

# **ASX Announcement**

# MULTIPLE HIGH GRADE EXTENSIONS IDENTIFIED AT GOLDEN AGE

#### **Highlights**

- Golden Age underground mine has generated strong cash flows for the last 3 quarters.
- Approximately 180Koz @ 9g/t Au has been historically mined from Golden Age Middle area.
- Successful drilling confirms that Golden Age mineralisation is open both down and down dip, with mining to increasingly target the extensions defined from this drilling
- Drilling of Golden Age Lower Extensions located mineralisation 150-300m below the current mining levels:

•	6.9m @ 15.5 g/t Au	107 g*m	GARD0033
	2.0m @ 11.8 g/t Au	23 g*m	GARD0036

• Surface drilling at Golden Age North has intersected high grade shallower mineralisation amenable to both open pit and underground mining:

•	2m @ 28.3g/t Au from 75m	57 g*m	WURC0577
•	6m @ 7.97g/t Au from 106m and 1m @ 6.14g/t Au	54 g*m	WURC0583
•	8m @ 5.82 g/t Au from 87m	47 g*m	WURC0579
•	7m @ 1.52 g/t Au from 12m and 14m @ 1.26g/t Au	28 g*m	WURC0601
•	7m @ 2.97 g/t Au from 80m	21 g*m	WURC0567
•	4m @ 4.24 g/t Au from 94m	17 g*m	WURC0575
Infill drilling ha	as further extended remnant mineralisation currently bei	ing mined:	
•	2.1m @ 43.6g/t Au and 1.1m @ 7.28g/t Au	97 g*m	GAGC0244
•	6.5m @ 8.88g/t Au and 2.8m @ 5.81g/t Au	74 g*m	GAGC0243
•	5.1m @ 4.15g/t Au	21 g*m	GAGC0233
•	1.1m @ 17.4g/t Au	19 g*m	GAGC0238
•	2.1m @ 7.87g/t Au	16 g*m	GAGC0241

- Golden Age drilling programme to be extended further with a view to both lengthening the mine plan and increasing the mining rate at Golden Age.
- Free milling resources and reserves are currently being updated to incorporate recent Wiluna and Golden Age drilling success.

**Blackham Resources Limited** (ASX: BLK) (Blackham or the Company) is pleased to present an update on successful drill results from the high grade free milling Golden Age orebody which has significantly extended mineralisation beyond current mining areas. From March'18 to May'18, Blackham drilled 19 surface RC holes (2,117m) and 30 underground diamond holes (2,331m) focused on extensions to the Golden Age deposit.

#### **BOARD OF DIRECTORS**

Milan Jerkovic - Executive Chairman Bryan Dixon - Managing Director Greg Miles - Non-Executive Director Greg Fitzgerald – Non-Executive Director

ASX CODE BLK

#### **CORPORATE INFORMATION**

1,266M Ordinary Shares 534M Quoted Options 3.6M Unquoted Options

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Milan Jerkovic, Executive Chairman said "Blackham is pleased to announce new drill results from our high-grade Golden Age orebody which have identified significant extensions to mineralisation within 200m of existing underground development. Based on the highly encouraging intercepts, planning has commenced for further drilling to better define the mineralised extensions and to support early underground development to provide additional high-grade ore to feed the Wiluna gold plant, which last quarter produced 20,631oz @ AISC A\$1,092/oz".

#### **Background and Programme Details**

The Golden Age Underground mine is accessed via the Bulletin portal located only 2.5km from the 1.8Mtpa Wiluna gold plant. The Golden Age workings commenced in the 1890's and approximately 180,000oz @ 9g/t gold has been produced to date, with strong cash flows generated for the Company in the last three quarters. The discontinuous nature of the reef in places led to previous miners not accessing gold mineralisation in some areas previous mined. Recent mining of these remnant areas, armed with a greater understanding of the style of mineralisation, has produced additional gold from Golden Age over the past year. With the orebody now better understood, and the mineralisation open both down dip and down plunge, mining will increasingly target the extensions defined from this drilling.

Drill targets were aimed at maintaining a minimum 6-12 month mine life at Golden Age and to subsequently significantly increase mine capacity for the Golden Age mine area. The targets were arrived at following extensive data collation (including additional structural mapping) and a review of the stratigraphic sequence, deformation and mineralising events. Most of the drilling was aimed at defining extensions to the east and below the zone of mineralisation currently being mined. Grade control drilling in the remnant mining areas (at higher RLs) targeted areas where over-lapping, but separate, quartz lodes were previously missed; these remain viable mining targets.

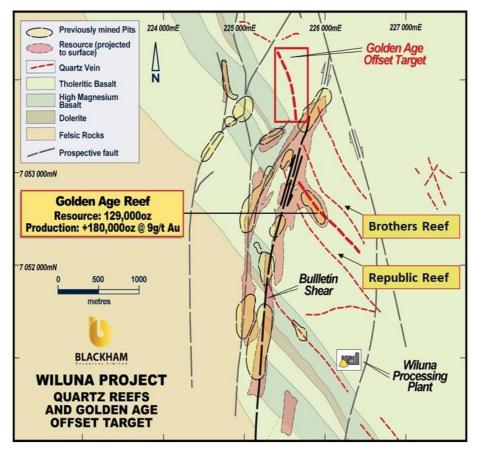


Figure 1. Plan view of Wiluna Project geology and Golden Age location.



