

# 30 SEPTEMBER 2019

# ASX/MEDIA RELEASE

# BARDOC GOLD RESOURCE HITS +3Moz UNDERPINNING MINING STUDIES AND NEXT PHASE OF GROWTH

17% increase Global Mineral Resource to 3.02Moz follows successful drilling and acquisition strategy, supporting open pit and underground mining studies

# **Key Points:**

- Total Mineral Resource Estimate (MRE) for 100%-owned Bardoc Gold Project near Kalgoorlie increases to <u>49.4Mt @ 1.9g/t Au for 3.02Moz</u> of contained gold:
  - 17% increase in global ounces to 3.02Moz;
  - 28% increase in global tonnes to 49.4Mt;
  - $\circ~$  19% increase in Indicated Resource to 28.88Mt at 1.9g/t now 58.5% of the total; and
  - 11% increase in Indicated Resource ounces to 1.77Moz Au.
- Significant 20% increase in Mineral Resource for the cornerstone Zoroastrian deposit to 515koz.
- Resource grade of Zoroastrian deposit increases from 2.1 to 2.3g/t Au.
- Resource base will be used to underpin Pre-Feasibility Study to be released in Q1 2020.

Bardoc Gold Limited (ASX: **BDC**, **Bardoc** or **the Company**) is pleased to advise that it has taken a further important step towards its objective of building a significant new mid-tier Australian gold company after delivering a substantial increase in the Mineral Resource for its 100%-owned **Bardoc Gold Project**, located 50km north of Kalgoorlie in Western Australia to over 3 million ounces.

The updated project-wide Measured, Indicated and Inferred Mineral Resource, which follows highly successful drilling, exploration and strategic acquisition initiatives during the year, now stands at:

# 49.4Mt @ 1.9g/t Au for 3.02Moz of contained gold.

This updated Mineral Resource Estimate (MRE) contains **42.2Mt** @ **1.5g/t** Au for **2.06Moz** classified as being potentially open pittable and **7.2Mt** @ **4.1g/t** Au for **962koz** that may be amenable to underground mining methods.

The updated Mineral Resource base of 3.02Moz is available for mining studies as part of the Pre-Feasibility Study currently underway and due for completion in Q1 2020.



Updated MRE's have been completed for the Aphrodite Underground and Zoroastrian Underground deposits. Updated MRE's classified as being amenable to open pit mining methods have also been completed for the Grafters, El Dorado, Nerrin Nerrin and Talbot North deposits.

The Company is also announcing new MREs for South Castlereagh and Duke North, while restating previously reported MRE's for open pit material at Aphrodite, Zoroastrian, Excelsior and Lochinvar using cut-off grades that better reflect the contained gold in these resources that can be used in future mining studies.

# **MANAGEMENT COMMENTS**

Bardoc Gold's Chief Executive Officer, Mr Robert Ryan, said the substantial increase in the Company's global Mineral Resource Estimate marked another step in its journey to develop the next significant independent gold mining operation in the Kalgoorlie district.

"The Company has delivered an updated MRE with over 3Moz of contained gold in a high-quality resource base which now comprises around 2Moz of open pittable material and around 1Moz of Resources that are amenable to underground mining. Importantly, we have also increased the geological confidence levels in a number of deposits, converting nearly 200koz of Inferred into Indicated Resources.

"Against the backdrop of record Australian Dollar gold prices, this large and high-quality gold Resource base in a Tier-1 location represents an extremely valuable asset which puts Bardoc Gold in a fantastic position to complete feasibility studies and continue its strategy of aggressive growth to become a new gold producer.

"While there has been significant increase in Resource ounces across a number of deposits, the growth in the Zoroastrian underground resource of more than 80koz is particularly notable, as this will provide strong support for future underground mining operations and is expected to be an important source of free-milling ore to the consolidated Bardoc Gold Project. Zoroastrian has not been closed off and remains open at depth.

"The increase in Resources across our satellite deposits shows that we have a very strong growth pipeline with many deposits having been limited in scale historically simply due to a lack of drilling. An excellent example is El Dorado, where previously announced drilling results (reported on the 28<sup>th</sup> August) have led to a modest increase in the Resource estimate, however this area remains open along strike and downplunge. These should further add to the MRE over time.

"Following the recently completed highly successful capital raising, the Company has already recommenced drilling with a view to further expanding our Mineral Resources and upgrading Inferred Resources to Measured and Indicated status. Follow-up drilling is currently underway at El Dorado and we are looking forward to drill-testing the recently acquired North Kanowna Star, Mayday and Vettersburg Projects.

"In addition to ongoing exploration news-flow, shareholders can look forward to the delivery of a Pre-Feasibility Study based on the current 3Moz Mineral Resource Estimate in Q1 2020. Ongoing drilling will then feed into a further Resource update next year which will form the basis of a Definitive Feasibility Study, most likely kicking off by mid-year.



BARDOC GOLD RESOUR		т	M	EASURED		IN	DICATE	D	IN	FERRED	)	TOTAL	RESOL	JRCES	
Deposit	Туре	Cut-Off (g/t Au)	Tonnes (.000t)	Grade (g/t Au)	Ounces (.000oz)	Original AS Report Dat									
Aphrodite	ОР	0.4	-	-	-	11,622	1.7	619	6,676	1.4	298	18,288	1.6	916	22-May-18
Aphrodite	UG	2.0	-	-	-	3,458	3.9	436	2,391	4.3	330	5,848	4.1	765	_
Aphrodite	TOTAL		-	-	-	15,080	2.2	1,055	9,067	2.2	628	24,136	2.2	1,681	_
Zoroastrian	ОР	0.4	-	-	-	3,862	1.8	229	1,835	1.5	89	5,698	1.7	318	22-May-18
Zoroastrian	UG	2.0	-	-	-	580	4.4	82	823	4.3	114	1,403	4.4	197	
Zoroastrian	TOTAL		-	-	-	4,442	2.2	311	2,658	2.4	203	7,101	2.3	515	
Excelsior	OP	0.4	-	-	-	6,729	1.2	266	1,749	1.0	54	8,478	1.2	320	
Mulwarrie	OP	0.5	-	-	-	-	-	-	881	2.8	79	881	2.8	79	13-Nov-18
Bulletin South	OP	0.4	152	2.2	11	546	2.1	36	150	2.1	10	849	2.1	57	
Lochinvar	OP	0.4	-	-	-	423	1.8	24	57	1.6	3	480	1.7	27	19-Feb-14
Nerrin Nerrin	OP	0.5	-	-	-	-	-	-	651	1.3	26	651	1.3	26	
Ophir	OP	0.6	-	-	-	-	-	-	75	1.9	5	75	1.9	5	11-Dec-13
Vettersburg South	OP	0.6	-	-	-	-	-	-	552	1.5	26	552	1.5	26	11-Dec-13
El Dorado	OP	0.5	-	-	-	-	-	-	471	1.5	23	471	1.5	23	
Talbot North	OP	0.4	-	-	-	698	1.8	40	123	1.8	7	820	1.8	47	
Windanya	OP	0.6	-	-	-	-	-	-	360	1.5	17	360	1.5	17	11-Dec-13
South Castlereagh	OP	0.5	-	-	-	111	1.6	6	369	1.3	15	481	1.4	21	
Grafters	OP	0.5	-	-	-	-	-	-	319	1.3	14	319	1.3	14	
Duke North	OP	0.4	-	-	-	851	1.0	28	795	1.0	25	1,646	1.0	53	
TOTAL RESC	OURCES		152	2.3	11	28,880	1.9	1,766	18,277	1.9	1,135	47,300	1.9	2,911	

ACQUISITIC	DNS**		м	EASURED		IN	DICATE	D	INI	FERRED	)	TOTAL	RESOU	IRCES
Deposit	Туре	Cut-Off (g/t Au)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)									
North Kwanana Star	OP	0.5	-	-	-	-	-	-	716	1.4	32	716	1.4	32
Mayday North	OP	0.5	-	-	-	-	-	-	1,410	1.7	79	1,410	1.7	79
TOTAL RESC	URCES								2,126	1.6	112	2,126	1.6	111
GLOBAL RES	OURCE		152	2.3	11	28,880	1.9	1,766	20,403	1.9	1,247	49,426	1.9	3,022

\* Differences may occur due to rounding.

\*\* The Mineral Resource Estimate for Mayday and North Kanowna Star are subject to completion of the acquisition of the tenements as announced on 9 September 2019. Completion is expected to occur within 30 days.

#### Table 1: Mineral Resource Table

## **NEXT STEPS**

- Drilling is currently underway at El Dorado with drilling also planned to commence at the recently acquired North Kanowna Star, Mayday and Vettersburg Projects.
- Pre-Feasibility study work will continue with the aim of delivering a completed PFS by Q1 2020.
- Metallurgical test work for the Aphrodite deposit will continue, with the objective of achieving a gold concentrate sale.



