0778-9.

#### COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Alastair Barker ("AB") and Tom Sanders ("TS"), Competent Persons, who are Members of the Australasian Institute of Mining and Metallurgy. Mr Barker and Mr Sanders are executives of Breaker Resources NL and their services have been engaged by Breaker on an 80% of full time basis; they are also shareholders in the Company. Mr Barker and Mr Sanders have sufficient experience that is relevant to the style of mineralisation and type of deposit 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'. Mr Barker and Mr Sanders consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to the modelling, estimation and classification of the Mineral Resource is based on and fairly represents information and supporting documentation compiled by Naomi Fogden ("NF"), who is a Competent Person and a Member of the Australasian Institute of Mining and Metallurgy. Mrs Fogden is an employee of Optiro Pty Ltd. Reporting of the Mineral Resource has been compiled by Mrs Fogden, who is a Competent Person. Mrs Fogden has sufficient experience that is relevant to the style of mineralisation and type of deposit 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'. Mrs Fogden consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

This document contains exploration results and historic exploration results as originally reported in fuller context in Breaker Resources NL's ASX Announcements, Quarterly Reports and Prospectus as summarised in Appendix 1.



### Appendix 1: Previous and Relevant Bombora ASX Announcements

The following announcements released to the ASX contain results from RC and diamond drilling at the Bombora, Crescent-Kopai and Claypan deposits within the Lake Roe Gold Project, WA.

Date	Title of Announcement
15-Feb-16	RC drilling underway to test potentially major gold discovery at Lake Roe Project in WA
24-Feb-16	Maiden RC drilling hits multiple gold-bearing sulphide lodes at Lake Roe Project in WA
24-Feb-16	RIU Explorers Conference Presentation
16-Mar-16	Hits of up to 19g/t identify high-grade sulphide lodes at emerging Lake Roe discovery in WA
18-Apr-16	New RC drill results up to 25g/t further highlight potential for significant gold discovery, Lake Roe Gold Project, WA
29-Apr-16	Quarterly Report for the period ending 31 March 2016
10-May-16	Final RC results upgrade potential for major gold discovery, Lake Roe Gold Project, WA
11-May-16	RIU Resources Round-up Conference Presentation
24-May-16	Resources Rising Stars Conference Presentation
11-Jul-16	RC drilling underway to test extensive high-grade gold anomaly at Lake Roe Project in WA
28-Jul-16	Quarterly Report for the period ending 30 June 2016
2-Aug-16	Diggers & Dealers Conference Presentation
15-Aug-16	Breaker makes significant WA gold discovery with numerous wide, high-grade intersections
30-Aug-16	Exploration Update: Drilling hits sulphide mineralisation at Lake Roe Gold Project in WA
13-Sep-16	Final assays confirm significant widths and high grades at Bombora North discovery in WA
20-Sep-16	Wide, shallow high-grade gold results in gap between Bombora and Bombora North discoveries
20-Sep-16	Resources Rising Stars Conference Presentation
20-Oct-16	Hits of up to 13g/t link two Lake Roe gold discoveries over continuous 2.2km zone
28-Oct-16	Results up to 38g/t boost mining potential of Lake Roe Gold Project in WA
31-Oct-16	Quarterly Report for the period ending 30 September 2016
18-Nov-16	First closer-spaced drilling between Bombora and Bombora North indicates continuity and
	robustness of the emerging Lake Roe gold discovery
28-Nov-16	Annual General Meeting Presentation
19-Dec-16	Gold hits highlight potential for 4.4km gold zone
24-Jan-17	High-grade results reinforce scale, continuity and potential at Lake Roe gold discovery
31-Jan-17	Bonanza grades up to 201g/t gold at Lake Roe discovery
31-Jan-17	Quarterly Report for the period ending 31 December 2016
22-Feb-17	RIU Explorers Conference Presentation
1-Mar-17	More shallow, high-grade infill results highlight continuity of mineralisation at 2.2km-long Bombora gold discovery in WA
27-Mar-17	Outstanding infill drilling results establish continuity of wide, shallow high-grade mineralisation at Bombora
31-Mar-17	AMEC Investor Presentation
26-Apr-17	Infill drilling at Bombora continues to confirm continuity of mineralisation with more shallow, high- grade hits
26-Apr-17	Quarterly Report for the period ending 31 March 3017
10-May-17	RIU Resources Round-up Conference Presentation
30-May-17	More wide, shallow, high-grade gold intersections
30-May-17	Resources Rising Stars Conference Presentation
6-Jul-17	Strong results from infill drilling at Bombora
19-Jul-17	Quarterly Report for the period ending 30 June 2017



