

# **QUARTERLY REPORT**

# December 2017

New gold lodes extend resource and mining potential to the east, at depth and along strike within Bombora discovery

Latest results highlight potential for a single large 2.2km-long open pit; Metallurgy confirms high recoveries, low processing costs and potential for an early, low capex start-up without limiting the scale of the development

# Highlights

- Newly discovered gold lodes in northern, central and southern parts upgrade the scale and economic potential of the 2.2kmlong Bombora gold discovery at the Lake Roe gold project, WA
- ▼ The results widen the discovery zone to the east and extend it at depth, materially upgrading the resource potential in several areas

**x** Results from the quarter include:

Hole No.	Interval @ g/t gold	From	Includes Interval @ g/t gold
BBRD0675	9m @ 35.88g/t	131m	2.88m @ 108.55g/t
	7m @ 2.45g/t	182m	5m @ 3.27g/t
BBRD0553	9.3m @ 3.22g/t	201m	4.06m @ 4.24g/t
	13.34m @ 1.48g/t	214.66m	5.34m @ 2.17g/t
	5m @ 3.28g/t	239m	1m @ 12.05g/t
BBRC0708	4m @ 5.21g/t	112m	1m @ 11.66g/t
	19m @ 2g/t	141m	9m @ 3.57g/t
	20m @ 3.53g/t	167m	8m @ 7.49g/t
BBRC0689	24m @ 3.12g/t	36m	11m @ 6.33g/t
BBRC0694	36m @ 2.78g/t	8m	8m @ 8.01g/t
BBRC0698	9m @ 4.07g/t	190m	7m @ 4.53g/t
BBRC0577	32m @ 2.57g/t	20m	4m @ 4.9g/t

- ▼ The results increase the width and depth of any future open pit and create potential for a single large 2.2km-long open pit subject to ongoing drilling success
- Metallurgy testwork confirms high gold recoveries, low energy requirements and potential for an early, low capex start-up that does not limit the scale of a processing facility

## **Board of Directors**

#### **Tom Sanders**

**Executive Chairman** 

#### **Mark Edwards**

Non-executive Director

## Mike Kitney

Non-executive Director

## Senior Management

### **Alastair Barker**

**Exploration Manager** 

### Michelle Simson

Manager Corporate
Affairs/Company Secretary

#### Corporate

### **Issued Securities:**

145.1 million ordinary shares5.7 million partly paid shares8.65 million unlisted options

#### Cash:

\$11.8 million

## **Market Capitalisation:**

\$87.1 million @ \$0.60/share

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# Highlights (continued)

- ▼ Good continuity of the mineralised structures now obvious
- Underground mining potential upgraded; "Stacked" nature of steep controlling faults in conjunction with deeper reconnaissance intersections indicate gold mineralisation will extend at depth
- ▼ The results provide compelling evidence of the early stages of a major gold discovery that is gradually unfolding
- ▼ Drilling in progress with multiple rigs; maiden resource later this quarter
- ➤ Focus for 2018 is ongoing drilling for resource growth and concurrent assessment of all development options



Photo 1: Diamond Core Logging at Lake Roe Camp

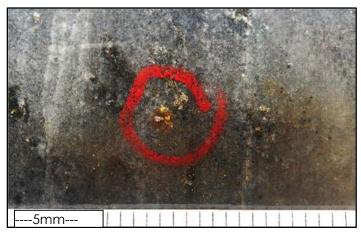
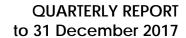


Photo 2: Coarse and Fine Visible Gold in New High-grade Lode BBRD0675 132.36m





Breaker's Executive Chairman, Tom Sanders, said it was a highly successful quarter with exceptional drilling and metallurgical results which upgrade the Lake Roe gold project and significantly de-risk its commercialisation.

"We are seeing strong continuity between sections and in long section, and more gold in new lodes to the east and at depth and over a longer strike length. This is positive for the upcoming maiden resource.

"The upshot of the results is that we are likely to have a wider, deeper, longer open pit which could be up to 2.2km long subject to continued drilling success. The "stacking" of the steep and flat lodes that we are seeing is likely to keep repeating at depth, further upgrading both the resource and the mining.

"It generally takes at three years for a deposit to progress from a promising discovery hole to a potentially economic resource and it has only been two years since our first RC discovery drill hole. The discovery of new gold lodes this quarter after nearly one year of resource drilling reinforces the scale and potential of the Bombora gold system.

"We plan to keep drilling for a long time after the maiden resource is released with the objective of expanding and upgrading it and continuing to build value. We also need to understand the overall size of the deposit so we can optimise the mining and processing configuration ahead of potential development.

"As highlighted by the recently extended mine life at the Carosue Dam gold operations to our immediate north, underground mineralisation is important as it can establish a long-life operation and add multiples to any shallow, open pit gold resource.

"The metallurgical results point towards high gold recoveries and low-cost processing for the fresh and oxide ores at a relatively coarse grind size.

"We need to keep an open mind on the final gold processing configuration but the high content of gravity-recoverable gold creates potential for an early, low-cost Stage 1 development option without limiting the scale of operation. Not all deposits have this option.

"The potential advantages are early cash flow, low initial capital expenditure and the ability to, wholly or partially, self-fund ongoing value-adding drilling, feasibility work and the construction of the second stage of the processing facility.

"A staged processing scenario also has scope to negate the typical "orphan" investor period that many companies endure as they undertake feasibility studies. We plan to assess this option further as part of our pre-feasibility assessment of all development options at the appropriate time."