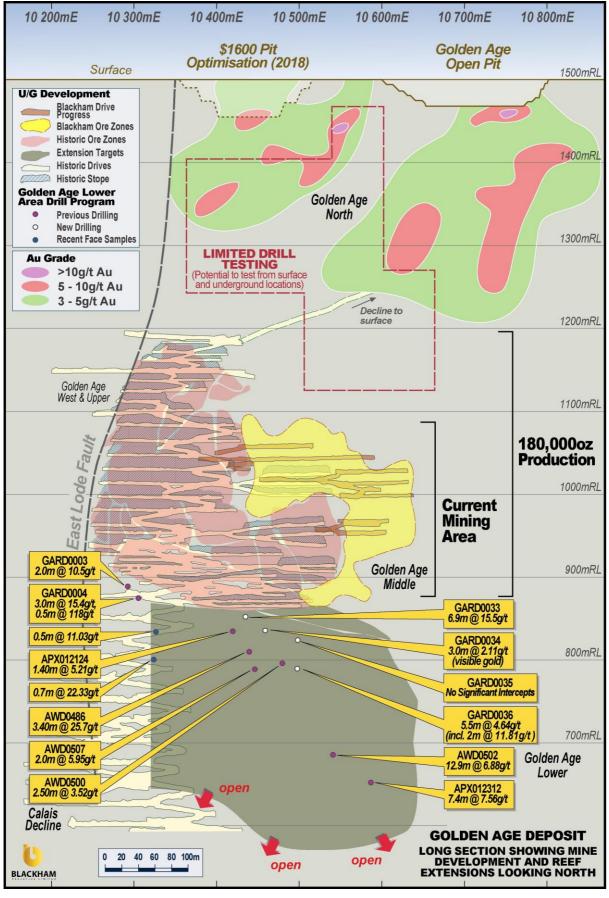


Figure 2. Golden Age long section showing mine development and latest drilling results.



## **Golden Age Lower Extensions**

A 2,464m diamond drilling programme is underway targeting depth extensions to Golden Age (Figure 2).

Initial drilling has returned highly successful results from the four holes drilled to date (730m), extending the zone of high grade mineralisation 150m below the current workings. The program specifically targeted an area interpreted to be a shallower dipping, dilational zone, preferential for the deposition of gold mineralisation.

All holes intercepted the strongly sheared Golden Age dolerite host rock and Golden Age quartz reef with three intercepts exhibiting the dominant galena and pyrite sulphide mineralisation typically associated with high grade zones. Reef intercepts varied from 1.2 - 6.9m in width with visible gold noted in one hole (GARD0034). Results received for these holes are:

6.9m @ 15.5 g/t Au	107 g*m	GARD0033	(see Photo 1 of core tray)
2.0m @ 11.8 g/t Au	23 g*m	GARD0036	
3.0m @ 2.11g/t Au	6 g*m	GARD0034	(visible gold in core- see Photo 2).

The results strongly support the potential for the continuation of underground mining at Golden Age and further drilling is now being planned (to commence in Jul-Aug'18) to establish an initial resource in this area. Positive results may provide the catalyst for early access via the nearby Calais Decline to enable a substantial increase in the mining rate.

The on-going drilling will also test this zone at greater depth (a further 120m lower) to enable early assessment for a significant additional resource increase.



Photo 1: GARD0033, Golden Age Shear Zone and thick laminated quartz reef with assay results of 6.9m @15.5g/t



Photo 2: Visible Gold in GARD0034 (3.0m @ 2.11 g/t Au) to be re-assayed by screen fire assay

#### Recent assay results from Calais Decline sampling.

Recent results from sampling the Calais Decline on both the 825 RL and 800 RL have confirmed the high grade Golden Age Lower reef intersects the walls of the decline (Figure 2, Photos 3 & 4). Four samples were taken across the 3.5m vein in the decline at the 825 RL. The results included: **11.03 g/t**, **6.86 g/t**, 1.42 g/t and 0.25 g/t Au.

Four samples were also taken across the 1.8m vein in the decline at the 800RL. The results included: 0.82 g/t, 0.24 g/t, **22.3 g/t** and 0.93 g/t Au.



Historical drilling has confirmed high grade mineralisation in AWD0502 (**12.9m @ 6.88g/t Au**) and APX012312 (**7.4m @ 7.56g/t Au**) 200m below where Blackham is currently mining on the 858RL, and 200m east of the Calais Decline (Figure 2).



Photo 3: Recent assays from the Calais Decline 825m RL, 75m below the historical mining area.

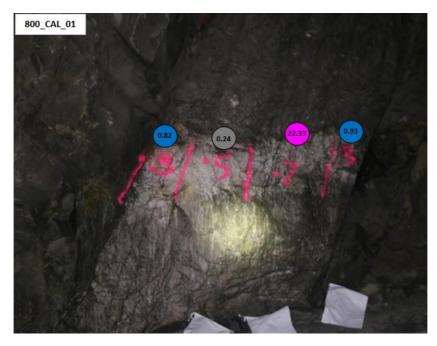


Photo 4: Recent assays from the Calais Decline 800m RL, 100m below the historical mining area.

Recent drilling has now confirmed high grade mineralisation 200m east of where these Calais Decline samples were taken in GARD0033 (**6.9m @ 15.5 g/t Au**) and GARD0036 (**2.0m @ 11.8 g/t Au**).

Golden Age Lower has never been mined as it is offset from Golden Age Middle zone by a barren dyke. Golden Age Lower currently has a small **resource of 168,000t** @ **4.72g/t for 25,000oz** (74% inferred). When the latest drill and face sampling results are combined with historical drilling it creates a very significant exploration target for Golden Age Lower all within 200m of existing access.