Date	Title of Announcement
7-Aug-17	Breaker confirms potential for underground mine with hits of up to 12g/t
7-Aug-17	Diggers & Dealers Conference Presentation
4-Sep-17	More thick high-grade hits results of up to 21g/t further strengthen open pit potential at Lake Roe
17-Oct-17	More strong results of up to 54g/t to form part of maiden resource at Bombora gold discovery
18-Oct-17	Strong recoveries from preliminary metallurgical testwork at Lake Roe gold project in WA
31-Oct-17	Quarterly Report for the period ending 30 September 2017
9-Nov-17	Precious Metals Symposium Presentation
23-Nov-17	Strong drill results further highlight continuity of mineralisation at Bombora
23-Nov-17	Annual General Meeting Presentation
4-Dec-17	Resources Rising Stars Summer Series Events Presentation
10-Jan-18	Bonanza results up to 9m @ 35.88g/t gold at Bombora discovery
15-Jan-18	Exceptional metallurgy results highlight potential for early cashflow opportunity and low ongoing production costs
30-Jan-18	Quarterly Report for the period ending 31 December 2017
20-Feb-18	Further strong drilling results continue to extend mineralised zone at Bombora
28-Mar-18	Exceptional new high-grade lodes confirm underground mining potential at Bombora
18-Apr-18	Robust maiden resource confirms outstanding mining and growth potential at Bombora
26-Apr-18	Inside Briefing
30-Apr-18	Quarterly Report for the period ending 31 March 2018
7-May-18	New high-grade lodes show strong potential to grow Resource laterally and at depth
13-Jun-18	Strong drill results continue to confirm scope to materially expand Bombora gold Resource
17-Jul-18	Broker/Investor Presentation
31-Jul-18	Continued drilling success at Bombora paves way for upgrade of Mineral Resource
31-Jul-18	Step-out drilling extends Bombora gold deposit to the north
31-Jul-18	Quarterly Report for the period ending 30 June 2018
4-Sep-18	High-grade results continue to grow Bombora gold deposit ahead of updated Resource
17-Sep-18	Resources Rising Stars Roadshow Presentation
23-Oct-18	Outstanding drill results extend Bombora gold deposit to the east and at depth
31-Oct-18	Quarterly Report for the period ending 30 September 2018
22-Nov-18	Annual General Meeting Presentation
12-Dec-18	New high-grade results continue to grow Bombora deposit along strike, to the east, and at depth
31-Jan-19	More strong results continue to extend Bombora gold deposit in all directions
31-Jan-19	Quarterly Report for the period ending 31 December 2018
11-Feb-19	Resources Rising Stars Summer Series Presentation
19-Feb-19	RIU Explorers Conference Presentation
21-Mar-19	Strong results extend strike length of Bombora mineralisation to 3.2km
26-Mar-19	Swiss Mining Institute Conference Presentation
29-Apr-19	Receipt of more strong assays paves way for Breaker to finalise Resource update and PFS
30-Apr-19	Quarterly Report for the period ending 31 March 2019
6-May-19	New lode discovery with visible gold and strong Tura Lode hit expand gold potential at depth
7-May-19	RIU Resources Round-up Conference Presentation
4-Jun-19	Resources Rising Stars Conference Presentation
12-Jul-19	High-grade results extend 1.1Moz Bombora deposit at depth and along strike
19-Jul-19	Quarterly Report for the period ending 30 June 2019
5-Aug-19	Diggers & Dealers Conference Presentation



Date	Title of Announcement
2-Sep-19	Bombora on track to be significant new open pit mine with ~30% increase in Indicated Resource
2-360-13	to 803,000oz
9-Sep-19	Beaver Creek Precious Metal Summit Presentation
4-Oct-19	Strategic Review - Corporate and Operations Update
11-Oct-19	Annual Report
31-Oct-19	Quarterly Report for the period ending 30 September 2019
21-Nov-19	Annual General Meeting Presentation
5-Dec-19	Breaker launches major drilling campaign to grow 1Moz <sup>#</sup> Resource at Bombora
31-Jan-20	Significant results from shallow drilling in three new areas outside 1 Moz Resource # at Lake Roe
31-Jan-20	Quarterly Report for the period ending 31 December 2019
11-Feb-20	Gold Investor Day Presentation
20-Feb-20	RIU Explorers Conference Presentation
21-Feb-20	Australian Resources Conference Presentation
30-Apr-20	Latest drilling hits extensive high-grade mineralisation at depth
30-Apr-20	Quarterly Report for the period ending 31 March 2020
12-May-20	Investor Presentation
27-May-20	Resource Rising Star Virtual Investor Forum Presentation
11-Jun-20	Strong mineralisation intersected 3km north of 1Moz# Bombora deposit
17-Jun-20	Outstanding new results highlight potential to grow 1Moz Bombora Resource# at depth
0 1 1 00	Strong results highlight discovery potential in two large areas outside the 1Moz# Bombora
2-Jul-20	Resource
8-Jul-20	Investor Presentation
27-Jul-20	Investor Presentation
27-Jul-20	Quarterly Report for the period ending 30 June 2020
13-Aug-20	Annual Report
25-Aug-20	Strong results confirm extensive mineralisation over 2km zone along strike from 1Moz# Bombora
	deposit
1-Sep-20	Investor Presentation
15-Sep-20	Beaver Creek Precious Metal Summit Presentation
17-Sep-20	Annual General Meeting Presentation
22-Sep-20	More strong results point to further growth in 1Moz Resource# at Bombora
12-Oct-20	Diggers & Dealers Conference Presentation
30-Oct-20	Strong drill results outside 1Moz open pit Resource# at Lake Roe
30-Oct-20	Quarterly Report for the period ending 30 September 2020
2-Nov-20	Precious Metals Summit Europe Presentation
6-Nov-20	Resource Rising Star Conference Presentation
10-Dec-20	High-grade infill drilling results over 2km pave way for April Resource update
29-Jan-21	Quarterly Report for the period ending 31 December 2020
9-Feb-21	Investor Presentation
16-Feb-21	RIU Explorers Conference Presentation
25-Feb-21	Half Year Financial Report
9-Mar-21	Strong infill drilling results highlight continuity of 2km high-grade lode system below 1Moz Resource# at Bombora
22-Mar-21	Swiss Mining Institute Conference Presentation



Date	Title of Announcement
29-Apr-21	Lake Roe Gold Resource Increases 40% to 1.37 Million Ounces
3-May-21	Quarterly Cashflow Report
3-May-21	Quarterly Activities Report
4-May-21	RIU Sydney Resources Round-up Conference Presentation
25-May-21	121 Mining Investment London Virtual Conference Presentation
2-Jun-21	Webinar Presentation
10-Jun-21	High-grade results enhance depth potential at Bombora
30-Jul-21	Results up to 20g/t expand growth options at Lake Roe
2-Aug-21	Quarterly Cashflow Report
2-Aug-21	Quarterly Activities Report
23-Aug-21	Drilling to Grow Manna Lithium Discovery
31-Aug-21	Full Year Statutory Accounts
7-Sep-21	Peter Cook Joins Breaker as Non-Executive Chairman
8-Sep-21	Precious Metals Summit Presentation
24-Sep-21	More High Grade Zones and Extensions to Bombora
11-Oct-21	Bombora Keeps Delivering High-Grade
14-Oct-21	Breaker to present at RRS Boom in a Room Conference
18-Oct-21	Annual Report to Shareholders
28-Oct-21	Extensional hits of up to 37g/t Au under Bombora
1-Nov-21	Quarterly Cashflow Report
1-Nov-21	Quarterly Activities Report
15-Nov-21	Precious Metals Summit Europe Presentation
18-Nov-21	AGM Presentation
26-Nov-21	Manna Opens Up