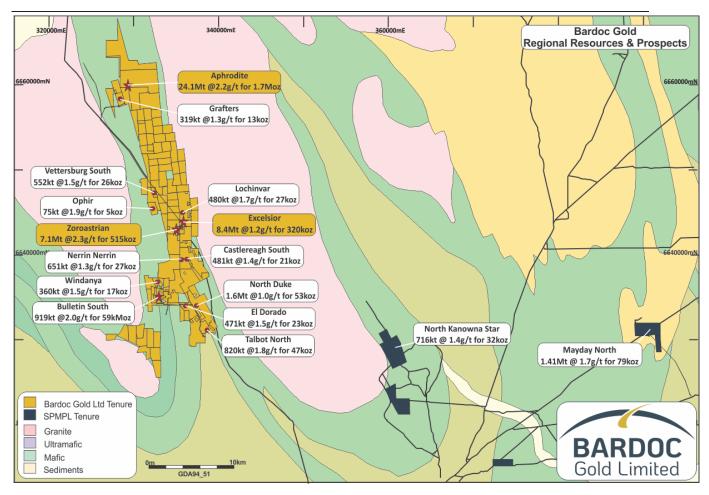


Figure 1: Tenement and mineral resource location plan

# **MATERIAL INFOTMATION SUMMARY**

# **CUT-OFF GRADES AND GOLD PRICE**

The selection of an appropriate gold price for Mineral Resource reporting was made after consideration of Clause 20 of the JORC Code (2012): -

A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction.

Interpretation of the word 'eventual' in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron ore, bauxite and other bulk minerals or commodities, it may be reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years. However, for the majority of smaller deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time. In all cases, the considered time frame should be disclosed and discussed by the Competent Person

To this end, Bardoc Gold confirms it has a +10-year vision for the Bardoc Gold Project as it currently stands, and while being unqualified to forecast likely future gold price movements, the Australian dollar gold price trend over the past 20 years provides some insight into the potential price projection over the next decade.



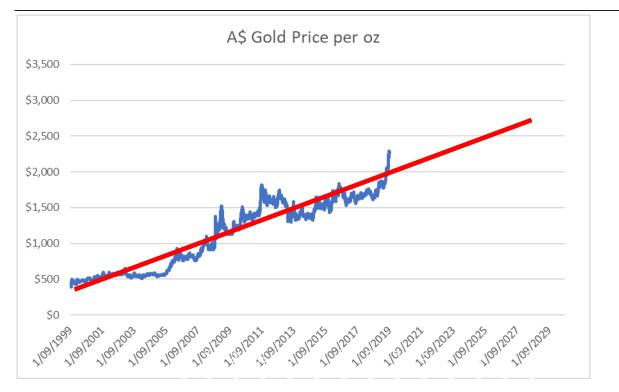


Figure 2: A\$ gold price trend based on historical performance

This projection suggests potential for a gold price approximating A\$2,700/oz in 10 years' time, however it is recognised that the likely corresponding increase in operating costs over this period of time may somewhat offset the revenue benefits from future gold price increase.

Consideration as to the cut-off grade to be used for Resource reporting has taken into account the style and grade of the mineralisation. A lower reporting grade may be more applicable to larger and well developed ore bodies and it also provides an improved representation of what material may be amenable to mining after studies are completed as part of the Pre-Feasibility Study.

While at this stage mining studies are yet to be undertaken, the experience of the Competent Person takes this into account as per the JORC Code (2012):-

In discussing 'reasonable prospects for eventual economic extraction' in Clause 20, the Code requires an assessment (albeit preliminary) in respect of all matters likely to influence the prospect of economic extraction including the approximate mining parameters by the Competent Person. While a Scoping Study may provide the basis for that assessment, the Code does not require a Scoping Study to have been completed to report a Mineral Resource **as per** the JORC 2012 Code

As such, cut off grades and depth of mineralisation reported are considered for each MRE on an individual basis and have been applied to each deposit as best fits its style and grade of mineralisation.



# APHRODITE

The Aphrodite deposit has a current JORC Resource of 24.1Mt @ 2.17g/t Au for 1.68Moz of contained Au.

	Meas	sured	Indicated Inferred Tota		Total				
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces
Oxide			1,063,461	1.42	738,730	1.14	1,802,191	1.31	75,636
Transitional			1,857,656	1.36	1,945,477	1.15	3,793,133	1.25	152,966
Fresh			8,701,168	1.75	3,991,756	1.55	12,692,923	1.69	687,758
Total	-	-	11,622,000	1.66	6,676,000	1.39	18,288,000	1.56	916,000

#### Table 2: Aphrodite >=0.40g/t Au above 215mbs – OP resource

Note: Appropriate rounding applied

#### Table 3: Aphrodite >=2.00g/t Au below 215mbs – UG resource

	Meas	sured	Indic	ated	Infei	red		Total	
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces
Oxide									-
Transitional									-
Fresh			3,457,505	3.92	2,390,941	4.29	5,848,446	4.071	765,466
Total	-	-	3,458,000	3.92	2,391,000	4.29	5,848,000	4.07	765,000

Note: Appropriate rounding applied

#### Table 4: Aphrodite combined resource

Domoin	N	leasure	d	I	ndicated	l		Inferred	I		Total	
Domain	Tonnes	g/t	Ounces	Tonnes	g/t	Ounces	Tonnes	g/t	Ounces	Tonnes	g/t	Ounces
ОР	-	-	-	11,622,000	1.66	619,000	6,676,000	1.39	298,000	18,288,000	1.56	916,000
UG	-	-	-	3,458,000	3.92	436,000	2,391,000	4.29	330,000	5,848,000	4.07	765,000
Total Resource	-	-	-	15,080,000	2.18	1,055,000	9,067,000	2.15	628,000	24,136,000	2.17	1,681,000

## **GEOLOGY AND GEOLOGICAL INTERPRETATION**

The local stratigraphy comprises of a package of mafics, epiclastic sediments of dominantly volcanic origin, intermediate to felsic intrusives, and ultramafics. The package strikes NNW. From west to east the lithologies broadly progress from a megacrystic dolerite through sediments intruded by intermediate porphyries and finally ultramafics in the east. The mixed epiclastic and volcaniclastic succession was intruded by felsic to intermediate porphyries that are all in turn intruded by dolerite sills and dykes. The Aphrodite deposit is a series of steep, WSW-dipping shear zones often located along lithological contacts. Hydrothermal alteration associated with the gold mineralisation is characterised by a quartz-albite-sericite ± biotite, chlorite assemblage which is pale-cream coloured, with an increased hardness.

The geological interpretation was completed by Geological Consultants Model Earth Pty Ltd and this geological understanding was utilised in the interpretation of the mineralisation.



## DRILLING TECHNIQUES

Drilling completed by numerous operators using RC and diamond drilling. Upper portions of the deposit are well drilled on a 20m x 20m grid with wider spaced drilling at depth and further along strike. Drilling was dominantly at -60° towards the west or east. The majority of holes were down-hole surveyed by various methods and collars located by contracted or mine surveyors.

All Bardoc drilling was HQ diamond, usually with a mud rotary or RC pre-collar and targeted deeper mineralisation. All holes drilled by Bardoc Gold were down-hole surveyed every 30m and collars located by contract surveyor.

## SAMPLING TECHNIQUES, SUB-SAMPLING TECHNIQUES, SAMPLE PREPARATION AND ANALYSIS

RC sampling of a ~3kg split from the bulk sample was commonly done with assay by 40g or 50g Fire Assay. NQ2 or HQ core was sawn in half and one half sent for assay. Sampling of core was commonly to 1m intervals and occasionally to intervals of geological interest. Core drilled by Bardoc Gold was sawn and one half sampled, usually to 1m intervals. Samples were sent to accredited laboratories for gold analysis by Fire Assay with ICP finish, and Peroxide Fusion Digest with ICP finish for As, S & Cu. Quality control data was included in all drill programs. A review of the QAQC data found analytical results to be satisfactory and suitable for inclusion in the resource estimation.

## **ESTIMATION METHODOLOGY**

Localised Uniform Conditioning (LUC) was used for the open pit resource model and Ordinary Kriging was used for the underground resource model. LUC is a non-linear technique suitable for estimating into smaller blocks (SMU scale) using wider spaced resource drilling. The LUC model implies a level of selectivity at the SMU scale that would not be achievable in an underground mining scenario so the ordinary kriged model was developed. Samples composited to 1m were used for both models. Top cuts were applied on a domain basis based on disintegration analysis of the probability curve and visual inspection of the histogram. Variography was used to determine directions of gold grade continuity, supported by geological evidence. Ellipsoidal search parameters were applied on a domain basis to align with the mineralised trend. Minimum samples utilised was 8. Minimum sample and search distance parameters were relaxed for subsequent searches. Bulk density values were applied from average density readings in different lithologies and weathering states.

## MINERAL RESOURCE CLASSIFICATION

Mineral Resource classification attempts to categorise confidence in the geological framework and estimation quality. Confidence is dominantly dependent on drill hole spacing. In well drilled (up to 40m x 40m) areas grade continuity is good and ore body geometry is predictable. These areas were classified as Indicated. Less well drilled areas up to ~ 80m x 80m defined areas of Inferred material.

## **CUT-OFF GRADES AND REPORTING**

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.4g/t Au and is constrained to a depth of 215m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. There has been no update to the previously reported open pit LUC block model of 13 November 2018, the only change is in the cut-off grade and depth to better reflect the material that is available for possible open pit extraction. For further details of the LUC model refer to Spitfire Materials Ltd (ASX: SPI) Announcement of 13 November 2018.