Blackham's geologists are currently planning additional drilling with a view to bring Golden Age Lower into the mine plan as a priority and to supply further high grade ore to the Wiluna gold plant.

### **Golden Age North**

The Golden Age North prospect is situated immediately north and along strike of the historically mined Golden Age pit, on a NW-SE-striking reef structure that dips at approximately 70° to the SW. Mineralisation is localised at the contacts of quartz-dolerite, tholeiitic basalt and intermediate porphyry rocks, with the best grades often associated with thick quartz veining.

Historical drilling, together with recent exploration drilling completed by Blackham has confirmed the continuity of the mineralised structure over a 600m strike and to a depth >150m, with mineralisation remaining open, both laterally and down-dip. Preliminary metallurgical test work indicates mineralisation at Golden Age North is also free-milling and is therefore considered an attractive feed for Blackham's Wiluna CIL processing facility, located only 2km away.

Drilling comprised of 19 holes for a total of 2,117m and was successful in intersecting high grade mineralisation over 600m of strike.

Significant intercepts from the drilling include:

7m @ 2.97 g/t from 80m (incl. <b>1m @ 13.4 g/t</b> from 84m)	WURC0567
4m @ 3.70 g/t from 118m (incl. <b>1m @ 6.55 g/t</b> from 120m)	WURC0569
2m @ 4.64 g/t from 88m (incl. <b>1m @ 8.34 g/t</b> from 88m)	WURC0570
4m @ 4.24 g/t from 94m (incl. <b>1m @ 13.3 g/t</b> from 96m)	WURC0575
2m @ 28.34 g/t from 75m (incl. 1m @ 47.0 g/t from 76m)	WURC0577
8m @ 5.82 g/t from 87m (incl. 4m @ 10.2 g/t from 89m)	WURC0579
12m @ 1.72 g/t from 59m (incl. <b>1m @ 6.96 g/t</b> from 60m)	WURC0580
6m @ 7.97 g/t from 106m (incl. 1m @ 37.1 g/t from 107m)	WURC0583



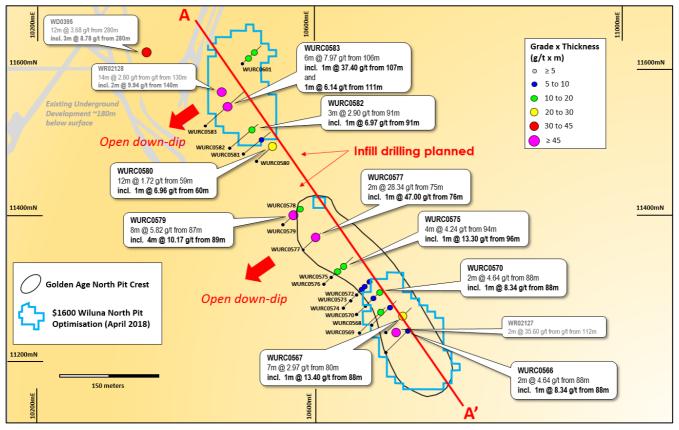


Figure 3. Overview map of the Golden Age North with significant intercepts from the latest drilling.

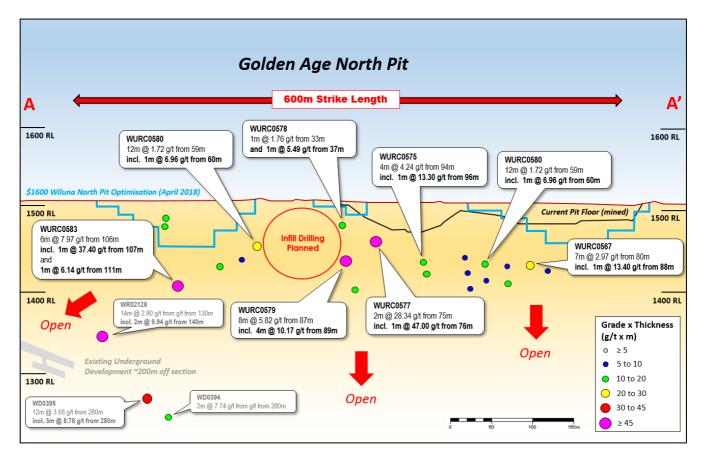


Figure 4. NW-SE-oriented long section through Golden Age North. Mineralisation open in multiple directions.



One of the underground diamond holes GAGC0241 (**1.0m** @ **15.5** g/t Au) appears to have intercepted the Golden Age North structure at a depth of 370m below surface, a further 220m deeper than the surface drilling. The Golden Age North structure looks to cross the Golden Age Middle orebody and development drives, suggesting they are separate structures. Further drilling is required to confirm that this intercept is the Golden Age North structure and that it remains open at depth.

Significant intercepts from the latest program lie outside of the current Golden Age North pit optimisation and below the existing mined pit floor. With the depth to fresh rock approximately 50m, the ore zones are amenable to both open pit and underground mining. The deeper, northern-most intercepts are located approximately 150m from existing underground infrastructure allowing for lower-cost underground access.

### Golden Age remnant mine plan growing

A diamond drilling grade control programme has been completed in conjunction with the resource extension drilling in the Golden Age Middle zone focussing on quartz lodes not identified or extracted by previous operators.