### ANNEXURE 1: JORC Code (2012 Edition) Table 1

#### SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary	Competent Person
Sampling techniques	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.	RC samples were collected from a trailer or rig mounted cyclone by a green plastic bag in 1m intervals and the dry sample riffle split to produce a 3kg representative sample which was placed on the ground with the remaining bulk sample in rows of 20. Any damp or wet samples were kept in the green plastic bag, placed in the rows of samples and a representative spear or scoop sample taken. Diamond core is drilled HQ3, HQ or NQ2 dependent upon ground conditions. Core is cut in half by a diamond	AB
		saw on site and half core is submitted for analysis except duplicate samples which are submitted as quarter core.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sampling was undertaken using BRB sampling protocols and QAQC procedures which are in line with industry best practice, including standard and duplicate samples.	AB
	Aspects of the determination of mineralisation that are Material to the Public Report.	RC samples were composited at 4m to produce a bulk 3kg sample for initial analysis. If the 4 m composite sample was anomalous (Au>0.1 g/t), the original 1 m samples were retrieved and submitted to the laboratory.	AB
	In cases where 'industry standard' work has been done this would be relatively simple (eg. 'reverse circulation drilling was used to obtain 1m	Half core samples were taken with a diamond saw generally on 1m intervals or on geological boundaries where appropriate (minimum 0.4m to maximum of 1.2m).	
	samples from which 3kg was pulverised to produce a 30g 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.	The 3kg samples were sent to MinAnalytical in Perth. Samples were sorted, dried, crushed to 10mm, pulverised to -75µm and split to produce either a 30g or 50g charge for fire assay analysis for gold.	
Drilling	Drill type (eg. core, reverse circulation, open-hole hammer, rotary air blast,	RC drilling was undertaken using a face-sampling percussion hammer with 51/2" bits.	AB
techniques	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.).	Diamond core is HQ3, HQ or NQ2. Core is orientated using Reflex orientation tools, with core initially cleaned and pieced together at the drill site, and fully orientated by BRB field staff at Lake Roe core yard.	
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	RC drilling recoveries were visually estimated as a semi-qualitative range and recorded on the drill log along with moisture content.	AB
		Diamond drillers measure core recoveries for every drill run completed using either three or six metre core barrels. The core recovered is physically measured by tape measure and the length is recorded for every "run". Core recovery is calculated as a percentage recovery.	
		Core recovery is confirmed by BRB staff during core orientation activities on site and recorded into the database.	
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC holes were collared with a well-fitting stuff box to ensure material to the outside return was minimised. Drilling was undertaken using auxiliary compressors and boosters to keep the hole dry and lift the sample to	AB



		the sampling equipment. Drill cyclone and splitter were cleaned regularly between rod-changes if required and after each hole to minimise down hole or cross-hole contamination.	
		Various diamond drilling additives (including muds and foams) have been used to condition the drill holes to maximise recoveries and sample quality.	
		Diamond drilling by nature collects relatively uncontaminated core samples. These are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling.	
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of	There is no observable relationship between recovery and grade, or preferential bias in the RC drilling at this stage.	AB
	fine/coarse material. The	There is no significant loss of material reported in the mineralised parts of the diamond core to date.	
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.	Drill holes were logged for lithology, alteration, mineralisation, structure, weathering, wetness and obvious contamination by a geologist. Data is then captured in a database appropriate for mineral resource estimation.	AB
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	RC and diamond core logging is both qualitative and quantitative in nature and captures downhole depth, colour, lithology, texture, mineralogy, mineralisation, alteration and other features of the samples.	AB
		All cores are photographed in the core tray, with individual photographs taken of each tray both dry and wet.	
	The total length and percentage of the relevant intersections logged.	All drill holes were logged in full.	AB
Sub-sampling techniques and sample	If core, whether cut or sawn and whether quarter, half or all core taken.	Core samples were cut in half using a conventional diamond core saw. Half core samples were collected for assay except duplicate samples which are quarter cut. An entire half core sample is retained and stored in core trays.	AB
preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were split 87.5%-12.5% by a stand-alone multi-tiered riffle splitter. The majority of the samples were recorded as dry and minimal wet samples were encountered. Sample duplicates were obtained by resplitting the remaining bulk sample contained in a plastic bag in the field using the multi-tier riffle splitter.	AB
		RC composite samples were collected via spear sampling of the riffle split bulk sample contained in green plastic bags.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The samples were sent to an accredited laboratory for sample preparation and analysis. All samples were sorted, dried pulverised to -75µm to produce a homogenous representative 50g sub-sample for analysis. A grind quality target of 85% passing -75µm has been established.	AB
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	RC samples were collected at 1m intervals and composited into 4m samples using a spear to sample individual metre bagged samples.	AB
		Diamond core sample intervals are based on geological intervals typically less than a nominal 1m.	
		Quality control procedures involved the use of Certified Reference Materials ( <b>CRM</b> ) along with sample duplicates (submitted as quarter core). Selected samples are also re-analysed to confirm anomalous results.	
		MinAnalytical's QAQC included insertion of certified standards, blanks, check replicates and fineness checks to ensure grind size of 85% passing -75µm as part of their own internal procedures.	
	Measures taken to ensure that the sampling is representative of the in situ	Sample duplicates for RC and diamond drilling (quarter core) are taken at least three times in every 100 samples.	AB