A resource below 215m below surface is reported at a cut-off grade of 2.0g/t, which reflects the economics of possible underground mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as a Mineral Resource.

# METALLURGY

Aphrodite ores have been subjected to metallurgical testwork and are not amenable to standard CIP/CIL processing. Metallurgical testwork has shown the ores to be amenable to fine grinding and atmospheric leaching using the Albion Process<sup>™</sup>. Recoveries of up to 93.5% have been achieved using this process (Refer Spitfire Materials Ltd (ASX: SPI) ASX Release 22 October 2018).

# **MODIFYING FACTORS**

No modifying factors were applied to the reported Mineral Resources. Parameters including geotechnical, mining dilution, ore loss and metallurgical recoveries will be considered during the mining evaluation of the project. The reported Mineral Resources have never been mined.

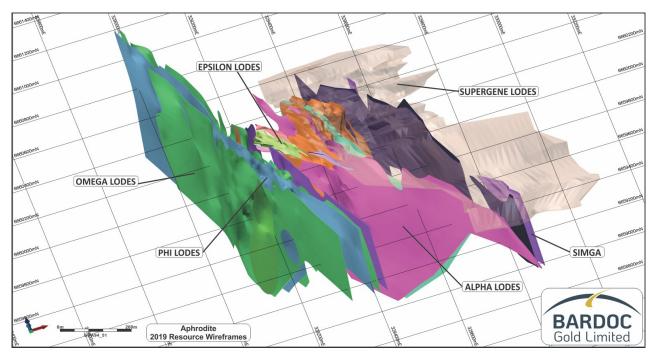


Figure 3: Aphrodite view of lode wireframes from the southwest



# ZOROASTRIAN

The Zoroastrian deposit has a current JORC Resource of 7.10Mt @ 2.26g/t Au for 515koz of contained Au.

	Meas	sured	Indic	Indicated Inferred Total					
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces
Oxide			432,533	1.41	53,900	1.20	486,433	1.39	21,676
Transitional			708,346	1.76	111,875	1.57	820,218	1.74	45,782
Fresh			2,721,519	1.94	1,669,430	1.51	4,390,949	1.78	250,944
Total	-	-	3,862,000	1.85	1,835,000	1.50	5,698,000	1.74	318,000

Note: Appropriate rounding applied

#### Table 6: Zoroastrian >=2.00g/t Au below 200mbs – UG resource

	Meas	sured	Indic	ated	Infe	rred		Total	
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces
Oxide									-
Transitional									-
Fresh			580,424	4.42	822,777	4.32	1,403,201	4.36	196,754
Total	-	-	580,000	4.42	823,000	4.32	1,403,000	4.36	197,000

Note: Appropriate rounding applied

Domoin	N	leasure	d	I	ndicated			Inferred			Total	
Domain	Tonnes	g/t	Ounces	Tonnes	g/t	Ounces	Tonnes	g/t	Ounces	Tonnes	g/t	Ounces
OP	-	-	-	3,862,000	1.85	229,000	1,835,000	1.50	89,000	5,698,000	1.74	318,000
UG	-	-	-	580,000	4.42	82,000	823,000	4.32	114,000	1,403,000	4.36	197,000
Total Resource	-	-	-	4,442,000	2.18	311,000	2,658,000	2.38	203,000	7,101,000	2.26	515,000

## Table 7: Zoroastrian combined resource

#### **GEOLOGY AND GEOLOGICAL INTERPRETATION**

The local stratigraphy comprises a package of sediments, mafics and ultramafics deformed and thinned between two granite domes resulting in a formation of a narrow syncline. The Zoroastrian deposit occurs within this syncline. A dolerite has intruded the greenstone rocks and is the host-rock of the Zoroastrian gold deposit. The gold mineralisation at Zoroastrian is associated with steep west dipping lodes, oriented approximately north-south, and shallow dipping lodes predominantly in the footwall to the steep lodes. The steep lodes occur within zones of shearing that present as foliation of varying intensity. The shallow lodes are extensional in nature and foliation is absent. The presence or absence of foliation has allowed the classification and interpretation of mineralised drill intercepts as either "steeps" or "flats".

The interpretation of mineralised lodes for the open pit resource was completed at a 0.3g/t Au cut-off grade guided by presence and intensity of quartz veining. The 0.3g/t Au value is indicative of mineralisation on the periphery of a high grade zone and is typically characterised by pyrite and pyrrhotite sulphides as



opposed to arsenopyrite in the high grade zones. Wireframes for the underground resource were at a nominal 1g/t Au cut-off which represents the material in the material in core of the mineralised structures.

## **DRILLING TECHNIQUES**

The Zoroastrian deposit has been defined by an extensive drill database, including some historical and considerable drilling completed by Excelsior. Historic digital data has been verified against hardcopy records and ground truthed where possible. For Bardoc Gold drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling is NQ2 size core (nominal 50.6mm core diameter) or HQ (nominal 63.5mm core diameter). All Excelsior Gold drill core was orientated by the drilling contractor. Holes are down hole surveyed usually every 30m down-hole and deeper holes are gyro surveyed by a contract surveyor. All collars are picked up by a mine or contract surveyor.

## SAMPLING TECHNIQUES, SUB-SAMPLING TECHNIQUES, SAMPLE PREPARATION AND ANALYSIS

Details on sampling completed by all historic operators are not available, it is assumed that procedures were to the industry standard of the time. However, much of the historic drilling was completed by Aberfoyle, whose sampling procedures are detailed in the Excelsior section below. All Excelsior Gold RC drilling was sampled at one metre down hole intervals. The recovered samples were passed through a cone splitter and a representative 2.5kg – 3.5kg sample was taken to a Kalgoorlie contract laboratory for gold assay. The core samples were collected at nominated intervals by Excelsior staff from core that was cut in half at a Kalgoorlie based laboratory. All samples were oven dried, crushed to a nominal 10mm by a jaw crusher, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75  $\mu$ m prior to being assayed for gold. Historic assay methods were not documented, however Aberfoyle used standard analysis methods from Genalysis, Analabs and Pilbara (Kalgoorlie) Laboratories. All EXG pulverised samples were prepared for standard fire assay techniques using a 50g charge. A review of the QAQC data found analytical results to be satisfactory and suitable for inclusion in the resource estimation

## **ESTIMATION METHODOLOGY**

Localised Uniform Conditioning (LUC) was used for Zoroastrian where open pit mining is the likely extraction method. Composited samples were used for grade interpolation, 1m width at Zoroastrian. Composite grade top cutting was completed on a domain basis based on disintegration analysis of the probability curve and visual inspection of the histogram. Variography was used to determine directions of grade continuity, supported where possible by geological evidence. Ellipsoidal search parameters were applied on a domain basis with distances between 90m to 145m (Zoroastrian). Minimum samples ranged between 2 and 8 for Zoroastrian with maximum samples employed 32. The LUC panel size for Zoroastrian was 8mE x 15mN x 10mRL and SMU block sizes were 2mE x 5mN x 12.5mRL. The SMU sizes were selected based on the geometry of the mineralisation and the likely degree to which selective mining could be achieved given the visual appearance of mineralisation. The underground resource at Zoroastrian was estimated using ordinary kriging as the LUC model is unsuitable for underground mine planning. The underground model used a block size of 4mE x 15mN x 8mRL, considered appropriate for the drill holes spacing and mining method. Estimation search parameters including search distance and minimum number of samples were relaxed on subsequent runs.

## MINERAL RESOURCE CLASSIFICATION

The classification attempts to categorise areas of the block model to reflect confidence in the geological framework and estimation quality. The classification takes account of confidence in the geological interpretation and sample density. In order to avoid a mosaic style of classification, solid wireframes were constructed to encompass areas considered to adequately fulfil the requirement to be classified as either



#### indicated or inferred:

Indicated - Areas with drill spacing up to approximately 35mE x 35mN with good confidence in the geology.

Inferred – Areas with wider spaced drilling but reasonable confidence in geological continuity

## **CUT-OFF GRADES AND REPORTING**

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.4g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. There has been no update to the previously reported open pit LUC block model detailed by Spitfire Materials Ltd (ASX: SPI) Announcement of 13 November 2018 the only change is in the cut-off grade.

A resource below 200m below surface is reported at a cut-off grade of 2.0g/t, which reflects the economics of possible underground mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as a Mineral Resource. The resource has been depleted for prior open pit mining.

#### METALLURGY

The Zoroastrian Deposit has been recently successfully previously mined. Metallurgical testwork and milling reconciliations confirm gold recoveries exceed 92% for primary ore.

#### **MODIFYING FACTORS**

No modifying factors were applied to the reported Mineral Resources. Parameters including geotechnical, mining dilution, ore loss and metallurgical recoveries will be considered during the planned mining evaluation of the project. The reported Mineral Resources have been depleted to account for previous mining.