Two separate quartz lodes were intercepted in a number of holes validating the over-lapping nature of the reef. The best intercepts were:

92 g*m	GAGC0244
74 g*m	GAGC0243
21 g*m	GAGC0233
19 g*m	GAGC0238A
16 g*m	GAGC0241
	74 g*m 21 g*m 19 g*m

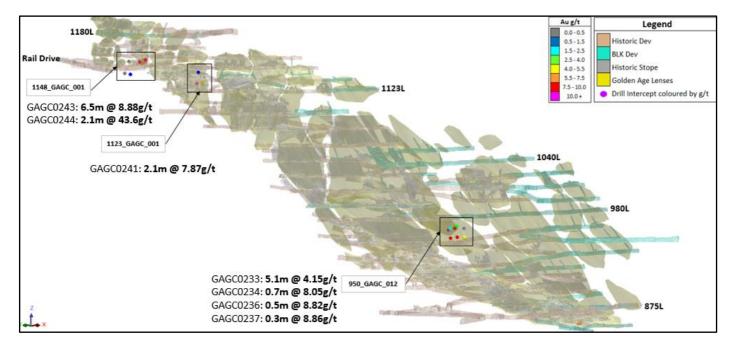


Figure 5. Long section of Golden Age Middle showing latest results in remnant zones currently being mined.

This drilling has extended the current mine plan of three lenses in the remnant part of the mine. This additional ore is expected to be mined over the next 4 months.



Following the successful drilling campaign, Blackham is re-estimating the open pit free milling resources and reserves around the Wiluna Mine site. Blackham's management team believes the free milling ores within the existing Wiluna Mine footprint are an attractive feed stock for the current operating mill and allows for fast tracking mining approvals.

Blackham has also commenced a 2,600m RC and Diamond drill programme for the Lake Way prospects targeting the southern extensions to the Williamson orebody and the 2.5 kilometres of strike on the Carroll-Prior structure. No exploration drilling has taken place in this area for over 12 years.

## For further information on Blackham please contact:

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Matilda-Wiluna Gold Operation Measured, Indicated & Inferred Resources (JORC 2012) at 30 June 2017. **OPEN PIT RESOURCES** Measured Indicated Inferred Total 100% **Mining Centre** Mt g/t Au Koz Au Matilda Mine OP 0.9 1.5 44 6.1 1.7 340 4.1 1.4 185 11.1 1.6 569 Galaxy 0.7 1.4 32 0.1 3.7 5 0.2 2.8 16 1.0 1.6 53 Williamson Mine 3.3 1.6 170 3.8 1.6 190 7.1 1.6 360 Wiluna OP1 13.6 2.6 1150 3.3 3.3 355 16.9 2.8 1,505 Regent 0.7 2.7 61 3.1 2.1 210 3.8 2.2 271 **Stockpiles** 04 09 11 0.4 09 11 **OP** Total 15 2.1 956 2,769 24 2.2 1,737 40 2.1 Total 100% Measured Indicated Inferred **Mining Centre** g/t Au g/t Au Mt Koz Au Mt g/t Au Koz Au Mt Koz Au Mt g/t Au Koz Au Golden Age UG 0.2 0.6 0.9 0.1 4.2 8 7.1 46 3.8 75 4.5 129 Wiluna UG 8.2 5.5 1441 14.6 4.4 2086 4.8 3,527 23 Matilda Mine UG 0.1 2.5 10 0.6 0.7 3.6 3.6 70 80 UG Total 5.5 1.497 16 4.4 0.1 4.2 8 q 2.231 24 4.8 3.736 Grand Total 3.234 30 3.3 3.187 6.505

Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location shape and continuity of the occurrence and on the available sampling results. The figures in the above table are rounded to two significant figures to reflect the relative uncertainty of the estimate.

#### **Competent Persons Statement**

The information contained in the report that relates to Exploration Targets and Exploration Results at the Matilda-Wiluna Gold Operation ("Operation") is based on information compiled or reviewed by Mr Cain Fogarty, who is a full-time employee of the Company. Mr Cain Fogarty is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is 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 Fogarty has given consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.



The information contained in the report that relates to all other Mineral Resources is based on information compiled or reviewed by Mr Marcus Osiejak, who is a full-time employee of the Company. Mr Osiejak, is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is 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 Osiejak has given consent to the inclusion in the report of the matters based on this information in the form and context in which it appears. With regard to the Matilda-Wiluna Gold Operation Mineral Resources, the Company is not aware of any new information or data that materially affects the information included in this report and that all material assumptions and parameters underpinning Mineral Resource Estimates as reported in the market announcements dated 12 October 2017 continue to apply and have not materially changed.

#### **Forward Looking Statements**

This announcement includes certain statements that may be deemed 'forward-looking statements'. All statements that refer to any future production, resources or reserves, exploration results and events or production that Blackham Resources Ltd ('Blackham' or 'the Company') expects to occur are forward-looking statements. Although the Company believes that the expectations in those forward-looking statements are based upon reasonable assumptions, such statements are not a guarantee of future performance and actual results or developments may differ materially from the outcomes. This may be due to several factors, including market prices, exploration and exploitation success, and the continued availability of capital and financing, plus general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance, and actual results or performance may differ materially from those projected in the forward-looking statements. The Company does not assume any obligation to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise.