# **Exploration Overview (December 2017 Quarter)**

## Drilling

Breaker Resources NL (**Breaker**; ASX: BRB) delivered another quarter of exceptional drilling and metallurgy results that continue to upgrade and de-risk its greenfields Bombora gold discovery at the 100%-owned Lake Roe gold project, 100km east of Kalgoorlie in WA.

Resource drilling continued with two reverse circulation (RC) and two diamond drill rigs in the December 2017 quarter focused primarily on resource drilling within the 2.2km Bombora discovery zone in preparation for a maiden JORC Resource later this quarter.

The drilling delivered some of the best results yet, discovering new and extensional steep and flat lodes in the northern, central and southern parts of the Bombora discovery zone. Over 90% of the drill holes completed intersected significant gold mineralisation.

The drilling intersected numerous shallow and deep, high-grade gold intersections that provide compelling evidence of a major greenfields gold discovery that is gradually unfolding.

Highlight results include:

- 9m @ 35.88g/t Au from 131m including 2m @ 108.55g/t Au (BBRD0675: Photo 2)
- **9.33m @ 3.22g/t Au from 201m & 13.34m @ 1.48g/t** A∪ from 214.66m (BBRD0553)
- 20m @ 3.53g/t Au from 187m including 11m @ 5.94g/t Au & 9m @ 3.57g/t Au from 142m (BBRC0708)
- **24m @ 3.12g/t Au from 36m** including **11m @ 6.33g/t Au** (BBRC0689)
- ★ 36m @ 2.78g/t Au from 8m including 8m @ 8.01g/t Au (BBRC0694)
- **× 20m @ 2.16g/t Au from 180m** including **7m @ 4.53g/t Au** (BBRC0698)
- **32m @ 2.57g/t Au from 20m** including **4m @ 4.90g/t Au** (BBRC0577)

The new lodes extend the main known mineralised zone to the east <u>and</u> at depth, materially increasing the width, depth, strike extent and consequently the resource potential of the main discovery zone. The main zone of mineralisation is wider than previously realised.

The results increase the resource potential and create the option for a single large 2.2km-long open pit subject to ongoing drilling success.

The progressive increase in drill density continues to upgrade the continuity of gold mineralisation, significantly de-risking potential mining in the process. Good continuity of the mineralised structures is now obvious between cross-sections and in long section over the full 2.2km of the main discovery zone where close-spaced drilling has been completed.

This continuity is driven by strike-extensive, stacked steep lodes (mineralised shears) which control linking, stacked, flat and west-dipping lodes (mineralised faults).

The "stacked", repetitive nature of the steep "controlling" mineralised faults, and the deep reconnaissance gold intersections to date strongly suggests that gold mineralisation will extend at depth.



The new steep mineralised shears consequently upgrade not only the open pit potential but the resource potential at depth, an aspect reinforced by high-grade reconnaissance results at depth. Many of the diamond drill holes and other RC drilling intersected significant gold mineralisation 150-200m vertically below surface. This is highly significant as the potential to mine underground has scope to add multiples to any shallow gold inventory constrained by the economic limits of open pit mining.

The close-spaced drilling is also starting to identify more previously "hidden" west-dipping lodes that are orientated sub-parallel to the drill orientation and therefore difficult to "see" – eg. 24m @ 3.12g/t gold including 11m @ 6.33g/t gold from BBRC0693 on the 6601960N section. These have scope to augment the ounces per vertical metre in any mining scenario.

The expanding footprint of the gold mineralisation means that the maiden Resource planned for the March 2018 quarter is likely to be just the start. Ongoing drilling after March 2018 is planned.

Drilling is currently prioritising significant gaps in the drilling, particularly in the southern and central parts of the main discovery zone ahead of the maiden resource. The Company is also taking steps to accelerate exploration activities in the +500 square kilometre area outside the 2.2km Bombora discovery.

## Metallurgy

A second round of metallurgical testwork confirmed the high gravity recoverable gold and total gold recoveries of the first round of testing in the previous quarter but over a broader area.

Excellent results for total gold recovery were achieved in both oxide material (96%-99%) and fresh rock (97%-99%). In addition, first-pass grind size optimisation studies indicate a relatively coarse grind size of 106-125µm, an important aspect that points to low energy consumption and hence operating costs.

Given the high gravity gold recoveries of 31%-77% in oxide ore, 32%-90% in fresh ore and a coarse grind size, the Company plans to assess a staged development scenario with the potential for early, low capex cash flow without affecting the optimum processing throughput. This would involve the early construction of the 'front-end' of a conventional processing plant, the crushing, grinding and gravity recovery circuits (Stage 1). Tails from the gravity circuit which would normally flow to the "back-end" of the plant (the leach circuit; Stage 2) would flow to storage ponds for later reclamation once construction of the entire plant was complete.

This approach has the potential to minimise equity dilution and debt funding requirements by facilitating the Stage 2 development (and ongoing drilling) as much as possible from early cash flow.



# Lake Roe Gold Project December 2017 Quarter Exploration Activities

Drilling activities focused mainly on resource delineation drilling within the 2.2km Bombora discovery zone in preparation for a maiden JORC Resource in the current quarter. The resource drilling commenced in February 2017.

New drill holes are shown in plan, long-section and cross-section (Figures 1 to 3). The drilling comprised 93 RC drill holes (13,942m), and 29 diamond drill holes and pre-collared diamond drill holes (6,778.9m) at Bombora, and a further six reconnaissance RC drill holes (897m) in the Claypan South area.