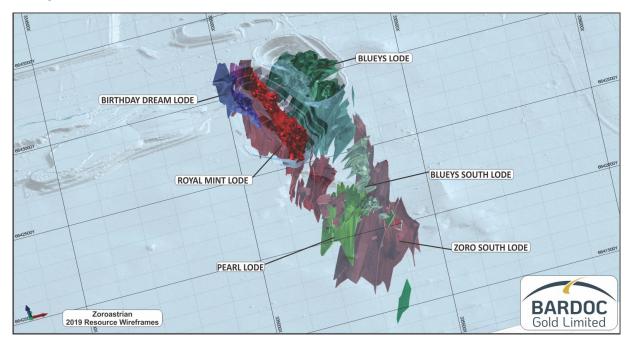


Figure 4: Zoroastrian view of lode wireframes from the southwest



# EXCELSIOR

	Meas	sured	Indic	ated	Infer	red		Total	
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces
Oxide			1,398,910	1.25	22,290	0.99	1,421,200	1.25	56,928
Transitional			1,558,672	1.31	36,698	1.03	1,595,370	1.30	66,861
Fresh			3,771,682	1.19	1,690,018	0.96	5,461,699	1.12	196,460
Total	-	-	6,729,000	1.23	1,749,000	0.96	8,478,000	1.17	320,000

The Excelsior deposit has a current JORC Resource of **8.48Mt** @ **1.17g/t Au for 320koz** of contained Au.

Table 8: Excelsior >=0.40g/t Au above 200mbs – OP resource

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.4g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. The resource has been depleted for prior open pit mining. There has been no update to the previously reported LUC block model of 13 November 2018, the only change is in the cut-off grade.

The currently defined extent of mineralisation above 2.0g/t Au does not warrant reporting of resources with potential for extraction by underground mining.

For further details refer to Spitfire Materials Ltd (ASX: SPI) Announcement of 13 November 2018.



## **BULLETIN SOUTH**

The Bulletin South deposit has a current JORC Resource of **849kt @ 2.10g/t Au for 57.2koz** of contained Au.

	Meas	ured	Indicat	ed	Infe	rred			
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces
Oxide	125,800	2.25	46,000	1.65	24,550	0.94	196,350	1.95	12,282
Transitional	26,675	1.76	187,938	1.75	11,408	0.89	226,021	1.71	12,410
Fresh			311,985	2.33	114,480	2.49	426,465	2.37	32,535
Total	152,000	2.16	546,000	2.07	150,000	2.12	849,000	2.10	57,200

Table 9: Bulletin South >=0.50g/t Au above 200mbs - OP resource

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.5g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. There has been no update to the previously reported LUC block model of 13 November 2018.

The currently defined extent of mineralisation above 2.0g/t Au does not warrant reporting of resources with potential for extraction by underground mining.

For further details refer to Spitfire Materials Ltd (ASX: SPI) Announcement of 13 November 2018.



# **DUKE NORTH**

The Duke North deposit has a current JORC Resource of **1.64Mt** @ **1.00g/t Au for 53.1koz** of contained Au.

	Measured	Measured		Indicated		rred	Total			
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces	
Oxide			337,400	1.01	52,500	0.91	389,900	1.00	12,492	
Transitional			401,314	1.12	121,750	0.86	523,064	1.06	17,817	
Fresh			112,420	0.83	620,690	0.99	733,110	0.97	22,756	
Total			851,000	1.04	795,000	0.96	1,646,000	1.00	53,100	

Table 10: Duke North >=0.40g/t Au above 200mbs – OP resource

## GEOLOGY AND GEOLOGICAL INTERPRETATION

The local stratigraphy, from west to east comprises a package of sediments, mafics and ultramafics. The package is steeply dipping to the east or north east. The central mafic is a layered dolerite, up to 30m wide with obvious variations in pyroxene:plagioclase ratio as well as grainsize and leucoxene percentage. The dolerite is the primary host to mineralisation. The dolerite is fault repeated south of the resource area and attains a width of ~350m north of the resource area. The footwall sediments comprise an extensive sequence of siltstones and shales. The immediate hangingwall of the dolerite is defined by a narrow (10m-15m wide) chert horizon, after graphitic shale, which is variably mineralised. West of the chert is a thick sequence (>500m) of barren olivine cumulates and komatiites.

All drilling was used to inform the interpretation, including RAB although the RAB holes were not used in the estimation. Lodes were generally interpreted on NE-SW drill sections where individual strings were digitised for each lode, snapping to existing drill holes. From these strings wireframes were produced for each individual lode. Closed out positions of the mineralised lodes along strike and depth were typically defined by a distance of approximately ½ of the surrounding drill spacing beyond the last drill hole. In total 3 lodes were defined.

## **DRILLING TECHNIQUES**

Drilling completed by numerous operators using RC and Diamond drilling. Upper portions of the deposit are well drilled on a 20m x 20m grid with wider spaced drilling at depth and further along strike. Drilling was dominantly at  $-60^{\circ}$  towards the west or east.

BDC is of the opinion that the historic drilling was completed to industry standard by well-established drill companies. Sampling and assay procedures are described and are to industry standard. All RC drilling was assayed by fire assay and a system of QAQC checks implemented by BDC. QAQC procedures for the Diamond hole drilled by Aurion Gold is unknown. For historic drilling (pre EXG) much of the QAQC data is unavailable and results are unknown.

# SAMPLING TECHNIQUES, SUB-SAMPLING TECHNIQUES, SAMPLE PREPARATION AND ANALYSIS

All RC holes sampled on 1m intervals and split on-site to a smaller ~2kg sample for analysis. Goldfields analysed alternate samples and infill samples were subsequently tested once any anomalous zones were identified. Wet samples were scoop sampled. Some operators composited to 4m for initial analysis. 1m splits subsequently assayed if the composite interval was anomalous.



Assaying was generally by 50g Fire Assay utilising certified laboratories. Excelsior RC drilling was sampled and assayed every metre by 40g fire assay. NQ2 core sawn in half and one half sampled to zones of geological interest. Assays of core generally by 50g Fire Assay. A review of the QAQC data found analytical results to be satisfactory for inclusion in the resource estimation

BDC is of the opinion that the historic drilling was completed to industry standard by well-established drill companies. Sampling and assay procedures are described and are to industry standard. BDC RC drilling was assayed by fire assay and a system of QAQC checks implemented. QAQC procedures for the Diamond hole drilled by Aurion Gold are unknown. For historic drilling (pre EXG) much of the QAQC data is unavailable and results are unknown.

## ESTIMATION METHODOLOGY

Localised Uniform Conditioning (LUC) was used for Duke North where open pit mining is the likely extraction method. Composited samples were used for grade interpolation, 1m width at Duke North. Composite grade top cutting was completed on a domain basis based on disintegration analysis of the probability curve and visual inspection of the histogram. Variography was used to determine directions of grade continuity, supported where possible by geological evidence. Ellipsoidal search parameters were applied on a domain basis to align with the mineralisation. The LUC panel size used is 8mE x 10mN x 5mRL and SMU block sizes were 2mE x 5mN x 2.5mRL. The SMU sizes were selected based on the geometry of the mineralisation and the likely degree to which selective mining could be achieved given the visual appearance of mineralisation. Estimation used four sectors with a maximum of 6 samples per sector and a minimum of 6 samples and maximum of 5 samples per drill hole. Estimation search parameters including search distance and minimum number of samples were relaxed on subsequent runs.

## MINERAL RESOURCE CLASSIFICATION

The classification attempts to categorise areas of the block model to reflect confidence in the geological framework and estimation quality. The classification takes account of confidence in the geological interpretation and sample density. In order to avoid a mosaic style of classification, solid wireframes were constructed to encompass areas considered to adequately fulfil the requirement to be classified as either indicated or inferred:

Indicated - Areas with drill spacing up to approximately 20mE x 20mN with reasonable confidence in the geology.

Inferred – Areas with drill spacing in excess of 20mE x 20mN with lower geological confidence.

# **CUT-OFF GRADES AND REPORTING**

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.4g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. Historic underground mining has taken place at the deposit, the extents of which are unknown, and as a result the resource has not been depleted for this mining.

The currently defined depth extent of mineralisation does not warrant reporting of resources with potential for extraction by underground mining.



## METALLURGY

Metallurgical test work has not been done on Duke North mineralization.

# **MODIFYING FACTORS**

No modifying factors were applied to the reported Mineral Resources. Parameters including geotechnical, mining dilution, ore loss and metallurgical recoveries will be considered during the mining evaluation of the project.

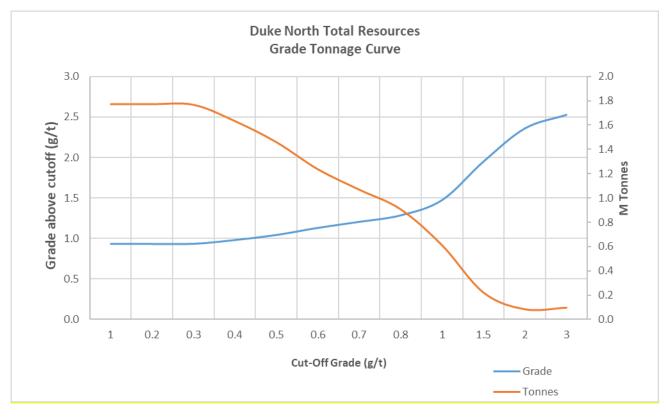


Figure 5: Grade tonnage curve



# **EL DORADO**

The El Dorado deposit has a current JORC Resource of **471kt @ 1.49g/t Au for 22.5koz** of contained Au.