	material collected, including for instance results for field duplicate/second-half sampling.	All samples submitted were selected to weigh less than 3kg to ensure total preparation at the pulverisation stage.	
	Samping.	Duplicate sample results are reviewed regularly for both internal and external reporting purposes.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered to be appropriate to correctly give an accurate indication of mineralisation given the qualitative nature of the technique and the style of gold mineralisation sought.	AB
Quality of assay data	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The analytical technique used a 50g or 30g fire assay and is appropriate to detect gold mineralisation. The use of fire assay is considered a total assay.	AB
and laboratory tests	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 tools were used to determine any reported element concentrations.	AB
	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.	BRB inserted CRMs and duplicates into the sample sequence, which were used at the frequency of three CRMs and three duplicates per 100 samples. Sample preparation checks for fineness were carried out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing -75μm was being attained. Laboratory QAQC involved the use of internal lab standards using CRMs, blanks,	AB
		splits and replicates.	
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Alternative BRB personnel have verified the significant results outlined in this report. It is considered that the Company is using industry standard techniques for sampling and using independent laboratories with the inclusion of Company standards on a routine basis.	AB
	The use of twinned holes.	Directional "wedging" was used in several deep diamond drill holes at Bombora which results in twinning of parent drill hole intersections in several areas of mineralisation. The density and pattern of RC and diamond drilling also results in twinning of RC intersections by diamond drill holes in several other areas.	AB
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary geological and sampling data were recorded digitally and on hard copy respectively, and are subsequently transferred to a digital database where it is validated by experienced database personnel assisted by the geological staff. Assay results are merged with the primary data using established database protocols run in house by BRB.	AB
	Discuss any adjustment to assay data.	No adjustments or calibrations were undertaken other than to average any repeated analysis for each individual sample.	AB
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill hole collars are initially located by handheld GPS and then picked up by an accredited surveyor. GPS elevation values are corrected where necessary using a digital elevation model from a LIDAR survey. Expected accuracy is +/- 4m for easting, northing and RL (GPS) and +/- 0.1m or less for surveyed and LIDAR elevation point data.	AB
		All RC and diamond holes are gyro surveyed for rig alignment and downhole at the completion of the hole.	
	Specification of the grid system used.	The grid system is GDA94 MGA, Zone 51.	AB
	Quality and adequacy of topographic control.	As detailed above.	AB
Data spacing and	Data spacing for reporting of Exploration Results.	<b>Bombora:</b> Drill holes are on a nominal spacing of 40m x 20m with areas at a 20m x 20m spacing completed every 200 metres along strike in the shallow part of the Bombora resource to ~200-250 meters below	AB



distribution		surface).	
		Claypan: The drill spacing is on a nominal 200m x 80m reconnaissance pattern.	
		<b>Kopai-Crescent:</b> The drill spacing is on a nominal 100m x 40m with local infill to 40m x 20m in the southern (Crescent) area.	
		Drilling outsite the Mineral Resource areas is on an irregular reconnaissance spacing.	
	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.	The drill spacing is considered sufficient to establish geological and grade continuity to support the estimation of Mineral Resources as described in this report.	AB
	Whether sample compositing has been applied.	Four metre composite samples were taken for all RC holes via spearing. One metre samples were riffle split when dry or by a representative spear or scoop sample when wet/damp.	AB
		No sample compositing has been applied to diamond drill core.	
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.	<b>Bombora:</b> Three main mineralised fault (lodes) orientations have been recognised: steep lodes, flat lodes and west lodes. The predominant west-orientated drilling does not adequately "see" the west-dipping lodes or can result in "down-dip" intersections in some areas, introducing a respective negative or positive sample biasy. The problem is overcome by the use of east-orientated drilling, or by closing the drill spacing on west-orientated drill sections. Overall this bias may underestimate the Resource due to "missed" intersection. Where "down-dip" intersections are obtained, they are factored into the interpretation. The problem is understood.	AB
		<b>Claypan and Kopai-Crescent:</b> The geometry of the flat, north-plunging mineralisation is constrained by diamond drilling and is factored into the modelling. The wide drill spacing introduces the possibility that other mineralised geometries may be present.	
	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.	<b>Bombora:</b> The use of strategically spaced east-orientated drill holes and sections overcomes the sample bias on the west-dipping lodes introduced by west-orientated drilling. The problem is understood and incorporated into the modelling. Further selective east-orientated drilling is planned. Deeper diamond drill holes are typically angled to the east resulting in a satisfactory intersection angle on all three lode orientations.	AB
		<b>Claypan and Kopai-Crescent:</b> The problem is understood and incorporated into the modelling. Selective east-orientated drilling is planned to assess for potential west-dipping lodes.	
Sample security	The measures taken to ensure sample security.	RC and diamond drill samples submitted were systematically numbered and recorded, bagged in labelled polyweave sacks and dispatched in batches to the laboratory's Kalgoorlie facility by BRB personnel. The laboratory confirms receipt of all samples on the submission form on arrival.	AB
		All assay pulps are retained and stored in a Company facility for future reference if required.	
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	All drillholes used in the Mineral Resource have been drilled since 2016 and Breaker has used industry standard drilling and sampling techniques since this time. The use and insertion of CRM standards, blanks, field and lab duplicates are in accordance with industry standards. Review of the QAQC reports by Optiro did not highlight any matters for concern. Review of the database found no material issues and the database is	AB



	considered adequate to support a Mineral Resource estimate.	
	A formal audit and review was conducted on field sampling techniques, data collection and storage procedures by Cube Consultants (February 2018) did not identify any material issues	
	Scanning of sample quality (recovery, wetness and contamination) as recorded by the geologist on the drill rig against assay results occurs regularly with no obvious issues identified to date.	
	Ongoing reviews of QA/QC data (CRM and duplicate samples) and RC composite v RC split metal content are regularly carried out as a part of BRB's standard procedures.	

#### SECTION 2: REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary	Competent Person
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 RC and diamond drill holes are located on tenement M28/388 and E28/2515, which are held 100% by BRB. There are no material interests or issues associated with the tenement.	AB
	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 tenements are in good standing and no known impediments exist.	AB
Exploration	Acknowledgment and appraisal of exploration by other parties.	Historical holders of the Project area include Poseidon Gold, WMC, Mt Kersey Mining and Great Gold Mines.	AB
done by other parties		Vertical rotary air blast and aircore drilling undertaken in the period 1991 to 1998 identified a zone of strong gold anomalism that extends over a potential distance of 4km under thin (5-10m) cover (maximum grade of 4m at 0.71g/t Au).	
		Although the prospectivity of the trend was recognised by previous explorers, rigorous anomaly definition and appropriate follow-up of encouraging results did not occur, apparently due to "non-geological" factors, including inconvenient tenement boundaries at the time of exploration and changes in company priorities and market conditions.	
Geology	Deposit type, geological setting and style of mineralisation.	BRB is targeting Archean orogenic gold mineralisation near major faults.	AB
		Gold at Bombora is associated with subsidiary faults of the Claypan Shear Zone and occurs preferentially in the Fe-rich part of a fractionated dolerite in an area of shallow (5m to 20m) transported cover. The dolerite is folded into a domal geometry between two major shear zones ("domain" boundaries) that converge and bend in the vicinity of the project. Mineralisation also occurs in other predominantly mafic rocks in the hangingwall at Bombora, and at the Crescent-Kopai and Claypan deposits.	
		The main exploration target is high-grade lode, stockwork, disseminated and quartz vein gold mineralisation hosted by different phases of the fractionated dolerite.	