Hole ID	East (MGA)	North (MGA)	RL	EOH (m)	Dip	Azi (MGA)	From (m)	To (m)	Width (m)	Au (g/t)	True Width (m)
WURC0566	225867	7052535	510	120	-54.7	45.9	95	98	3	1.54	2.0
WURC0567	225863	7052566	511	128	-60.2	47.5	80	87	7	2.97	4.7
WURC0567						incl.	84	85	1	13.40	0.7
WURC0568	225838	7052577	511	115	-61	45.2	97	102	5	1.23	3.3
WURC0569	225824	7052562	511	130	-60	46.5	118	122	4	3.70	2.7
WURC0569						incl.	120	121	1	6.55	0.7
WURC0570	225833	7052608	511	120	-59.9	45.3	88	90	2	4.64	1.3
WURC0570						incl.	88	89	1	8.34	0.7
WURC0571	225819	7052593	511	140	-59.8	45	110	113	3	1.38	1.3
WURC0572	225819	7052629	511	100	-61.4	44.2	79	81	2	1.89	1.3
WURC0573	225805	7052614	511	115	-60.5	46	104	106	2	0.82	2.0
WURC0573							109	112	3	1.27	3.0
WURC0574	225791	7052600	512	136	-60	45	123	126	3	2.51	2.0
WURC0575	225772	7052653	512	102	-55	45.3	94	98	4	4.24	2.7
WURC0575						incl.	96	97	1	13.30	0.7
WURC0576	225758	7052638	512	125	-54.3	45.6	110	115	5	1.59	3.3
WURC0576							120	121	1	1.59	0.7
WURC0577	225735	7052686	514	100	-50.1	46.3	75	77	2	28.34	1.3
WURC0578	225727	7052750	513	80	-60.7	46.3	33	34	1	1.76	0.7
WURC0578							37	38	1	5.49	0.7
WURC0579	225712	7052735	512	100	-61.3	45.9	87	95	8	5.82	5.3
WURC0579						incl.	89	93	4	10.17	2.7

## Appendix 1. Drill hole details and significant intercepts.



WURC0580	225667	7052831	512	80	-60.5	45.3	59	71	12	1.72	8.0
WURC0580						incl.	60	61	1	6.96	0.7
WURC0581	225644	7052845	511	100	-59.8	49.3	77	79	2	3.20	1.3
WURC0581						incl.	77	78	1	5.30	0.7
WURC0582	225622	7052858	511	106	-60	45.4	91	94	3	2.90	2.0
WURC0582						incl.	91	92	1	6.97	0.7
WURC0583	225583	7052889	511	150	-60	45.8	106	112	6	7.97	4.0
WURC0583						incl.	107	108	1	37.40	0.7
WURC0583						and	111	112	1	6.14	0.7
WURC0601	225639	7052986	512	70	-60.3	43.6	12	19	7	1.52	4.7
WURC0601							23	26	3	1.58	2.0
WURC0601							30	44	14	1.26	9.3
WURC0601							65	66	1	1.38	0.7
GARD0029	226233	7051920	-139	161.8	-45.3	248.3	129.5	130.3	0.77	1.36	0.3
GARD0030	225784	7052461	-47	179	-35.6	244.4	162.7	165	2.3	1.01	1.5
GARD0033	225488	7052422	-210	156	19.4	131.1	127	133.9	6.9	15.54	4.6
GARD0033						incl.	127	130.2	3.2	31.97	2.1
GARD0033							140.2	143.6	3.4	1.65	2.3
GARD0034	225488	7052422	-211	177	7.5	131.6	157	160	3	2.11	2.0
GARD0035	225488	7052422	-211	264	7.2	123.5	NSI				
GARD0036	225487	7052422	-211	213	2	127.3	194	199.5	5.5	4.64	3.7
GARD0036						incl.	195	197	2	11.81	1.3
GAGC0226	225621	7052414	-140	26	1.9	313	15.4	17.9	2.6	2.74	1.7
GAGC0226						incl.	16.8	17.3	0.6	9.48	0.4
GAGC0227	225621	7052414	-142	22	-51	294	NSI				
GAGC0228	225623	7052422	-140	20	7.3	334	5	7.2	2.2	4.44	1.5
GAGC0228						Incl.	6.5	7.2	0.7	8.99	0.5
GAGC0229	225625	7052421	-142	22	-42.4	7.2	1	2	1	1.96	0.7
GAGC0231	226237	7051860	-151	28	-27.6	349.4	NSI				
GAGC0233	225549	7052606	-44	30	52.4	156.5	15	20.1	5.1	4.15	3.4
GAGC0233						incl.	15	16	1	12.03	0.7
GAGC0234	225549	7052606	-45	35	42.1	126.7	21.4	22.1	0.7	8.05	0.5
GAGC0234							24.4	25.4	1	3.51	0.7
GAGC0236	225549	7052606	-47	32	20.3	181.6	17.9	18.4	0.5	8.82	0.3
GAGC0237	225549	7052606	-47	35	19.2	154.1	21.2	21.5	0.3	8.86	0.2
GAGC0238A	225549	7052606	-47	40	14.5	137.8	27.1	27.8	0.7	4.17	0.5
GAGC0238A							38.5	39.6	1.1	17.43	0.7
GAGC0240	225484	7052934	128	18	20	264.8	13.6	17.5	3.8	1.93	2.5
GAGC0240						incl.	13.6	14	0.4	5.41	0.3
GAGC0241	225484	7052935	127	25	15.4	278.9	19.9	22	2.1	7.87	1.4
GAGC0241						incl.	19.9	20.9	1	15.47	0.7
GAGC0242	226751	7051716	145	39	46.5	296.4	23	24	1	0.80	1
GAGC0243	225477	7053041	151	35	14.5	218.7	17.2	20	2.8	5.81	1.9
GAGC0243						incl.	17.2	18	0.8	12.30	0.5