	Measured		Indic	Indicated		Inferred		Total		
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces	
Oxide					55,921	1.15	55,921	1.15	2,075	
Transitional					231,453	1.42	231,453	1.42	10,559	
Fresh					183,541	1.68	183,541	1.68	9,896	
Total			-	-	471,000	1.49	471,000	1.49	22,500	

Table 11: Eldorado >=0.50g/t Au above 200mbs – OP resource

## GEOLOGY AND GEOLOGICAL INTERPRETATION

The mineralisation at El Dorado is situated on a north-northwest trending mafic/ultramafic package with sediments and felsic volcanics of the Black Flag Beds forming the footwall. Gold mineralisation is hosted predominantly in a 20m wide steeply east dipping shear zone, with quartz veining +/- arsenopyrite and has a northerly plunge.

The El Dorado mineralisation wireframes are for the most part interpreted to a 0.3g/t cut-off grade. The 0.3g/t threshold was chosen as this appears to be the threshold grade that defines any level of gold mineralisation as distinct from barren host rock.

All drilling was used to inform the interpretation, including RAB/Aircore. The RAB/Aircore data was however not used in the estimation. Lodes were generally interpreted on NE-SW sections when individual strings were digitised for each lode, snapping to existing drill holes. From these strings wireframe were produced for each individual lode. Closed out positions of the mineralised lodes along strike and depth were typically defined by a distance of approximately ½ of the surrounding drill spacing beyond the last drill hole. In total 3 mineralisation lodes were defined at El Dorado over a strike length of 340m.

## **DRILLING TECHNIQUES**

The El Dorado deposit has been defined by an extensive drill database, including some historical and considerable drilling completed by Excelsior and BDC.

Historic drill hole data has been validated against available reports, including Wamex reports. Where possible hole locations were checked on ground but in most cases rehabilitation of the drill collar prohibited this. Early drilling, predominantly by Samantha has been included in the Mineral Resource Estimate as locations of mineralised intercepts are in agreement with later drilling which have surveyed collar locations and downhole surveys. Early holes were drilled on a local grid for which there was no established conversion to the GDA94 zone 51 system. A conversion to MGA coordinates was established by Excelsior Gold in 2014 where the local grid coordinates were obtained from the original drill logs (Wamex reports) and used to define a 2 point grid transformation.

For BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. All collars are picked up by a mine or contract surveyor.

RAB drilling makes up about 5% of the historic drilling and RC the other 95%. There are several campaigns of historic drilling between 1984 and 1995. These holes are sometimes without documentation of the rig



type and capability, core size, sample selection and handling. RAB drilling was used to assist with geological and mineralisation wireframing and was excluded from the resource estimation process.

## SAMPLING TECHNIQUES, SUB-SAMPLING TECHNIQUES, SAMPLE PREPARATION AND ANALYSIS

All RC holes sampled on 1m intervals and split on-site to a smaller ~2kg sample for analysis. Goldfields analysed alternate samples and infill samples were subsequently tested once any anomalous zones were identified. Wet samples were scoop sampled. Some operators composited to 4m for initial analysis. 1m splits subsequently assayed if the composite interval was anomalous.

Assaying was generally by 50g Fire Assay utilising certified laboratories. BDC RC drilling was sampled and assayed every metre by 40g fire assay. A review of the QAQC data found analytical results to be satisfactory for inclusion in the resource estimation

BDC is of the opinion that the historic drilling was completed to industry standard by well-established drill companies. Sampling and assay procedures are described and are to industry standard. BDC RC drilling was assayed by fire assay and a system of QAQC checks implemented. For historic drilling (pre EXG) much of the QAQC data is unavailable and results are unknown.

## **ESTIMATION METHODOLOGY**

Grade estimation was by Ordinary Kriging for Au using GEOVIA Surpac<sup>™</sup> software. The estimate was resolved into 2m (E) x 5m (N) x 10m (RL) parent cells that have been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, top-cuts were applied to some of the domains.

## MINERAL RESOURCE CLASSIFICATION

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information. In part, the lodes have been drilled down to a 15m x 15m spacing, on drill lines running east-northeast – west-southwest. To the north and south drilling is at greater spacing.

In part, the deposit is adequately drilled to have potentially been defined as higher confidence classification using only drilling density as a criteria. However, a number of issues remain unresolved with the base data and geological/structural models, including rock bulk density is assumed, no actual measurements exist from El Dorado. Only one diamond core hole has been drilled at depth in the northern part of the resource, further core holes are required to confirm geological and structural interpretation assumptions.

## **CUT-OFF GRADES AND REPORTING**

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.5g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource.

The currently defined depth extent of mineralisation does not warrant reporting of resources with potential for extraction by underground mining.



## METALLURGY

Metallurgical test work has not been done on El Dorado mineralization.

# **MODIFYING FACTORS**

No modifying factors were applied to the reported Mineral Resources. Parameters including geotechnical, mining dilution, ore loss and metallurgical recoveries will be considered during the mining evaluation of the project. The reported Mineral Resources have had some minor unquantified historical minor underground mining.

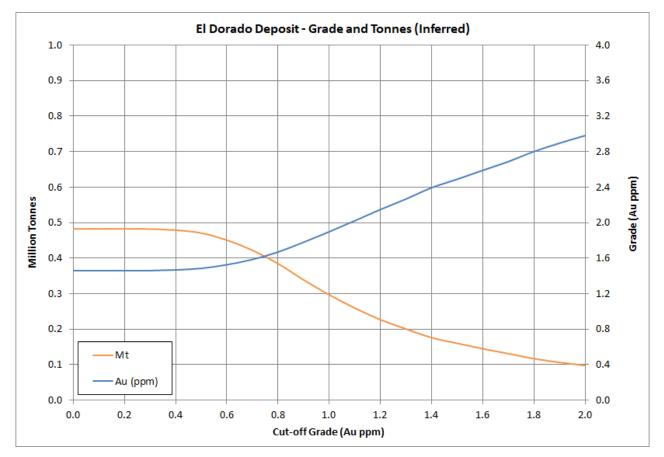


Figure 6: Grade tonnage curve



# GRAFTERS

The Grafters deposit has a current JORC Resource of 319kt @ 1.34g/t Au for 13.7koz of contained Au.

	Measured		Indic	Indicated		Inferred		Total		
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces	
Oxide					16,020	1.00	16,020	1.00	513	
Transitional					183,702	1.24	183,702	1.24	7,307	
Fresh					119,424	1.53	119,424	1.53	5,882	
Total			-	-	319,000	1.34	319,000	1.34	13,700	

Table 12: Grafters >=0.50g/t Au above 200mbs - OP resource

# **GEOLOGY AND GEOLOGICAL INTERPRETATION**

Local geology has been interpreted from drill hole logs and limited outcrop. Rock types consist of gabbros, basalt and intercalated lenses of sediments, including black shale which is often silicified. The contact between the basalt and the sediments is weakly sheared. Mineralisation is confined to quartz stockworks, 5 to 10m wide in sheared fine grained sediments and the basalt in close proximity to the sheared sediment contact. These sediments are frequently pyritic and graphitic.

The Grafters mineralisation wireframes are for the most part interpreted to a 0.3g/t cut-off grade. The 0.3g/t threshold was chosen as this appears to be the threshold grade that defines any level of gold mineralisation as distinct from barren host rock. Ore lodes were usually defined with a minimum width of 2m downhole.

All drilling was used to inform the interpretation, including RAB. The RAB data was however not used in the estimation. Lodes were generally interpreted on NE-SW sections when individual strings were digitised for each lode, snapping to existing drill holes. From these strings wireframe were produced for each individual lode. Closed out positions of the mineralised lodes along strike and depth were typically defined by a distance of approximately ½ of the surrounding drill spacing beyond the last drill hole. Mineralisation is defined in two locations. Grafters north and Grafters south.

# **DRILLING TECHNIQUES**

The Grafters deposit has been defined by an extensive drill database, including some recent drilling completed by BDC. Historic drill hole data has been validated against available reports, including Wamex reports. Where possible historic hole locations were checked on ground. Some old collars with known local grid coordinates were picked up in the field using GPS. These were used to establish a 2 point grid transformation for Grafters Local grid to MGA94 zone 51.

For BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling (1 diamond core tail to an RC pre-collar) is NQ2 size core (nominal 50.6mm core diameter). All BDC drill core is orientated by the drilling contractor. Holes are down hole surveyed usually every 30m downhole and deeper holes are gyro surveyed by a contract surveyor. All collars are picked up by a contract surveyor.

RAB drilling makes up about 25% of the historic drilling and RC the other 75%. There are several campaigns of historic drilling between 1983 and 2012. These holes are sometimes without documentation of the rig type and capability, core size, sample selection and handling. RAB drilling was used to assist with geological and mineralisation wireframing and was excluded from the resource estimation process.



## SAMPLING TECHNIQUES, SUB-SAMPLING TECHNIQUES, SAMPLE PREPARATION AND ANALYSIS

All RC holes sampled on 1m intervals and split on-site to a smaller ~2kg sample for analysis. Historical drilling was generally collected in 1m intervals and riffle split. Drilling from 1987 and 1994 was generally composited for initial assay work with any anomalous areas then having their 1m sample submitted for assay.