Criteria	JORC Code explanation	Commentary	Competent Person
Drill hole Information	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:	Any relevant information material to the understanding of exploration results has been included within the body of the announcement or as appendices. No information has been excluded.	AB
	<ul> <li>easting and northing of the drill hole collar;</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar;</li> <li>dip and azimuth of the hole;</li> <li>down hole length and interception depth;</li> <li>hole length.</li> </ul>		
	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.		
Data	In reporting Exploration Results, weighting averaging techniques, maximum	For reporting exploration data, no top-cuts have been applied.	AB
aggregation methods	and/or minimum grade truncations (eg. cutting of high grades) and cut-off grades are usually Material and should be stated.	Grades are reported above a nominal lower cut-off grade of 0.2g/t Au.	
	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.	All reported RC and diamond drill assay results have been length weighted (arithmetic length weighting).	AB
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used for exploration results.	AB
Relationship	These relationships are particularly important in the reporting of Exploration Results.	All drill hole intercepts are measured in downhole metres.	AB
between mineralisation widths and	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The orientation of the drilling may introduce some sampling bias (positive or negative) as described above.	
intercept lengths	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').		
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 drill hole collar locations and appropriate sectional views.	Refer to Figures and Tables in the body of the text.	AB
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.	All grades for exploration data are reported above a nominal lower cut-off grade of 0.2g/t Au	AB
Other substantive exploration	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	There is no other substantive exploration data.	AB



Criteria	JORC Code explanation	Commentary	Competent Person
data	treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.		
Further work	The nature and scale of planned further work (eg. 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.	Further work is planned as outlined in this announcement.	AB

#### SECTION 3: ESTIMATE AND REPORTING OF MINERAL RESOURCES

Criteria	JORC Code explanation	Commentary	Competent Person
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Geological data is stored centrally in a relational SQL database using DataShed software. BRB employs a Database Administrator who is responsible for the integrity of the data.	AB
		All geological and field data is entered into LogChief or Microsoft Excel spreadsheets with lookup tables and fixed formatting and validation rules to ensure data integrity and prevent errors. Sample assay data is received from the assay laboratory digitally and is imported into the database without edits.	
		An external audit was carried out by RockSolid Data on the database in 2019, to determine the quality of the data and to identify data failing integrity checks. Any suggested data adjustments arising from the audit were checked against original field data and implemented if necessary. Optiro reviewed the database prior to commencement of the 2021 November Mineral Resource update and found no underlying issues.	
	Data validation procedures used.	During importation of the data within DataShed, a series of validation procedures occur. These reference library tables, triggers and other procedures to ensure that data is valid before being uploaded into the database.	AB/NF
		Drill hole collar pickups are routinely checked against planned and actual collar locations.	
		All data was checked visually in 3D by Breaker and Optiro to ensure that hole locations and surveys were correct.	
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	A site visit to the Bombora Exploration Camp and project site was undertaken by Mrs Naomi Fogden of Optiro (one of the CPs) on the 13 <sup>th</sup> September 2021. Drilling and sampling practices (RC and diamond) as well as example diamond core intersections of the main mineralised lodes were examined. Mrs Fogden has	NF
	If no site visits have been undertaken indicate why this is the case.	confirmed site practices are appropriate and satisfactory for the preparation of a Mineral Resource Estimate.	
Geological	Confidence in (or conversely, the uncertainty of) the geological interpretation	The confidence in the geological interpretation is reflected in the assigned resource classification.	NF



Criteria	JORC Code explanation	Commentary	Competent Person
interpretation	of the mineral deposit.	<b>Bombora:</b> Diamond and RC drilling throughout the Bombora deposit has allowed the development of a robust geological model. The quartz dolerite host rock is highly predictable and the structural framework is consistent. A drill spacing of less than 40 m by 40 m is generally needed to resolve the detail of the interpretation. A combination of east- and west-orientated drilling is best to define the various lode orientations.	
		<b>Claypan:</b> The project is largely drilled by RC, with only 5 diamond holes. The mineralisation is interpreted as a series of flat-dipping shears. Understanding of the complexity of the host rocks (mafic and dolerite interspersed with sedimentary rocks) has not yet been captured in a 3D geological model.	
		<b>Kopai-Crescent:</b> The project is largely drilled by RC, with only 3 diamond holes. The mineralisation is interpreted as a series of flat east-dipping shear structures. There is potential for some west-dipping structures to be identified with further drilling. The understanding of the complexity of the host rocks (mafic and dolerite interspersed with sedimentary rocks) has been captured in a 3D geological model which has been used to code the block model.	
	Nature of the data used and of any assumptions made.	<b>Bombora:</b> The geological interpretation has been created based on 1,364 RC holes, 143 orientated diamond holes and 153 RC pre-collared (orientated) diamond drill holes. All available data from the drilling has been used within the creation of the geological interpretation. Structural observations from the diamond drilling were used to control the model. Intersections of holes awaiting assays were removed from the estimation.	NF
		The geological interpretation is also backed by aeromagnetic data and detailed surface geological mapping marginal to the Bombora deposit.	
		Claypan: The mineralisation interpretation is based on 53 RC holes and 5 orientated diamond holes.	
		<b>Kopai-Crescent</b> : The geological interpretation is based on 280 RC holes and 3 orientated diamond holes. All mineralised 4 m composites used in the April 2021 MRE have been resampled to 1 m intervals.	
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	<b>Bombora</b> : Alternative interpretations have been considered and tested using close-spaced drilling, and east- dipping drill holes. Interpretation of the west lodes would benefit from further east-orientated and contiguous drilling on section. Mineralisation was extrapolated approximately half the drill spacing past the final intersecting drill line and on section. The mineralisation interpretation is largely constrained by the lack of drilling at depth and along strike.	NF
		Claypan: No alternative interpretation has been considered.	
		Kopai-Crescent: Alternative interpretations have been considered but are constrained by the lack of drilling.	
	The use of geology in guiding and controlling Mineral Resource estimation.	<b>Bombora</b> : The host dolerite unit has been modelled over the entire deposit and the location of the hangingwall and footwall contacts are well understood. Lithological controls have been modelled into a comprehensive 3D model including barren, cross-cutting lamprophyre dykes. All geological and structural observations were used to guide the interpretation and control the trends of the Mineral Resource estimate. Modelled mineralisation orientations match those observed in core.	NF
		Claypan: The deposit is hosted by interspersed mafic and sedimentary rocks but is not well-understood.	