GAGC0243							26.5	33	6.5	8.88	4.3
GAGC0244	225477	7053041	151	37	10.4	237.6	13.1	14.2	1.1	7.28	0.7
GAGC0244							25.9	28	2.1	43.60	1.4
GAGC0244						incl.	25.9	27.4	1.5	60.64	1.0
GAGC0245	226841	7051694	141	43	- 14.37	255.84	33.98	34.45	0.47	1.40	0.4
GAGC0248	225550	7052969	188	98	-11.1	238.6	9	11	2	2.76	1.3
GAGC0248							27.6	28.6	1	3.87	0.7
GAGC0252	225544	7053046	182	70	7.9	233.2	29	29.8	0.8	7.92	0.5
GAGC0253	225544	7053046	182	70	10.5	221.3	19.7	20.6	0.9	2.05	0.6
GAGC0253							29.5	30.4	1	3.32	0.7
GAGC0253						incl.	30	30.4	0.5	6.28	0.3
GAGC0253							44.4	44.6	0.3	8.41	0.2
GAGC0253							57	59	2	0.81	1.3
GAGC0254	225544	7053046	182	76	11.1	215.5	20	21	1	1.46	0.7
GAGC0254							27	31	4	2.07	2.7
GAGC0254							60.4	61	0.6	3.46	0.4
GAGC0255	225544	7053046	181	82	-1.9	235.3	26.4	26.8	0.4	15.64	0.3
GAGC0255							30.5	32.4	1.9	6.63	1.3
GAGC0255							31.3	32.4	1.1	10.44	0.7
GAGC0255							35	36	1	2.15	0.7
GAGC0255							49.4	50	0.6	2.59	0.4
GAGC0255							66.9	67.5	0.5	5.31	0.3
GAGC0255							69.5	70.1	0.5	2.61	0.3
GAGC0256A	225544	7053046	181	84	-3.1	230.1	20.7	21.5	0.8	2.06	0.5
GAGC0256A							56	58.4	2.4	3.99	1.6
GAGC0256A						incl.	58	58.4	0.4	6.50	0.3
GAGC0256A							73.7	77.2	3.5	2.11	2.3
GAGC0256A							74	74.8	0.8	6.69	0.5
GAGC0257	225544	7053046	181	100	-2.4	221.1	21.1	21.4	0.3	5.42	0.2
GAGC0257							28.9	29.4	0.5	5.30	0.3
GAGC0257							94.5	95	0.6	5.25	0.4
GAGC0258	225544	7053046	181	113	-1.7	213.1	31	32.2	1.2	2.67	0.8
GAGC0258						incl.	31.8	32.2	0.5	5.88	0.3
GAGC0258							81.5	82.4	1	8.60	0.7
GAGC0258							104.6	105.5	0.9	7.41	0.6
GAGC0258							109	111.1	2	2.17	1.3
GAGC0258						incl.	110.6	111.1	0.5	6.93	0.3



# Appendix 2

# JORC Code, 2012 Edition – Table 1 (Wiluna Gold Operation)

## Section 1 Sampling Techniques and Data

## (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Blackham Resources has used i) reverse circulation drilling to obtain 1m samples from which ~3kg samples were collected using a cone splitter connected to the rig, ii) NQ2 with ½ core sampling or LTK60 with full core sampling, and iii) face sampling.</li> <li>Blackham's sampling procedures are in line with standard industry practice to ensure sample representivity. Core samples are routinely taken from the right-hand-side of the cut line. For Blackham's RC drilling, the drill rig (and cone splitter) is always jacked up so that it is level with the earth to ensure even splitting of the sample. Face samples are taken across the quartz vein, with sample intervals matched to varying intensity of mineralisation as indicated by shearing and sulphides.</li> <li>Historically (pre-Blackham Resources), drill samples were taken at predominantly 1m intervals in RC holes, or as 2m or 4m composites in AC holes. Historical core sampling is at various intervals so it appears that sampling was based on geological observations at intervals determined by the logging geologist.</li> <li>At the laboratory, samples &gt;3kg were 50:50 riffle split to become &lt;3kg. The &lt;3kg splits were crushed to &lt;2mm in a Boyd crusher and pulverized via LM5 to 90% passing 75µm to produce a 50g charge for fire assay. Historical assays were obtained using either aqua regia digest or fire assay, with AAS readings.</li> <li>Blackham analysed RC samples and GARD* holes using ALS laboratories in Perth. Analytical method was Fire Assay with a 50g charge and AAS finish. GAGC* holes and face samples were pulverized in an LM5 bowl to produce a 30g charge for assay by Fire Assay with AAS finish at the Wiluna Mine site laboratory.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Blackham data reported herein is RC 5.5" diameter holes. Diamond drilling is oriented NQ or LTK60 core.</li> <li>Historical drilling data contained in this report includes RC, AC and DD core samples. RC sampling utilized face-sampling hammer of 4.5" to 5.5" diameter, RAB sampling utilized openhole blade or hammer sampling, and DD sampling utilized NQ2 half core samples. It is unknown if core was orientated, though it is not material to this report. All Blackham RC drilling used a face-sampling bit.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>For Blackham RC drilling, chip sample recovery is visually estimated by volume for each 1m bulk sample bag, and recorded digitally in the sample database. For DD drilling, recovery is measured by the drillers and Blackham geotechnicians and recorded into the digital database. Recoveries were typically 100% except for the non-mineralised upper 3 or 4m in RC holes. For historical drilling, recovery data for drill holes contained in this report has not been located or assessed, owing to incomplete data records. Database compilation is ongoing.</li> <li>RC drilling, sample recovery is maximized by pulling back the drill hammer and blowing the entire sample through the rod string at the end of each metre. Where composite samples are taken, the sample spear is inserted diagonally through the sample bag from top to bottom to ensure a full cross-section of the sample is collected. To minimize contamination and ensure</li> </ul>