Assaying was generally by 50g Fire Assay utilising certified laboratories. BDC RC drilling was sampled and assayed every metre by 40g fire assay. NQ2 core sawn in half and one half sampled to zones of geological interest. Assays of core generally by 40g Fire Assay. A review of the QAQC data found analytical results to be satisfactory for inclusion in the resource estimation

BDC is of the opinion that the historic drilling was completed to industry standard by well-established drill companies. Sampling and assay procedures are described and are to industry standard. BDC RC drilling was assayed by fire assay and a system of QAQC checks implemented. For historic drilling (pre EXG) much of the QAQC data is unavailable and results are unknown.

## **ESTIMATION METHODOLOGY**

Grade estimation was by Ordinary Kriging for Au using GEOVIA Surpac<sup>™</sup> software. The estimate was resolved into 2m (E) x 10m (N) x 10m (RL) parent cells that have been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, top-cuts were applied to some of the domains.

## MINERAL RESOURCE CLASSIFICATION

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information. In part, the lodes have been drilled down to a 10m x 10m spacing, on northing and easting, with drill lines running approximately ENE-WSW. To the north and south drilling is at greater spacing.

In part, the deposit is adequately drilled to have potentially been defined as higher confidence classification using only drilling density as a criteria. However, a number of issues remain unresolved with the base data and geological/structural models, including: rock bulk density is assumed, no actual measurements exist from Grafters. Only one diamond core hole has been drilled at depth in the northern part of the resource, further core holes are required to confirm geological and structural interpretation assumptions.

## **CUT-OFF GRADES AND REPORTING**

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.5g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. Historic underground mining has taken place at the deposit, the extents of which are unknown, and as a result the resource has not been depleted for this mining.

The currently defined depth extent of mineralisation does not warrant reporting of resources with potential for extraction by underground mining.



## METALLURGY

Metallurgical test work has not been done on Grafters mineralization.

# **MODIFYING FACTORS**

No modifying factors were applied to the reported Mineral Resources. Parameters including geotechnical, mining dilution, ore loss and metallurgical recoveries will be considered during the mining evaluation of the project.

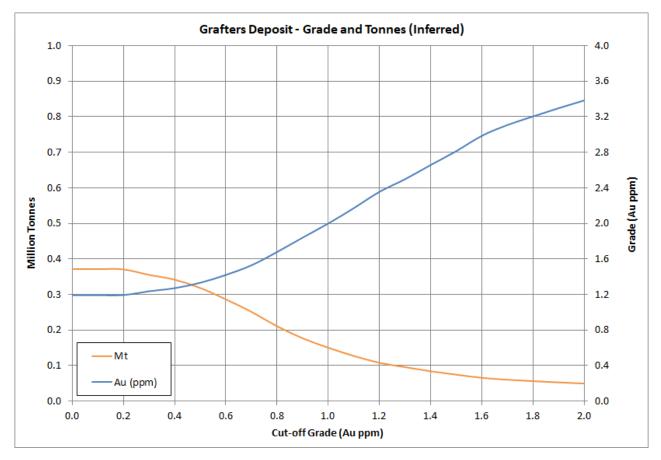


Figure 7: Grade tonnage curve



# LOCHINVAR

The Lochinvar deposit has a current JORC Resource of **480kt @ 1.73g/t Au for 26.7koz** of contained Au.

	Measured		Indic	Indicated		Inferred		Total		
Class	Tonnes	g/t	Tonnes g/t		Tonnes	g/t	Tonnes	g/t	Ounces	
Total			423,000	1.75	57,200	1.59	480,000	1.73	26,700	

Table 13: Lochinvar >=0.40g/t Au above 200mbs – OP resource

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.4g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. Historic underground mining has taken place at the deposit, the extents of which are unknown, and as a result the resource has not been depleted for this mining. There has been no update to the previously reported block model of 19 February 2014, the only change is in the cut-off grade.

The currently defined extent of mineralisation above 2.0g/t Au does not warrant reporting of resources with potential for extraction by underground mining.

For further details refer to Excelsior Gold Ltd (ASX: EXG) Announcement of 19 February 2014.



## **MULWARRIE**

The Mulwarrie deposit has a current JORC Resource of 881kt @ 2.78g/t Au for 78.7koz of contained Au.

Table 14: Mineral Resource Summary by Category: Mulwarrie Gold Deposit

	Measured Tonnes g/t		Indicated		Inferred		Total		
	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces
Total					880,800	2.78	881,000	1.46	78,700

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.5g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. Historic underground mining has taken place at the deposit, the extents of which are unknown, and as a result the resource has not been depleted for this mining.

The currently defined extent of mineralisation below 2.0g/t Au does not warrant reporting of resources with potential for extraction by underground mining.

For further details refer to Spitfire Materials Limited (ASX: SPI) Announcement of 13 November 2018.



## **NERRIN NERRIN**

The Nerrin Nerrin deposit has a current JORC Resource of 651kt @ 1.26g/t Au for 26.3koz of contained Au.

	Measured		Indic	Indicated		Inferred		Total		
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces	
Oxide					292,573	1.43	292,573	1.43	13,404	
Transitional					195,766	1.16	195,766	1.16	7,313	
Fresh					162,911	1.07	162,911	1.07	5,599	
Total			-	-	651,000	1.26	651,000	1.26	26,300	

Table 15: Nerrin Nerrin >=0.50g/t Au above 200mbs – OP resource

# **GEOLOGY AND GEOLOGICAL INTERPRETATION**

The lithologies encountered in the area comprise micaceous shale and gritty siltstones. East of the shale is a heavily weathered dolerite body which is narrow to the south and widens considerably to the north. Moderate milky quartz veining is present within the lithology. The eastern contact between dolerite and ultramafics is intensely sheared and, near surface, the shear zone is usually silicified, trends north-south and dips steeply to the west with a mapped thickness of 2m. To the east of the shear, the unit is comprised of talc carbonate, talc chlorite schist and serpentinite ultramafics. Adjacent to the shear, the unit has been intensely altered to sericitic pale yellow/brown clays.

All drilling, apart from excluded RC holes by Julia Mines, was used to inform the interpretation, including grade control and RAB/Aircore. The RAB/Aircore data was however not used in the estimation. Lodes were generally interpreted on E-W sections when individual strings were digitised for each lode, snapping to existing drill holes. From these strings wireframe were produced for each individual lode. Closed out positions of the mineralised lodes along strike and depth were typically defined by a distance of approximately ½ of the surrounding drill spacing beyond the last drill hole.

## **DRILLING TECHNIQUES**

The Nerrin Nerrin deposit has been defined by an extensive drill database, including some historical and considerable drilling completed by Excelsior and BDC. Historic drill locations have been validated by BDC with cross checking of spatial position on historic plans and cross-sections. Where possible hole locations were checked on ground but in most cases rehabilitation of the drill collar prohibited this. For much of the historic drilling there is no detailed downhole survey data and holes are plotted at a (usually) nominal direction of 90° and dip of -60°. Early drilling, predominantly by Julia Mines has been excluded from the Mineral Resource Estimate due to uncertainties with collar locations.

For BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. All collars are picked up by a mine or contract surveyor.

RAB drilling makes up about 20% of the historic drilling and RC the other 80%. There are several campaigns of historic drilling between 1983 and 2012. These holes are sometimes without documentation of the rig type and capability, core size, sample selection and handling. RAB drilling was used to assist with geological and mineralisation wireframing and was excluded from the resource estimation process.



## SAMPLING TECHNIQUES, SUB-SAMPLING TECHNIQUES, SAMPLE PREPARATION AND ANALYSIS

All RC holes sampled on 1m intervals and split on-site to a smaller ~2kg sample for analysis. Goldfields analysed alternate samples and infill samples were subsequently tested once any anomalous zones were identified. Wet samples were scoop sampled. Some operators composited to 4m for initial analysis. 1m splits subsequently assayed if the composite interval was anomalous.

Assaying was generally by 50g Fire Assay utilising certified laboratories. BDC RC drilling was sampled and assayed every metre by 40g fire assay. A review of the QAQC data found analytical results to be satisfactory for inclusion in the resource estimation

BDC is of the opinion that the historic drilling was completed to industry standard by well-established drill companies. Sampling and assay procedures are described and are to industry standard. BDC RC drilling was assayed by fire assay and a system of QAQC checks implemented. For historic drilling (pre EXG) much of the QAQC data is unavailable and results are unknown.

## **ESTIMATION METHODOLOGY**

Grade estimation was by Ordinary Kriging for Au using GEOVIA Surpac<sup>™</sup> software. The estimate was resolved into 2m (E) x 10m (N) x 10m (RL) parent cells that have been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, top-cuts were applied to some of the domains.

#### MINERAL RESOURCE CLASSIFICATION

The classification attempts to categorise areas of the block model to reflect confidence in the geological framework and estimation quality. The classification takes account of confidence in the geological interpretation and sample density.

The deposit is only classified as Inferred due to the lack of specific bulk density measurements and further core holes are required to confirm geological and structural interpretations. In part the deposit is drilled with sufficient drill density, 20-25mE and 20-25mN spacing to be classified as Indicated, however, the lacking drill core information has resulted in a more conservative approach.