Criteria	JORC Code explanation	Commentary	Competent Person
		<b>Kopai-Crescent</b> : The deposit is hosted by interspersed mafic and sedimentary rocks. A series of lamprophyre dykes and a cross cutting Proterozoic dyke have been modelled and used to deplete the model. The mineralisation wireframes are a set of 49 grade shells with a maximum of 2m internal dilution in contained drilling intercepts.	
	The factors affecting continuity both of grade and geology.	A swarm of moderately west-dipping, biotite-pyroxene-calcite lamprophyre dykes crosscut the mineralisation and are interpreted to post-date gold mineralisation, based on assay data and analysis of core-scale relationships. These have been modelled as barren within the quartz dolerite host unit. Samples logged as lamprophyre have been removed from the data file prior to compositing. Blocks coded as lamprophyre have not been reported within the Mineral Resource. This applies to both the Bombora, Claypan and Kopai- Crescent areas.	NF
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and	<b>Bombora:</b> The Resource model extends 4,525m along strike and has a horizontal width up to 680m and a vertical extent of 722m.	NF
		The Mineral Resource starts at 5m below surface (base of cover) and has been constrained to -480mRL or ~825m below surface. Only Indicated and Inferred categories falling within this area have been reported.	
		The plan width of mineralised zones ranges from 2 to 15m for the steep lodes, up to ~150m for flat lying lodes, and 1 to 10m for west dipping lodes.	
		<b>Claypan:</b> The Resource model extends ~700 m along strike, has a horizontal width up to ~600m and a vertical extent of 100 m. The Mineral Resource starts at 20m below surface (base of cover) and has been constrained to 190 mRL or ~120m below surface. Only Inferred categories within this area have been reported as Mineral Resource. The on-section width of the mineralisation ranges from 2 to 15m.	
		<b>Kopai-Crescent:</b> The Resource model extends 2,100m along strike and has a horizontal width up to 1,400m and a vertical extent of 160m. The Mineral Resource starts at 10m below surface (base of cover) and has been constrained between 150mRL and 310 mRL, or 160m below surface. Only the Inferred category within this area has been reported as a Mineral Resource.	
		The plan width of mineralised zones ranges from 15 to 155m (east-west direction).	
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Software Leapfrog Geo was used to generate lithology and material type wireframes and mineralised domains targeted by recent drilling since the April 2021 MRE.	NF
		Datamine RM was used for drill hole validation, compositing, geological modelling of mineralisation, block modelling, estimation, block model validation, classification and reporting.	
		Supervisor was used for geostatistics, variography, kriging neighbourhood analysis (KNA) and block model validation.	
		<b>Mineralisation Interpretation</b> Mineralisation wireframes were generated via sectional interpretations using a nominal 0.1 g/t Au threshold for mineralisation above 100 mRL and a nominal 0.3 g/t Au threshold for all mineralisation below 100 mRL. Lithology and oxidation surfaces were used to code both the data and the block model. Samples logged as	



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		barren lamprophyre were removed prior to compositing.	
		<b>Bombora:</b> 412 individual domains were identified and combined into orientation/mineralisation style groupings (including steep, flat, breccia and west). Downhole samples were coded in order of precedence with west lodes first, then breccia and flat domains, and lastly the steep domains. Where samples were in the intersection of two structures, samples were coded into a single domain using this precedence and not shared between domains. Coded samples were composited to 1 m with no residuals. 18 domains exhibited high grade subdomains relating to the intersection between structures. Subdomains were estimated separately using a hard boundary to reduce the risk of smearing grades into the surrounding areas.	
		<b>Claypan</b> : 10 mineralisation domains were identified which were grouped for analysis. Samples were composited to 1m.	
		<b>Kopai-Crescent</b> : 49 mineralisation domains were identified and consolidated into 5 orientation groups. Coded samples were composited to 1 m in length with no residuals.	
		<b>Treatment of extreme grade values</b> High grade composites were capped by analysing histograms, log histograms, log probability plots and population disintegration analysis. Top cuts were applied to the data prior to estimation and varied between 5g/t Au and 40g/t Au at Bombora, 5g/t Au at Claypan and between 4g/t Au and 10g/t Au at Kopai-Crescent.	
		Variography Variogram analysis was undertaken using the consolidated composite data within each orientation group. A normal scores transformation was used to best define the nugget; results were back-transformed before use in the estimate. Back-transformed nuggets typically range between 25% to 45% of the total variance at Bombora, 37% at Claypan and between 6% and 44% at Kopai-Crescent.	
		Kriging estimation parameters used for the OK estimation were derived from the variogram analysis. Search ellipses for each group were based on the ranges of the variograms. Block sizes, minimum/maximum number of samples, discretisation and search ellipse factors were confirmed using KNA analysis of the main domains.	
		Estimation Block models were created using a parent cell size of 10mN by 10mE by 5mRL. Blocks were coded by domain, lithology and oxidation using the interpreted wireframes. Sub-celling was permitted down to 1mN by 1mE by 0.5mRL for domain resolution.	
		Estimation of gold (ppm) was completed into well-informed domains using Ordinary Kriging. Search neighbourhoods were aligned with the prevailing mineralised trends using dynamic anisotropy at Bombora and Claypan. Three search passes were used; the ranges were controlled by the variogram for each domain group. Hard boundaries were applied between individual domains and to domains containing high grade subdomains. All searches used a maximum of between 6 and 8 samples per drillhole	
		<b>Bombora:</b> The initial search was set to the range of the group variogram and ranged from 40m by 49m by 3.5m to 140m by 90m by 6m. A minimum of 8 and maximum of 32 samples were used. Subsequent passes expanded the search by a factor of 2 and 5 respectively, with the minimum number of samples reduced to 6	