		<ul> <li>an even split, the cone splitter is cleaned with compressed air at the end of each rod, and the cyclone is cleaned every 50m and at the end of hole, and more often when wet samples are encountered. Historical practices are not known, though it is assumed similar industry-standard procedures were adopted by each operator. For historical drilling with dry samples it is unknown what methods were used to ensure sample recovery, though it is assumed that industry-standard protocols were used to maximize the representative nature of the samples, including dust-suppression and rod pull-back after each drilled interval. For wet samples, it is noted these were collected in polyweave bags to allow excess water to escape; this is standard practice though can lead to biased loss of sample material into the suspended fine sample fraction. For DD drilling, sample recovery is maximised by the use of short drill runs (typically 1.5m).</li> <li>For Blackham drilling, no such relationship was evaluated as sample recoveries were generally excellent. Face sampling is generally prone to higher-grade bias, though bias effects were not studied on these samples owing to the reconnaissance stage.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Drill samples have been logged for geology, alteration, mineralisation, weathering, geotechnical properties and other features to a level of detail considered appropriate for geological and resource modelling.</li> <li>Logging of geology and colour for example are interpretative and qualitative, whereas logging of mineral percentages is quantitative.</li> <li>All holes were logged in full.</li> <li>Core photography was taken for BLK diamond drilling.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>For core samples, Blackham uses half core cut with an automatic core saw. Samples have a minimum sample width of 0.1m and maximum of 1.2m, though typically 1m intervals were selected. A cut line is routinely drawn at an angle 10 degrees to the right of the orientation line. Where no orientation line can be drawn, where possible samples are cut down the axis of planar features such as veins, such that the two halves of core are mirror images.</li> <li>For historical drilling sampling techniques and preparation are not known. Historical core in storage is generally half core, with some quarter core remaining; it is assumed that half core was routinely analysed, with quarter core perhaps having been used for check assays or other studies. Holes have been selectively sampled (visibly barren zones not sampled), with a minimum sample width of 0.3m and maximum of 1.2m, though typically 1m intervals have been left un-sampled).</li> <li>RC sampling with cone splitting with 1m samples collected. 4m scoop composites compiled from individual 1m samples. RC sampling with riffle or cone splitting and spear compositing is considered standard industry practice.</li> <li>For historical samples the method of splitting the RC samples is not known. However, there is no evidence of bias in the results.</li> <li>Blackham drilling, 1m RC samples were split using a cone splitter. Most samples were dry; the moisture content data was logged and digitally captured. Where it proved impossible to maintain dry samples, at most three consecutive wet samples were obtained before drilling was abandoned, as per procedure. AC samples were appliting is considered to be standard industry practice; each sample splitting is considered to be standard industry practice, each sample split chus. At the laboratory, &gt;3kg samples are split 50:50 using a riffle splitter so they can fit into a LMS pulveriser bowl.</li> <li>Field duplicates were collected approximately every 20m down hole for Blackham holes. With a minimum of</li></ul>



Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>between primary and duplicate samples. RC duplicates are taken using the secondary sample chute on the cone splitter. AC duplicates were scooped in the field. It is not clear how the historical field duplicates were taken for RC drilling.</li> <li>Riffle splitting and half-core splitting are industry-standard techniques and considered to be appropriate. Note comments above about samples through 'stope' intervals; these samples don't represent the pre-mined grade in localized areas.</li> <li>For historical drilling, field duplicates, blank samples and certified reference standards were collected and inserted from at least the early 2000's. Investigation revealed sufficient quality control performance. No field duplicate data has been located or evaluated in earlier drilling. Field duplicates were collected every 20m down hole for Blackham holes. Analysis of results indicated good correlation between primary and duplicate samples.</li> <li>Sample sizes are considered appropriate for these rock types and style of mineralisation, and are in line with standard industry practice.</li> <li>Fire assay is a total digestion method. The lower detection limits of 0.01ppm is considered fit for purpose. For Blackham Exploration drilling, ALS completed the analyses using industry best-practice protocols. ALS is globally-recognized and highly-regarded in the industry. Historical assaying was undertaken at Amdel, SGS, and KalAssay laboratories, and by the on-site Agincourt laboratory. The predominant assay method was by Fire Assay with AAS finish. The lower detection limit of 0.01ppm Au used is considered fit for purpose.</li> <li>No geophysical tools were required as the assays directly measure gold mineralisation. For Blackham drilling, down-hole survey tools were checked for calibration at the start of the drilling program and every two weeks.</li> <li>Comprehensive programs of QAQC have been adopted since the 1980's. For Blackham drilling certified reference material, blanks and duplicates were submitted to an umpi</li></ul>
Verification of sampling and assaying Location of data	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>these results typically shows no smearing has occurred.</li> <li>Blackham's significant intercepts have been verified by several company personnel, including the database manager and exploration manager.</li> <li>Twinned holes were not drilled in this program, however, correlation between intercepts was generally poor when intercepts were greater than 20m apart reflecting the short range variability expected in a gold orebody like Wiluna</li> <li>Wiluna data represents a portion of a large drilling database compiled since the 1930's by various project owners.</li> <li>Data is stored in Datashed SQL database. Internal Datashed validations and validations upon importing into Micromine were completed, as were checks on data location, logging and assay data completeness and down-hole survey information. QAQC and data validation protocols are contained within Blackham's manual "Blackham Exploration Manual 2018". Historical procedures are not documented.</li> <li>The only adjustment of assay data is the conversion of lab non-numeric code to numeric for estimation.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> </ul>	<ul> <li>All historical holes appear to have been accurately surveyed to centimetre accuracy. Blackham's drill collars are routinely surveyed using a DGPS with centimetre accuracy, though coordinates reported herein are GPS surveyed to metre-scale accuracy.</li> </ul>