#### **CUT-OFF GRADES AND REPORTING**

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.5g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. Historic underground mining has taken place at the deposit, the extents of which are unknown, and as a result the resource has not been depleted for this mining.

The currently defined depth extent of mineralisation does not warrant reporting of resources with potential for extraction by underground mining.

## METALLURGY

Metallurgical test work has not been done on Nerrin Nerrin mineralization.



# MODIFYING FACTORS

No modifying factors were applied to the reported Mineral Resources. Parameters including geotechnical, mining dilution, ore loss and metallurgical recoveries will be considered during the mining evaluation of the project.

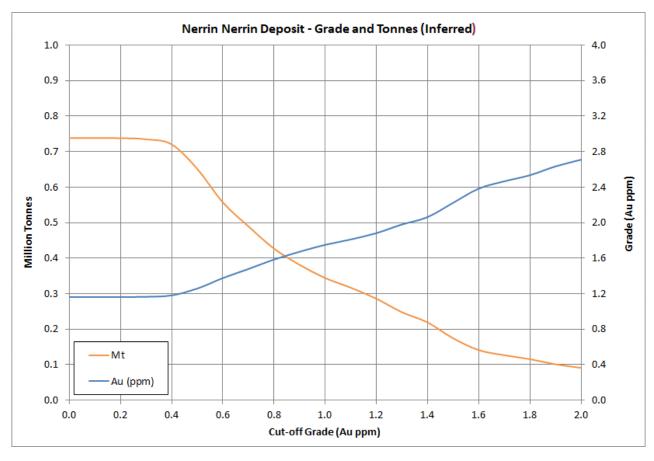


Figure 8: Grade tonnage curve



# **OPHIR**

The Ophir deposit has a current JORC Resource of **74.8kt @ 1.94g/t Au for 4.66koz** of contained Au.

	Measured In		Indicated	Indicated		Inferred		Total		
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces	
Oxide					41,908	2.21	41,908	2.21	2,978	
Transitional					27,338	1.63	27,338	1.63	1,433	
Fresh					5,560	1.40	5,560	1.40	250	
Total					74,800	1.94	75,000	1.94	4,7000	

Table 16: Ophir >=0.60g/t Au above 60mbs – OP resource

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.6g/t Au and is constrained to a depth of 60m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. Historic underground mining has taken place at the deposit, the extents of which are unknown, and as a result the resource has not been depleted for this mining.

The currently defined extent of mineralisation above 2.0g/t Au does not warrant reporting of resources with potential for extraction by underground mining.

For further details refer to Excelsior Gold Ltd (ASX: EXG) Announcement of 11 December 2013.



## SOUTH CASTLEREAGH

The South Castlereagh deposit has a current JORC Resource of **481kt @ 1.36g/t Au for 21.0koz** of contained Au.

	Measured		Indic	Indicated		Inferred		Total		
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces	
Oxide			58,191	1.16	116,364	1.57	174,555	1.43	8,051	
Transitional			14,859	1.52	58,375	1.16	73,234	1.23	2,897	
Fresh			38,297	2.39	194,628	1.14	232,925	1.34	10,069	
Total			111,000	1.63	369,000	1.28	481,000	1.36	21,000	

Table 17: South Castlereagh >=0.50g/t Au above 200mbs – OP resource

## GEOLOGY AND GEOLOGICAL INTERPRETATION

The primary gold mineralisation in the Castlereagh South area is predominately associated with a 10-20m wide shear zone and associated second order structures adjacent to an ultramafic and mafic contact. This mineralisation is associated with intense shearing and quartz, sericite, carbonate, sulphide alteration. The development of possible stockworks at intersections of structures is also interpreted. Whilst structures and again through the transitional zone. Sub-horizontal supergene enrichment blankets occur throughout the regolith. Historical workings and shafts exist within the area. Detailed mapping and sampling of these workings and structural measurements forms the basis of the geological interpretation. The Castlereagh South mineralisation wireframes are for the most part interpreted to a 0.3g/t cut-off grade. The 0.3g/t threshold was chosen as this appears to be the threshold grade that defines any level of gold mineralisation as distinct from barren host rock.

# **DRILLING TECHNIQUES**

The South Castlereagh deposit has been defined by an extensive drill database, including some historical and considerable drilling completed by Excelsior. Historic digital data has been verified against hardcopy records and ground truthed where possible. For BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling is NQ2 size core (nominal 50.6mm core diameter) or HQ (nominal 63.5mm core diameter). All BDC drill core is orientated by the drilling contractor. Holes are down hole surveyed usually every 30m downhole and deeper holes are gyro surveyed by a contract surveyor. All collars are picked up by a mine or contract surveyor.

RAB drilling makes up about 30% of the historic drilling and RC the other 70%. There are several campaigns of historic drilling between 1983 and 2012. These holes are sometimes without documentation of the rig type and capability, core size, sample selection and handling. RAB drilling was used to assist with geological and mineralisation wireframing and was excluded from the resource estimation process.

## SAMPLING TECHNIQUES, SUB-SAMPLING TECHNIQUES, SAMPLE PREPARATION AND ANALYSIS

All RC holes sampled on 1m intervals and split on-site to a smaller ~2kg sample for analysis. Goldfields analysed alternate samples and infill samples were subsequently tested once any anomalous zones were identified. Wet samples were scoop sampled. Some operators composited to 4m for initial analysis. 1m splits subsequently assayed if the composite interval was anomalous.



Assaying was generally by 50g Fire Assay utilising certified laboratories. BDC RC drilling was sampled and assayed every metre by 40g fire assay. NQ2 core sawn in half and one half sampled to zones of geological interest. Assays of core generally by 50g Fire Assay. A review of the QAQC data found analytical results to be satisfactory for inclusion in the resource estimation

BDC is of the opinion that the historic drilling was completed to industry standard by well-established drill companies. Sampling and assay procedures are described and are to industry standard. BDC RC drilling was assayed by fire assay and a system of QAQC checks implemented. For historic drilling (pre EXG) much of the QAQC data is unavailable and results are unknown.

## **ESTIMATION METHODOLOGY**

Grade estimation was by Ordinary Kriging for Au using GEOVIA Surpac<sup>™</sup> software. The estimate was resolved into 2m (E) x 10m (N) x 10m (RL) parent cells that have been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, top-cuts were applied to some of the domains.

## MINERAL RESOURCE CLASSIFICATION

The classification attempts to categorise areas of the block model to reflect confidence in the geological framework and estimation quality. The classification takes account of confidence in the geological interpretation, sample density and available bulk density information.

Indicated - Areas with drill spacing up to approximately 15-25mE x 15-25mN with reasonable confidence in the geology.

Inferred – Areas with drill spacing in excess of 25mE x 25mN. These are less well informed regions of the model and have lower levels of geological confidence than Indicated areas.

# **CUT-OFF GRADES AND REPORTING**

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.5g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. Historic underground mining has taken place at the deposit, the extents of which are unknown, and as a result the resource has not been depleted for this mining.

The currently defined depth extent of mineralisation does not warrant reporting of resources with potential for extraction by underground mining.

## METALLURGY

Metallurgical test work has not been done on South Castlereagh. The South Castlereagh Deposit is located 500m south, in similar rock types and mineralisation styles, of the Castlereagh Open Pit excavated by Excelsior Gold Ltd in 2015. The gold recoveries from the Castlereagh Open Pit through the Paddington Mill owned by Norton Goldfields were in excess of 90%.



# MODIFYING FACTORS

No modifying factors were applied to the reported Mineral Resources. Parameters including geotechnical, mining dilution, ore loss and metallurgical recoveries will be considered during the mining evaluation of the project.

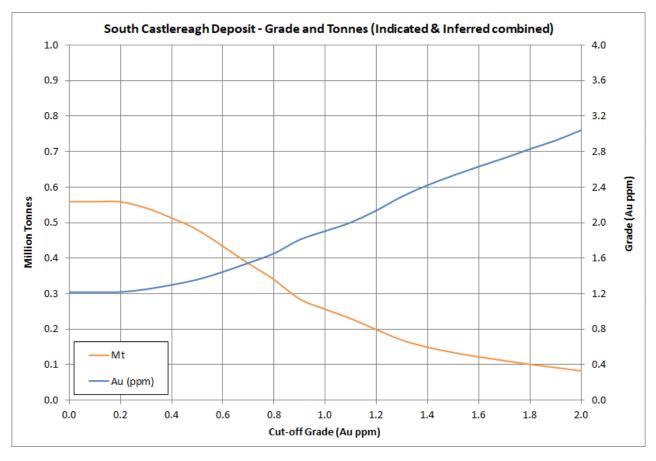


Figure 9: Grade tonnage curve



# TALBOT NORTH

The Talbot North deposit has a current JORC Resource of **820kt @ 1.78g/t Au for 47.0koz** of contained Au.