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		in the third pass.	
		<b>Claypan:</b> Similar search parameters to Bombora were utilised at Claypan. The initial search was based on the variogram and was 150 m by 75m by 5m.	
		<b>Kopai-Crescent:</b> The initial search was set to two thrids the range of the group variogram and ranged from 50m by 65m by 3m to 110m by 95m by 2.5m. A minimum of 10 and a maximum of 30 samples were used. Subsequent passes expanded the search by a factor of 2 and 5 respectively, with the minimum number of samples reduced to 4 in the third pass.	
		Blocks un-estimated by the final pass were assigned the domain average grade and flagged as search pass 4 in the model. Domains with less than 25 samples were estimated at Bombora and Claypan using Nearest Neighbour interpolation. At Kopai-Crescent, smaller domains were assigned the domain average grade.	
		At <b>Bombora</b> 95% of the total block grades were estimated using ordinary kriging, including 64% estimated in the first search pass, 19% within the second search pass, 11% in the third and less than 1% assigned. The remaining 5% were estimated using Nearest Neighbour.	
		At <b>Claypan</b> 92% of the total block grades were estimated using ordinary kriging, including 34% estimated in the first search pass, 36% within the second search pass, 22% in the third and less than 0.1% assigned. The remaining 8% was estimated using Nearest Neighbour.	
		At <b>Kopai-Crescent</b> 96% of the block grades were estimated using ordinary kriging, including 38% estimated in the first pass, 42% in the second pass and 15% in the final pass. The remaining 4% of blocks were assigned.	
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Check estimates using Ordinary Kriging without dynamic anisotropy and Inverse Distance were used to validate the estimation in Bombora. No check estimate was conducted at Kopai-Crescent and Claypan.	NF
	The assumptions made regarding recovery of by-products.	There have been no assumptions made with respect to by-products.	NF
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No estimation was made for deleterious elements or other non-grade variables.	NF
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	<b>Bombora</b> : The parent panel size of 10mE by 10mN by 5mRL is approximately half the average drill spacing of 20mE by 40mN above 100mRL. The block size selection was supported by KNA. The search parameters based on the variograms demonstrate grade continuity extending past a range of 40m by 45m in the first and second directions, past the range of the average drill spacing. The block size was not modified below the 100mRL where the drill spacing extends to 80m section spacing.	NF
		Claypan: A parent panel size of 10mE by 10mN by 5mRL was used. Claypan has been drilled to 80 m on section on 200m drill fences.	
		<b>Kopai-Crescent</b> : The parent panel size is also 10mE by 10mN by 5mRL in Kopai-Crescent. The drill spacing increases to 40-100mN by 20-40mE. The search parameters based on the variograms demonstrate grade continuity extending past a range of 40-100 m by 40 m in the first and second directions, past the range of	



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		the average drill spacing.	
	Any assumptions behind modelling of selective mining units.	No assumptions have been made regarding selective mining units.	NF
	Any assumptions about correlation between variables.	No correlated variables have been investigated or estimated.	NF
	Description of how the geological interpretation was used to control the resource estimates.	<b>Bombora:</b> The geological and structural interpretation was used at all stages to control the estimation. It was used to guide the orientation, shape of the mineralised domains and determine cross-cutting and timing relationships between structures. Mineralisation domains were then used as boundaries for the grade estimation, using the trend of the mineralisation to control the search ellipse direction. Intersection between structures and the introduction of subdomains around these intersections is identified as a major control on the distribution of grade.	NF
		<b>Claypan</b> : Mineralisation is interpreted to be a series of flat-lying structures. Structural information from diamond holes supports this interpretation.	
		<b>Kopai-Crescent:</b> The interpretation for mineralisation was created using Leapfrog and extended the mineralisation interpretation from the previous April MRE due to the availability of all 1 m sample splits. Since the previous MRE a detailed geological 3D model has been generated by Breaker geologists which was used to code the block model.	
	Discussion of basis for using or not using grade cutting or capping.	Top cuts were used in the estimate to control the local effect of high grades within domains. Top cuts were applied on a domain group basis across all deposits.	NF
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation checks of the estimate occurred by way of global and local statistical comparison, comparison of volume of wireframe vs the volume of the block model, comparison of the model average grade (and general statistics) and the declustered sample grade by domain, swath plots by northing, easting and elevation and visual check of drill data vs model data in three dimension, plan and cross section.	NF
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnage was estimated on a dry basis.	NF
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A nominal lower cut-off grade of 0.1g/t Au was utilised to model enhanced geological continuity to the 100mRL. Below 100mRL a nominal lower cut-off grade of 0.3g/t Au was used.	NF
		For reporting purposes an indicative cut-off grade of 0.5g/t Au was used above 100mRL (within 210m of surface) for areas with assumed open pit mining potential. A 0.5g/t Au cut-off grade is commonly used as a lower limit of economic extraction in many medium scale open pit mines of this nature.	
		The depth (RL) transition from assumed open pit to underground mining at Bombora will be guided by further drilling and future mining studies which will determine the scale and extent of potential mining activities.	
		An indicative minimum cut-off grade of 1.0g/t Au was used below 100mRL for areas with assumed underground mining potential for reporting purposes. Reasonable prospects for eventual economic extraction in whole or part above this cut-off grade are supported by the high-grade nature of the mineralisation when higher cut-off grades are applied (eg. Table 1: Bombora 1.8g/t Au subset), and by the evident continuity of mineralisation over large distances an aspect supported by high density drilling in the	