A second round of metallurgical testing was also completed on an expanded range of samples over a broader area. The testwork included a preliminary assessment of optimum ore grind size on gold recovery and further assessment of gold leach reagent and oxygen requirements.

The results from the resource drilling, metallurgical testwork and reconnaissance drilling activities are discussed below.

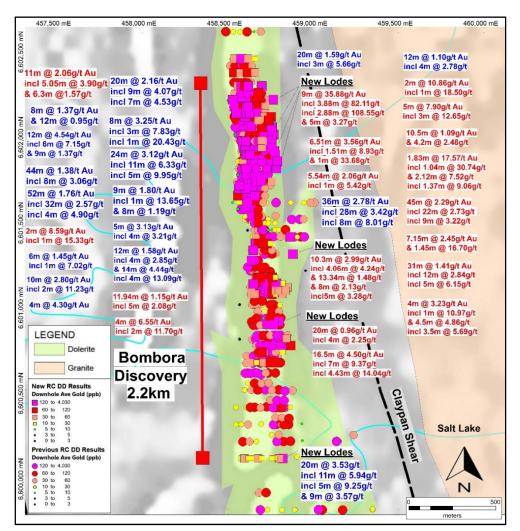


Figure 1: Bombora RC and diamond drill hole location plan with selected intersections colour-coded in red (diamond holes) and blue (RC holes); Drill holes colour-coded by average downhole gold over aeromagnetic image with interpreted geology



# **Bombora Resource Drilling**

Resource delineation drilling continued with two RC and two diamond drill rigs and is progressively reducing the drill hole spacing to a 40m x 20m pattern to facilitate resource estimation.

The drilling focused mainly on deeper drilling in the central and northern parts of the Bombora discovery to assess the scope for deeper mineralisation, 150m to 200m vertically below surface. The drilling also included early drilling in the southern part of the discovery zone to establish an initial  $(100m \times 20m)$  pattern ahead of more detailed infill drilling.

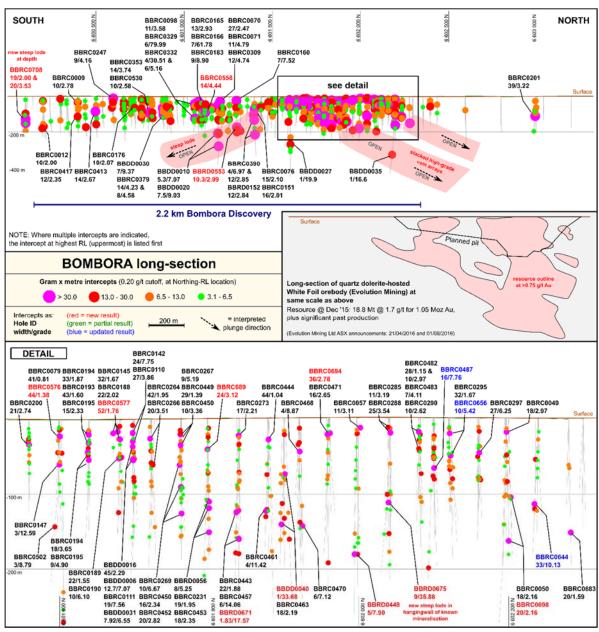


Figure 2: (Top) Gram x metre long section of the 2.2km Bombora discovery and immediate extensions showing location of significant down-hole intercepts in relation to Northing and depth (no adjustment for true width); (Inset) Long section view of White Foil Resource at the same scale as above long section



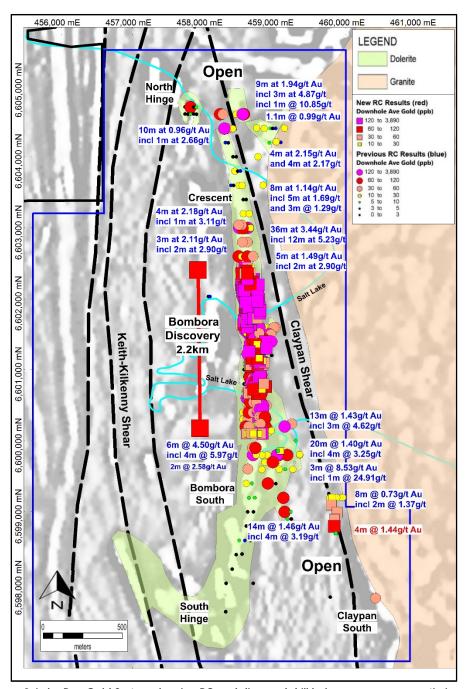
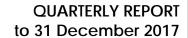


Figure 3: Lake Roe Gold System showing RC and diamond drill holes over aeromagnetic image with interpreted geology: Drill holes colour-coded by downhole average gold (Mining Lease Application 28/388 shown in blue)

## Results

The drilling delivered some of the best results yet, discovering new and extensional lode positions and returning a large number of wide, near-surface and deep, high-grade gold intersections.

Full details of the drilling and metallurgy results are provided in ASX Releases of 23 November 2017, 10 January 2018 and 15 January 2018.





The down-hole intersections reported do not represent true width as the geometry of the mineralised structures is still being resolved in several areas. Similarly, drilling in some areas is not adequately "seeing" mineralisation angled sub-parallel to the drill direction.

## ASX Release 23 November 2017 Summary

All but four of the 57 drill holes intersected significant gold mineralisation.