Data spacing and distribution	<ul> <li>Quality and adequacy of topographic control.</li> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Grid systems used in this report are Wil10 local mine grid and GDA 94 Zone 51 S. Drilling collars were originally surveyed in either Mine Grid Wiluna 10 or AMG, and converted in Datashed to MGA grid.</li> <li>An accurate topographical model covering the mine site has been obtained, drill collar surveys are closely aligned with this. Away from the mine infrastructure, drill hole collar surveys provide adequate topographical control.</li> <li>Blackham's exploration holes are generally drilled 25m apart on east-west sections, on sections spaced 50m apart north-south.</li> <li>Using Blackham's drilling and historical drilling, a spacing of approximately 12.5m (on section) by 20m (along strike) is considered adequate to establish grade and geological continuity. Areas of broader drill spacing have also been modelled but with lower confidence.</li> <li>The mineralisation lodes show sufficient continuity of both geology and grade between holes to support the estimation of resources which comply with the 2012 JORC guidelines</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Samples have been composited only where mineralisation was not anticipated. Where composite samples returned significant gold values, the 1m samples were submitted for analysis and these results were prioritized over the 4m composite values.</li> <li>RC drill holes were generally orientated perpendicular to targets to intersect predominantly steeply-dipping north-south or northeast-southwest striking mineralisation, though UG DD holes were in places drilled obliquely; true widths are shown in the significant intercepts table.</li> <li>The perpendicular orientation of the drillholes to the structures minimises the potential for sample bias.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>It is not known what measures were taken historically. For Blackham drilling, Drill samples are delivered to McMahon Burnett freight yard in Wiluna by Blackham personnel, where they are stored in a gated locked yard (after hours) until transported by truck to the laboratory in Perth. In Perth the samples are likewise held in a secure compound.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No external audit has been completed for this resource estimate. For Blackham drilling, data has been validated in Datashed and upon import into Micromine. QAQC data has been evaluated and found to be satisfactory.</li> </ul>

### Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <li>The drilling is located wholly within M53/200, M53/44, M53/40, M53/30, M53/468, M53/96, M53/32. The tenements are owned 100% by Matilda Operations Pty Ltd, a wholly owned subsidiary of Blackham Resources Ltd.</li> <li>The tenements are in good standing and no impediments exist.</li> <li>Franco Nevada have royalty rights over the Wiluna Mine mining leases of 3.6% of net gold revenue.</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Modern exploration has been conducted on the tenement intermittently since the mid-1980's by various parties as tenure changed hands many times. This work has included mapping and rock chip sampling, geophysical surveys and extensive RAB, RC and core drilling for exploration, resource definition and grade control purposes. This exploration is considered to have been successful as it led to the eventual economic exploitation of several open pits during the late 1980's / early 1990's, and underground mining until 2013. The deposits remain 'open' in various locations and opportunities remain to find extensions to the known potentially economic</li> </ul>



		mineralisation.
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The gold deposits are categorized as orogenic gold deposits, with similarities to most other gold deposits in the Yilgarn region. The deposits are hosted within the Wiluna Domain of the Wiluna greenstone belt.</li> </ul>
Drill hole Information	<ul> <li>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:         <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> </li> <li>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.</li> </ul>	• There is no new drilling information included in this release
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>In the significant intercepts are reported as length-weighted averages, above a 1m @ 0.6g/t cut-off, or &gt; 1.2 gram x metre cut off (to include narrow higher-grade zones) using a maximum 2m contiguous internal dilution. For the body of the report and in Figures, wider zones of internal dilution are included for clearer presentation. AC intercepts are based on 4m composites.</li> <li>High-grade internal zones are reported at a 5g/t envelope, e.g. MADD0018 contains 14.45m @ 6.74g/t from 162.55m including 4.4m @ 15.6g/t from 162.55m.</li> <li>No metal equivalent grades are reported because only Au is of economic interest.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>Lode geometries at Wiluna are generally steeply east or steeply west dipping. Generally the lodes strike north- northeast. Historical drilling was oriented vertically or at -60° west, the latter being close to optimal for the predominant steeply-east dipping orientation. Drill holes reported herein have been drilled as closed to perpendicular to mineralisation as possible. In some cases due to the difficulty in positioning the rig close to remnant mineralisation around open pits this is not possible. True widths are included in the significant intercepts table.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	See body of this report.
Balanced reporting	<ul> <li>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.</li> </ul>	80,000 holes is not feasible.
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	Other exploration tests are not the subject of this report.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Follow-up resource definition drilling is likely, as mineralisation is interpreted to remain open in various directions.</li> <li>Diagrams are provided in the body of this report.</li> </ul>