Criteria	JORC Code explanation	Commentary	Competent Person
		open pit area; and by similar mined grades in other similar deposits in Western Australia.	
		Ongoing drilling success and future mining studies may extend the open pit mining potential below 100mRL, and similarly may extend the underground mining potential above 100mRL.	
Mining factors or assumptions	dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The potential mining method above 100m RL is assumed to be by open pit method using medium scale equipment and excavators. At Bombora, reasonable prospects for eventual economic extraction in whole or part above 100mRL are supported by the high-grade nature of the mineralisation when higher cut-off grades are applied (eg. Table 1: Bombora 0.8g/t Au subset); by the established and indicative continuity of mineralisation supported by extensive drilling; and by an average gold endowment of approximately 3,800oz per vertical metre Drilling at Crescent-Kopai and Claypan is at a preliminary stage.	NF
		The potential mining method below 100m RL (applicable to Bombora only) is assumed to be a combination of bulk and selective underground stoping methods. Reasonable prospects for eventual economic extraction are supported by the high-grade nature of the mineralisation when higher cut-off grades are applied, and by the established and indicative continuity of mineralisation.	
		The scale and extent of assumed mining activities will be determined by future mining studies. No detailed mining studies have been completed. The depth (RL) transition from assumed open pit to underground mining at Bombora will be guided by future mining studies which will be influenced by factors including the gold price, the results of ongoing drilling and operational strategy. High-grade gold is a chararacteristic feature of many parts of the Bombora deposit indicating that reasonable potential for underground mining may extend above 100mRL. Similarly, the assumed open pit mining potential may extend below 100mRL as a result of future mining studies	
		Mining dilution assumptions have not been factored into the Mineral Resource estimates. Internal dilution was restricted to a length of less than ~20% of the mineralised intercept downhole and a minimum downhole length of 1 to 2 m was used to maintain geological continuity within the interpretation.	
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Metallurgical testwork indicates gold recoveries in the range of 96% to 99% in oxide and fresh mineralisation in fresh water, and 92% recovery using saline groundwater (ASX Releases 15 January 2018 and 9 February 2021). The metallurgical testwork points to low-cost gold processing based on modest hardness and a relatively coarse grind size of 106-125µm The testwork also indicates a high level of gravity gold (ranging from 31% to 90%). The testwork did not identify any significant problematic issues of concern.	TS
Environmenta I factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While	No assumptions have been made regarding possible waste and process residue residue options. Typical open pit mining and CIL processing scenarios would require generation of waste dumps and tailings dams. The deposit lies within a granted Mining Lease (M28/388).	TS



Criteria	JORC Code explanation	Commentary	Competent Person
	at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	PFS-level environmental studies have not identified any issues of concern to date.	
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Bulk density values have been assigned based on oxidation and lithology. A total of 1,961 specific gravity determinations from diamond core samples have been combined with information from metallurgical test work and down hole geophysics surveys to determine suitable assignments. Assigned values range from 1.93t/m <sup>3</sup> to 2.95t/m <sup>3</sup> at Bombora/Claypan and remain unchanged from the previous April 2021 MRE.	NF
		Limited density information is available at Kopai-Crescent and Claypan. Values have been determined from similar rock types at Bombora and range from 1.93t/m <sup>3</sup> to 2.85t/m <sup>3</sup> .	
		The method used to determine the bulk density of diamond core is by air/water immersion and numerous samples are taken for each diamond hole, with a preference for mineralised intervals. Generally samples are distributed evenly over the deposit, within different weathering zones and differing rock types. It is considered that the results within the transitional and fresh material are representative, with all core measurements comparing closely to geophysical methods.	
		Geophysical wireline measurements have been applied to the oxide and transported cover. Cover material is un-mineralised and does not form part of the Mineral Resource.	
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Onsite measurements by the water immersion method are only conducted on competent transitional and fresh core. Limited oxide samples have been taken and it is believed that porosity may not have been adequately assessed in this zone. A conservative density has been applied to this weathering profile based on down hole geophysical studies.	NF
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Samples taken were coded by lithology and weathering. Averages were derived within each weathering zone and used to code the block model. Results within each weathering zone (oxide, transitional and fresh) compared well to the geophysical results and are considered appropriate for reporting purposes.	NF
Classification	The basis for the classification of the Mineral Resources into varying	The Lake Roe Mineral Resource has been constrained to a maximum vertical depth of 722m below surface.	NF
	confidence categories.	Blocks have then been classified as Indicated, Inferred or left unclassified based on drill hole spacing, geological continuity and estimation quality parameters.	
		Indicated Mineral Resources were defined where there was a good to high level of geological confidence in geometry, where continuity of grade was established and drill spacing was averaging 40m or less. Indicated Resources were typically estimated in the first or second pass.	
		Inferred Mineral Resources were defined where there was a low to moderate level of geological confidence in geometry, there was still continuity of grade and drill spacing was greater than 40m. Inferred Resources were typically estimated in the second to third pass. Inferred Mineral Resources includes domains which were estimated using Nearest Neighbour techniques.	



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		Unclassified mineralisation has not been included in this Mineral Resource. It includes areas of high extrapolation and low confidence in the geological and grade continuity.	
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Consideration has been given to all relevant factors in the classification of the Mineral Resource.	NF
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Person's view of the deposit.	NF
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Internal reviews of the mineral interpretation were carried out by the BRB geological team members including Stephane Roudaut and Tom Sanders.	NF
		The database is considered appropriate for use in a Mineral Resource by the Competent Person.	
		An internal peer review of the estimation was conducted by Optiro.	
		No external audit or review of the current Mineral Resource has been conducted.	
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The assigned classification of Indicated and Inferred reflected the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate.	NF
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	This statement relates to global estimate of tonnes and grade of the Bombora, Claypan and Kopai-Crescent deposits located within the Lake Roe Project. It includes both mineralisation above the 100mRL (open pit potential) and below the 100mRL (underground potential) at Bombora.	NF/TS
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No production data exists for the Bombora deposit (no previous production).	NF