The "lake" RC and diamond drilling focused on the 6600680N to 6601060N area reducing the (on-section) drill hole spacing from 40m to 20m. This drilling returned a best intersection of 16.5m @ 4.50g/t gold (including 7m @ 9.37g/t gold) from 65m in BBDD0030. Drilling in this area resolved the mineralised structures into several stacked, sub-vertical, NNW-trending fault zones that have significant strike and depth potential.

The "land" RC and diamond drilling focused mainly on the 6601920N to 6602360N area. This drilling consisted of infill drilling with some deeper RC and diamond holes aimed at validating the mineralisation orientation and scoping the gold mineralisation at depth. BBDD0016, a validation diamond drill hole, drilled down-dip on 6601600N confirmed continuity of steep east-dipping mineralisation in this area (Figure 4).

More significant drill results are tabled below (Table 1).

Hole No.	Interval @ g/t gold	From	Includes Interval @ g/t gold	From
BBRC0656	12m @ 4.54	52m	6m @ 7.15	56m
	9m @ 1.37	87m	8m @ 1.42	88m
BBDD0030	16.5m @ 4.50	65m	7m @ 9.37	70m
	-		4.43m @ 14.04	70.8m
BBDD0016	45m @ 2.29	6m	22m @ 2.73	15m
	-	-	9m @ 3.22	28m
BBRD0152	31m @ 1.41	222m	12m @ 2.84	241m
	-		5m @ 6.15	241m
BBDD0030	16.5m @ 4.50	65m	7m @ 9.37	70m
	-		4.43m @ 14.04	70.8m
BBDD0033	4m @ 6.55	66m	2m @ 11.7	67m
BBDD0035	84m @ 0.47	43m	9.12m @ 0.85	115.9
	1m @ 16.61	380m	1m @ 16.61	380m
BBDD0038	11m @ 2.06	54m	5.05m @ 3.9	56.44m
	-		2.49m @ 5.36	59m
	6.3m @ 1.57	89m	2m @ 3.16	91m
BBRC0683	20m @ 1.59	166m	3m @ 5.66	174m
BBRD0668	2m @ 8.59	160m	1.1m @ 15.33	160.9m
	1m @ 5.14	170m	1m @ 5.14	170m
BBDD0013	7.15m @ 2.45	40.35m	1.65m @ 9.19	40.35m
	1.45m @ 16.7	54.55m	0.85m @ 25.15	54.55m

Table 1: Selected RC and Diamond Drill Results (ASX Release 23 November 2017)



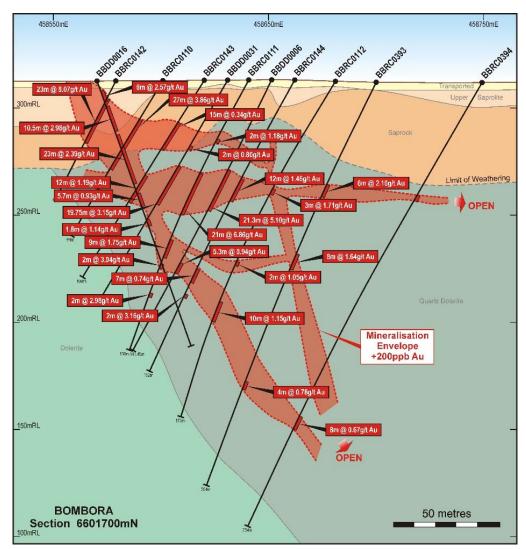


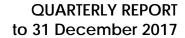
Figure 4: Bombora Cross Section 6601700N

## ASX Release 10 January 2018 Summary

All 18 diamond drill holes and 41 of the 47 RC drill holes in the 2.2km Bombora discovery zone intersected significant gold mineralisation. New drill holes are shown in plan (Figures 1), long-section (Figure 2) and cross-section (Figures 5 to 6).

The drilling discovered new high-grade steep and flat gold lodes in the northern (6601720-6602040N, eg. BBRD0675), central (6601100N/6601300N, eg. BBRD0553; BBRC0555-0556) and southern (6600100N, eg. BBRC0708) parts of the main discovery zone (Figures 2).

More significant drill results are tabled below (Table 2).





Hole No.	Interval @ g/t gold	From	То		Includes Interval @ g/t gold	From
BBRC0555	10m @ 2.8	148m	158m		4m @ 6.66	153m
					2m @ 11.23	152m
					1m @ 20.37	153m
BBRC0558	12m @ 1.58	75m	87m		2m @ 2.68	78m
				and	4m @ 2.85	83m
					1m @ 6.22	83m
				and	1m @ 3.25	86m
	14m @ 4.44	96m	110m		8m @ 7.4	101m
					4m @ 13.09	104m
BBRC0560	4m @ 4.3	48m	52m			
BBRC0562	6m @ 1.45	78m	84m		1m @ 7.02	78m
BBRC0574	5m @ 3.13	8m	13m		4m @ 3.21	8m
BBRC0576	44m @ 1.38	4m	48m		8m @ 1.45	12m
				and	8m @ 3.06	32m
					4m @ 3.71	36m
				and	4m @ 2.32	44m
BBRC0577	52m @ 1.76	4m	56m		32m @ 2.57	20m
					4m @ 4.9	28m
BBRC0688	9m @ 1.8	64m	73m		1m @ 13.65	71m
	8m @ 1.19	100m	108m			
BBRC0689	24m @ 3.12	36m	60m		11m @ 6.33	45m
					10m @ 6.7	45m
					lm @ 7.26	46m
				and	5m @ 9.95	49m
BBRC0690	12m @ 0.96	68m	80m		8m @ 1.16	72m
BBRC0691	8m @ 3.25	84m	92m		3m @ 7.83	85m
					1m @ 20.43	86m
BBRC0692	4m @ 3.72	68m	72m		= 207.10	
BBRC0693	8m @ 1.37	28m	36m		4m @ 1.86	28m
	12m @ 0.95	48m	60m		4m @ 1.65	56m
BBRC0694	36m @ 2.78	8m	44m		28m @ 3.42	16m
	20111 = 2172				8m @ 8.01	24m
BBRC0696	12m @ 0.84	8m	20m		4m @ 2.03	12m
BBRC0698	20m @ 2.16	180m	200m		9m @ 4.07	190m
	20 20				7m @ 4.53	191m
					2m @ 7.54	196m
BBRC0708	6m @ 4.1	111m	117m		4m @ 5.21	112m
	2 2 111				1m @ 7.63	112m
				and	1m @ 11.66	115m
	19m @ 2	141m	160m	<b>G</b> .	9m @ 3.57	142m
	17 5 2		. 50111		2m @ 6.69	142m
					lm @ 9.2	142m
				and	4m @ 3.31	146m
	20m @ 3.53	167m	187m	and	11m @ 5.94	174m
	ZUIII & J.JJ	10/111	10/111		8m @ 7.49	174111
					5m @ 9.25	176m
				and	1m @ 7.15	182m

Table 2a: Selected RC Drilling Results (ASX Release 10 January 2018)



Hole No.	Interval @ g/t gold	From	То		Includes Interval @ g/t gold	From	
BBDD0040	6.51m @ 3.56	22.49m	29m		1.51m @ 8.93	22.49m	
					1m @ 12.68	23m	
				and	1m @ 8.46	27m	
	1m @ 33.68	85m	86m				
BBRD0326	4m @ 3.23	56m	60m		1m @ 10.97	59m	
	4.5m @ 4.86	154.5m	159m		3.5m @ 5.69	154.5m	
					1m @ 9.32	157m	
BBRD0448	11m @ 0.99	168m	179m		1m@ 1.67	168m	
	5m @ 7.9	202m	207m		3m @ 12.65	203m	
BBRD0465	2.5m @ 5.05	147.5m	150m		1m @ 11.42	149m	
	11m @ 1.31	185m	196m		2m @ 4.22	192m	
BBRD0550	20m @ 0.86	56m	76m		4m @ 2.25	63m	
BBRD0553	10.3m @ 2.99	200m	210.3m		9.3m @ 3.22	201m	
					4.06m @ 4.24	201m	
					1m @ 7.44	201m	
				and	1.06m @ 6.24	204m	
	13.34m @ 1.48	214.66m	228m		5.34m @ 2.17	214.66m	
				and	3m @ 2.14	225m	
					1m @ 4.16	227m	
	8m @ 2.13	236m	244m		5m @ 3.28	239m	
					1m @ 12.05	242m	
BBRD0637	5.54m @ 2.06	214m	219.54m		1m @ 5.42	214m	
BBRD0669	8m @ 1.54	116m	124m				
BBRD0671	1.83m @ 17.57	187.17m	189m		1.04m @ 30.74	187.17m	
	2.12m @ 7.52	209.91m	212.03m		1.37m @ 9.06	210.66m	
BBRD0675	9m @ 35.88	131m	140m		3.88m @ 82.11	132.12m	
					2.88m @ 108.55	132.12m	
	7m @ 2.45	182m	189m		5m @ 3.27	182m	
BBRD0676	2m @ 10.86	224m	226m		1m @ 18.5	224m	

Table 2b: Selected <u>Diamond</u> Drilling Results (ASX Release 10 January 2018)

The discovery of a new, sub-vertical, high-grade lode on 6602040N in BBRD0675 – 9m @ 35.88g/t Au from 131m including 2m @ 108.55g/t Au (Photo 2 above), further upgrades the potential for long-term underground mining.

In the **northern part** of the discovery zone (6601720-6602040N; Figures 1, 2 and 5), the results materially extend the main mineralised zone to the east and at depth which increases the width and depth of a potential open pit.





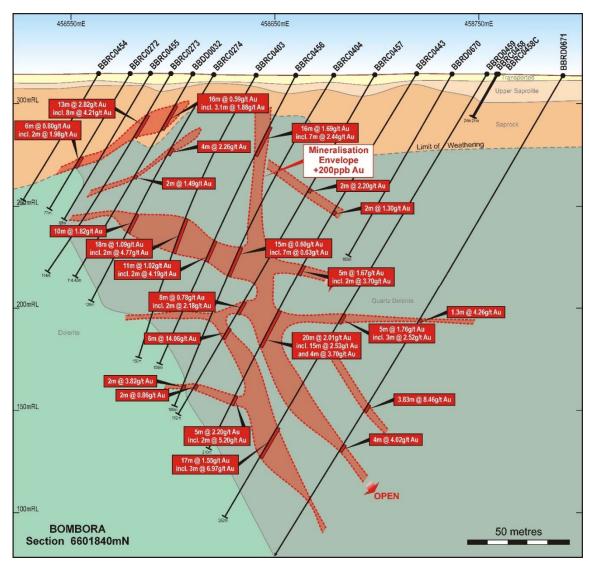
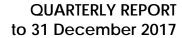


Figure 5: Bombora Cross Section 6601840N

Strong results were encountered from step-out drilling in the 6601100N-6601560N area in the **central part** of the discovery zone – eg. 9.33m @ 3.22g/t Au from 201m and 13.34m @ 1.48g/t from 214.66m in BBRD0553 on 6601300N; and 4m @ 6.66g/t gold in BBRC0555 and 9m @ 2.85g/t gold including 2m @ 11.23g/t gold on 6601100N (Figure 6).

Strong results from initial 100m x 20m-spaced drilling underway in the 660100N to 6600500N area in the southern part of the discovery zone are particularly encouraging – 11m @ 5.94g/t gold and 19m @ 2.00g/t gold from BBRC0708 on 6600100N – and represent the first high-grade gold mineralisation in this area. The results flag potential to link up the south, central and northern areas in a single large open pit subject to ongoing exploration success.





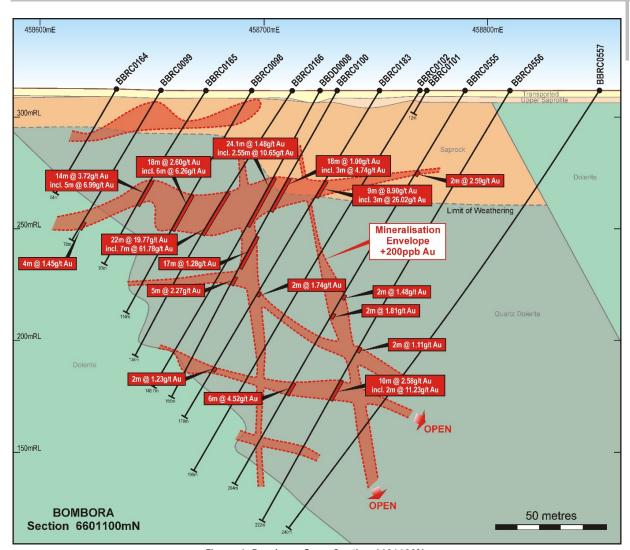


Figure 6: Bombora Cross Section 6601100N

# Claypan South

Six RC drill holes (897m) were completed on six individual 100m-spaced sections to assess widespread oxide gold anomalism encountered in previous aircore drilling in the Claypan South area (Figure 3 above).

Due to high water inflow into the drill holes, penetration of the primary zone was limited and most holes were abandoned well prior to reaching target depth.

The six reconnaissance RC drill holes encountered significant gold mineralisation in the oxide zone including 4m @ 1.44g/t gold in BBRC0706 and 4m @ 1.04g/t gold in BBRC0705. Anomalous mineralisation was also encountered in the primary zone with a best intercept of 4m @ 0.41g/t gold in BBRC0704. Follow-up drilling is planned.



# **Metallurgical Testwork**

A second round of metallurgical testing was also completed by Australian Laboratory Services on an expanded range of oxide and fresh ore samples (Figure 7; ASX Release 15 January 2018).

Previous testwork was limited to comminution studies on diamond core and an assessment of gravity- and leach-recoverable gold on two composite (pre-ground) RC samples (ASX Release 18 October 2018). This preliminary work indicated that the ores are of modest hardness with excellent gravity and total gold recovery.

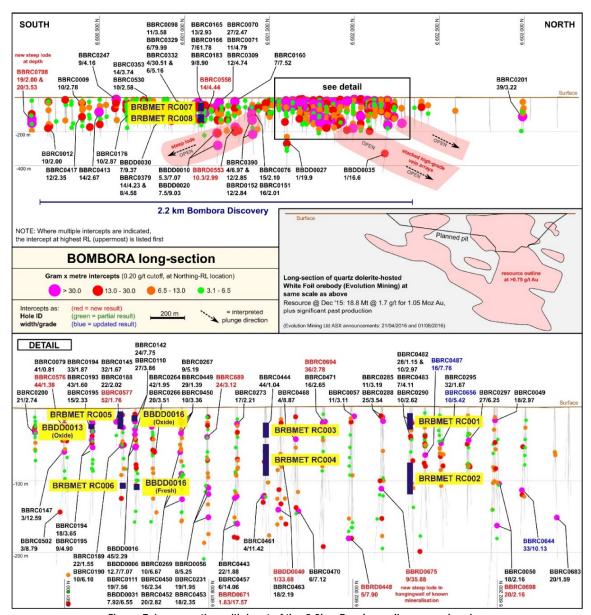


Figure 7: Long section with inset of the 2.2km Bombora discovery showing location and horizontal and vertical extent of metallurgical samples

The testwork consisted of:

(i) **gravity and leach gold extractions** on three more oxide RC composite samples and three more fresh (primary) RC composite samples;



- (ii) **gravity and leach gold extractions on "horizontal" composite samples** of oxide and fresh RC material; and
- (iii) preliminary assessment of optimum ore grind size and gravity and leach gold recovery using three different size fractions of oxide and fresh mineralisation (derived from diamond drill core).

An assessment of the gold leach reagents and oxygen requirements was made for each phase of the testwork. The three components of the metallurgical testwork are described below.

### Results

## Gravity and Cyanide Leach Gold Extraction of Individual RC Composites

The initial part of the new testwork involved an assessment of the gravity recoverable gold, and the gold recoverable by cyanide leach after gravity extraction on three oxide (weathered) and three fresh (primary) composite samples of RC fines (BRBMET\_RC003 to BRBMET\_RC008).

Results for gravity recoverable gold, total gold extraction and reagent requirements are summarised in Table 3 which includes results for previously reported samples RC001-002.

Sample	Ore Type	Measured Head Grade Au (g/t)	Test Number	Calculated Head Grade Au (g/t)	Test No.	Total Au Extraction (%)	Gravity Au (%)	NaCN Consumption (kg/t)	Lime Consumption (kg/t)
RC-001	Oxide	3.01	RH297	3.18	RH297	95.6	26.2	0.54	1.81
RC-002	Fresh	1.67	RH298	1.60	RH298	95.6	39.8	0.66	0.48
RC-003	Oxide	4.93	RH301	4.70	RH301	97.7	29.0	0.96	2.11
RC-004	Fresh	2.53	RH302	2.45	RH302	98.0	60.0	0.48	0.35
RC-005	Oxide	2.38	RH303	2.86	RH303	97.9	14.4	0.53	0.89
RC-006	Fresh	2.20	RH304	3.52	RH304	98.0	22.1	0.60	0.45
RC-007	Oxide	82.2	RH305	76.1	RH305	98.5	72.8	1.00	0.59
RC-008	Fresh	4.93	RH306	3.90	RH306	98.0	51.0	1.01	0.59

Table 3: Lake Roe RC Composite Grades

Total gold recoveries of 95.6% to 98.5% were achieved in the oxide zone and 95.6% to 98.0% in the fresh zone.

Gravity recoverable gold in the oxide zone averaged 35% with a range of 14% to 72%. Gravity recoverable gold in the fresh zone averaged 43% with a range of 22% to 60%. There is no obvious correlation between head grade and the percentage of gravity recoverable gold (or total gold recovery) in the oxide or primary zone.

Maximum gold extraction from gravity tails was achieved within 24 hours of leach time. Reagent consumption appears variable across the suite of samples with cyanide consumption varying from 0.54kg/t to 1.01kg/t and lime consumption in the range 0.35kg/t to 2.11kg/t.

Gravity and Cyanide Leach Gold Extraction of "horizontal" RC composites (oxide and fresh) Testing of the individual RC samples was followed by the production and testing of "horizontal" composites of shallow oxide/transition gold mineralisation, and the deeper fresh mineralisation extending from 6601080N to 6602120N (Figures 1 and 2).





These composites comprised equal weights of material as follows:

• Oxide/transition RC001, RC003, RC005, RC007 (Composite 1); and

Fresh RC002, RC004, RC006, RC008 (Composite 2).

The results for gravity recoverable gold and total gold extraction by direct leach (no carbon) and with carbon-in-leach (CIL), described as Gravity Leach and Gravity CIL below (for the oxide and fresh composite samples) are summarised in Table 4 which also details reagent requirements.

Sample	Ore Type	Test Type	Test Number	Calculated Head Grade Au (g/t)	Total Au Extraction (%)	Gravity Au (%)	NaCN Consumption (kg/t)	Lime Consumption (kg/t)
Composite 1	Oxide	Gravity Leach	RH311	22.22	98.8	77.8	1.07	1.61
Composite 2	Fresh	Gravity Leach	RH312	4.71	97.7	32.4	0.60	0.55
Composite 1	Oxide	Gravity CIL	RH313	22.34	94.0	78.4	2.33	1.10
Composite 2	Fresh	Gravity CIL	RH314	2.64	96.2	55.4	1.40	0.55

Table 4: Lake Roe RC Horizontal Composite Results

The two oxide composite samples of Composite 1 yielded gravity gold contents of close to 78% and overall recoveries of 94-98.8%.

The two fresh composite samples of Composite 2 yielded gravity gold contents of 32-55% and overall recoveries of 96.2-97.7%.

Gold extractions were generally complete well within 24 hours of leach time. The CIL total gold extraction results were slightly inferior to the direct leach extractions for the oxide and fresh samples which appears to be a consequence of the low levels of cyanide chosen to conduct this testwork. Additional testing of cyanide addition rates in the context of CIL performance appears warranted.

### **Preliminary Optimum Grind Size Assessment**

The RC samples did not present the opportunity to test the effect of grind size on gold recovery, as the gold extraction testwork on the RC samples was undertaken on pre-ground RC samples with a P80 size range of  $39\mu m$  to  $-60\mu m$ .

To assess the effect of grind size on gold recovery, three samples of crushed diamond core samples were prepared with a coarser grind size of 150µm, 106µm and 75µm (P80) using oxide and fresh mineralisation.

The results for gravity recoverable gold, total gold extraction (direct leach) and reagent consumption are summarised in Table 5.



Sample	Ore Type	Grind Size (μm)	Measured Head Grade Au (g/t)	Test Number	Calculated Head Grade Au (g/t)	Gravity Au (%)	Total Au Extraction (%)	NaCN Consumption (kg/t)	Lime Consumption (kg/t)
Composite 1	Oxide	150	3.81	RH325	3.81	39.1	95.8	0.38	1.39
Composite 1	Oxide	106	3.81	RH326	4.00	42.2	97.3	0.42	1.46
Composite 1	Oxide	75	3.81	RH327	3.97	45.2	97.5	0.47	1.19
Composite 2	Oxide	150	1.995	RH328	1.98	15.0	94.9	0.50	0.32
Composite 2	Oxide	106	1.995	RH329	1.94	20.3	95.0	0.42	0.34
Composite 2	Oxide	75	1.995	RH330	1.94	22.1	94.9	0.48	0.30
Composite 4	Fresh	150	2.825	RH331	2.55	85.7	99.0	0.37	0.28
Composite 4	Fresh	106	2.825	RH332	2.94	89.9	99.2	0.41	0.22
Composite 4	Fresh	75	2.825	RH333	2.94	90.8	99.1	0.43	0.23

Table 6: Lake Roe Gravity Leach Results for Three Different Grind Sizes

The results of this work suggest a target grind of 125µm to 106µm (P80) would be adequate to achieve optimum gold extraction (Figure 8). The solids tail grades at various grind sizings indicate that a grind P80 of 106µm would be adequate for the Lake Roe ores (Figure 9).

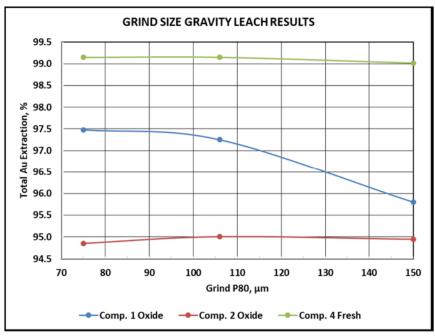


Figure 8: Effect of Grind Size on Gravity Leach Gold Extraction



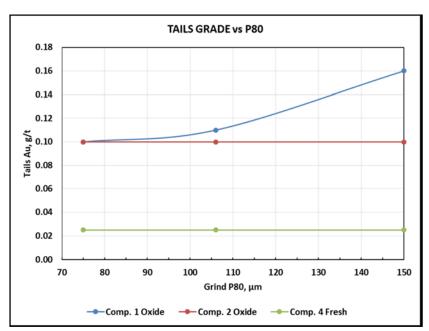


Figure 9: Effect of Grind Size on Tails Grade

The fresh gold mineralisation achieved near-maximum extraction at 106µm (P80) of 98.5% within 24 hours (Figure 5). The gold extraction rate for the two oxide samples was 93.3% and 98.5% within 24 hours.

Although the optimum grind size appears to lie in the range 106µm to 125µm, further testing on an extended range of drill core samples is warranted to confirm the most economical range of grind sizes for Lake Roe ores.

## **Future Metallurgical Testwork**

The following testwork is planned to further investigate the following aspects of the metallurgy at the Lake Roe project following the maiden resource:

- SAG milling amenability;
- Further assessment of the optimum grind size;
- Optimisation of reagent additions;
- Extend CIL testing; and
- Further testwork using site water.

## **Ularring Rock Project December 2017 Quarter Exploration Activities**

The main Ularring Rock tenement E70/4686 is located 100km east of Perth. The tenement covers the Centre Forest and Southern Brook gold-copper prospects, where historic RC drill intercepts of copper-gold mineralisation include 61m @ 0.83g/t Au, and 37m @ 0.72g/t Au and 0.26% Cu (WAMEX Report A75117).

An assessment of this project has highlighted considerable potential. The available data indicates a district scale mineralisation system best developed in the western sector of the tenement where remnant high-grade metamorphosed greenstone is present. The historical drill coverage is limited.



Multiple structural and geochemical targets are apparent including a large bullseye groundwater tungsten anomaly.

December 2017 quarter activities were limited to office studies and reconnaissance field investigations.

### **CORPORATE**

The Company's share register transferred from Advanced Share Registry Services to Automic Registry Services during October 2017. The contact details for Breaker Resources NL shareholder enquiries are:

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Phone (within Australia): 1300 288 664 Phone (outside Australia): +61 2 9698 5414

Postal Address: PO Box 2226

Strawberry Hills NSW 2012

Street Address: Level 2, 267 St George's Terrace

Perth WA 6000

The Company's annual general meeting was held on Thursday, 23 November 2017.

On 12 December 2017, 250,000 unlisted options were issued under the Company's employee option scheme. As at the date of this report, the Company's capital structure comprises:

- 145,095,344 fully paid ordinary shares (ASX: BRB)
- 5,671,623 partly paid ordinary shares (ASX: BRBCA)
- 8,650,000 unlisted options at various exercise prices and expiry dates

During the period the Company was represented at the Precious Metals Symposium in Melbourne and the Resources Rising Stars Summer Series events in Sydney and Brisbane.

Tom Sanders

Executive Chairman

**Breaker Resources NL** 

30 January 2018





## **APPENDIX 1: Tenement Schedule**

In line with obligations under ASX Listing Rule 5.3.3, Breaker provides the following information relating to its mining tenement holdings as at 31 December 2017.

Project	Tenement Number	Status at 31/12/17	% Held/ Earning	Changes during the Quarter
Lake Roe	E28/2515	Granted	100	
EGRO ROO	E28/2522	Granted	100	
	E28/2551	Granted	100	
	E28/2555	Granted	100	
	E28/2556	Granted	100	
	E28/2559	Granted	100	
	M28/388	<b>Application</b>	100	
Pinjin	E28/2629	Granted	100	
Ularring Rock	E70/4686 E70/4901	Granted Granted	100 100	

No tenements are subject to any farm-in or farm-out agreements.

## **COMPETENT PERSONS STATEMENT**

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Tom Sanders, Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Sanders is an executive of Breaker Resources NL and his services have been engaged by Breaker on an 80% of full time basis; he is also a shareholder and option holder in the Company. Mr Sanders 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'. Mr Sanders consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information in this report relates to metallurgical results based on information compiled by Mr Mike Kitney. Mr Kitney is a Member of the Australasian Institute of Mining and Metallurgy. Mr Kitney is a non-executive Director of Breaker Resources NL engaged as consultant to Breaker; he is also a shareholder in the Company. Mr Kitney has sufficient experience which is relevant to the nature of work and style of mineralisation under consideration 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 Kitney consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.