	Measured Indicated		Inferred		Total				
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces
Oxide			237,408	1.91	939	1.11	238,347	1.91	14,612
Transitional			229,064	1.80	8,996	2.45	238,060	1.82	13,965
Fresh			231,111	1.62	112,651	1.77	343,762	1.67	18,447
Total			698,000	1.78	123,000	1.81	820,000	1.78	47,000

Table 18: Talbot North >=0.40g/t Au above 200mbs – OP resource

# GEOLOGY AND GEOLOGICAL INTERPRETATION

Talbot North has three lithologies which strike NW and dip 65° to 80° to the south west. From west to east these are shale, basalt and ultramafic. The western sediments are part of the Black Flag Beds. The basalt varies in width from about 90m in the south to 40m in the north. The basalt is separated by two shale units of varying width between 30cm to 10m. Mineralisation lies almost entirely within the basalt, being both lithologically and structurally controlled. Mineralisation along the western contact is associated with a contact parallel quartz vein in the footwall. A pervasive chlorite-carbonate alteration with arsenopyrite is associated with the gold mineralisation. NE striking structures appear to dextrally offset the mineralisation in places and may increase gold grades locally.

# **DRILLING TECHNIQUES**

The Talbot North deposit has been defined by an extensive database of drilling completed by historic operators and Excelsior Gold. Historic digital data has been verified against hardcopy records and ground truthed where possible. The majority of historic data completed by Pancontinental and Goldfields. For EXG and BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling is NQ2 size core (nominal 50.6mm core diameter). All BDC drill core is orientated by the drilling contractor. Holes are down hole surveyed usually every 30m downhole and deeper holes are gyro surveyed by a contract surveyor. All collars are picked up by a mine or contract surveyor.

# SAMPLING TECHNIQUES, SUB-SAMPLING TECHNIQUES, SAMPLE PREPARATION AND ANALYSIS

All RC holes sampled on 1m intervals and split on-site to a smaller ~2kg sample for analysis. Goldfields analysed alternate samples and infill samples were subsequently tested once any anomalous zones were identified. Wet samples were scoop sampled. Some operators composited to 4m for initial analysis. 1m splits subsequently assayed if the composite interval was anomalous.

Assaying was generally by 50g Fire Assay utilising certified laboratories. BDC RC drilling was sampled and assayed every metre by 40g fire assay. NQ2 core sawn in half and one half sampled to zones of geological interest. Assays of core generally by 50g Fire Assay. A review of the QAQC data found analytical results to be satisfactory for inclusion in the resource estimation

BDC is of the opinion that the historic drilling was completed to industry standard by well-established drill companies. Sampling and assay procedures are described and are to industry standard. BDC RC drilling was



assayed by fire assay and a system of QAQC checks implemented. For historic drilling (pre EXG) much of the QAQC data is unavailable and results are unknown.

## ESTIMATION METHODOLOGY

Grade estimation was by Ordinary Kriging for Au using Micromine software. The estimate was resolved into 5m (E) x 10m (N) x 5m (RL) parent cells that have been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, top-cuts were applied to some of the domains.

## MINERAL RESOURCE CLASSIFICATION

The classification attempts to categorise areas of the block model to reflect confidence in the geological framework and estimation quality. The classification takes account of confidence in the geological interpretation and sample density. In order to avoid a mosaic style of classification, solid wireframes were constructed to encompass areas considered to adequately fulfil the requirement to be classified as either indicated or inferred:

Indicated - Areas with drill spacing up to approximately 40mE x 40mN with reasonable confidence in the geology.

Inferred – Areas with drill spacing in excess of 40mE x 40mN. These are less well informed regions of the model and generally only receive an estimated grade on the third estimation run with relaxed estimation parameters.

## CUT-OFF GRADES AND REPORTING

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.4g/t Au and is constrained to a depth of 200m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. The reported Mineral Resources have been depleted to account for previous mining.

The currently defined depth extent of mineralisation does not warrant reporting of resources with potential for extraction by underground mining.

## METALLURGY

BDC has not conducted metallurgical testwork on mineralisation at Talbot North. It is noted that previous open pit mining at Talbot North has seen 307kt @ 1.66g/t Au for 16.4koz Au of ore mined and treated through the nearby Paddington Mill, recoveries from this ore parcel are unknown.

## **MODIFYING FACTORS**

No modifying factors were applied to the reported Mineral Resources. Parameters including geotechnical, mining dilution, ore loss and metallurgical recoveries will be considered during the planned mining evaluation of the project.



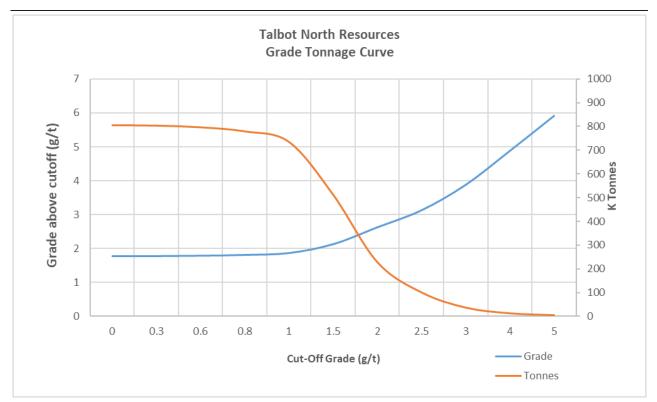


Figure 10: Grade tonnage curve



## VETTERSBURG SOUTH

The Vettersburg South deposit has a current JORC Resource of **552kt @ 1.46g/t Au for 25.9koz** of contained Au.

	Measured Tonnes g/t		Indicated		Inferred		Total		
	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces
Total					551,600	1.46	551,600	1.46	25,900

Table 19: Vettersburg South >=0.60g/t Au above 120mbs – OP resource

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.6g/t Au and is constrained to a depth of 120m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. Historic underground mining has taken place at the deposit, the extents of which are unknown, and as a result the resource has not been depleted for this mining.

The currently defined extent of mineralisation above 2.0g/t Au does not warrant reporting of resources with potential for extraction by underground mining.

For further details refer to Excelsior Gold Ltd (ASX: EXG) Announcement of 11 December 2013.



# WINDANYA

The Windanya deposit has a current JORC Resource of **360kt @ 1.49g/t Au for 17.3koz** of contained Au.

	Measured		Indicated	Indicated		Inferred		Total		
Class	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Tonnes	g/t	Ounces	
Oxide					73,626	1.68	73,626	1.68	3,977	
Transitional					90,469	1.46	90,469	1.46	4,247	
Fresh					196,307	1.44	196,307	1.44	9,088	
Total					360,400	1.49	360,400	1.49	17,300	

Table 20: Windanya >=0.60g/t Au above 50mbs – OP resource

The Mineral Resource reported by the Company is that portion of the resource model that is above 0.6g/t Au and is constrained to a depth of 50m below surface to reflect potential development by open pit mining. This satisfies the "reasonable prospects of eventual economic extraction" criteria for JORC compliance. Only Indicated and Inferred mineralisation that falls within this area is reported as Mineral Resource. Historic underground mining has taken place at the deposit, the extents of which are unknown, and as a result the resource has not been depleted for this mining.

The currently defined extent of mineralisation above 2.0g/t Au does not warrant reporting of resources with potential for extraction by underground mining.

For further details refer to Excelsior Gold Ltd (ASX: EXG) Announcement of 11 December 2013.

# BARDOC GOLD PROJECT – BACKGROUND

The New Bardoc Gold Project was formed in October 2018 following completion of the merger between Excelsior Gold and Spitfire Materials, bringing together significant resources and excellent potential for growth (refer Scheme Booklet dated 13 August 2018).

The New Bardoc Gold Project runs contiguously north for 50km in the Eastern Goldfields. There are four main deposits and a multitude of smaller projects within the 247km<sup>2</sup> land-holding, providing a large Resource base and excellent exploration potential within the prolific Norseman-Wiluna greenstone belt and junction of the Bardoc Tectonic Zone (BTZ) and the Black Flag Fault (BFF).

These two deep-seated crustal structures host many multi-million-ounce deposits, including the world-renowned Golden Mile in Kalgoorlie.



## **GLOBAL RESOURCE – BARDOC GOLD PROJECT**

BARDOC GOLD RESOUR		т	м	EASURED		IN	DICATE	D	IN	FERRED	)	TOTAL	RESOL	JRCES	
Deposit	Туре	Cut-Off (g/t Au)	Tonnes (,000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (.000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (.000t)	Grade (g/t Au)	Ounces (,000oz)	Tonnes (.000t)	Grade (g/t Au)	Ounces (,000oz)	Original Report D
Aphrodite	ОР	0.4	-	-	-	11,622	1.7	619	6,676	1.4	298	18,288	1.6	916	22-May-
Aphrodite	UG	2.0	-	-	-	3,458	3.9	436	2,391	4.3	330	5,848	4.1	765	
Aphrodite	TOTAL		-	-	-	15,080	2.2	1,055	9,067	2.2	628	24,136	2.2	1,681	
Zoroastrian	ОР	0.4	-	-	-	3,862	1.8	229	1,835	1.5	89	5,698	1.7	318	22-May-
Zoroastrian	UG	2.0	-	-	-	580	4.4	82	823	4.3	114	1,403	4.4	197	
Zoroastrian	TOTAL		-	-	-	4,442	2.2	311	2,658	2.4	203	7,101	2.3	515	
Excelsior	OP	0.4	-	-	-	6,729	1.2	266	1,749	1.0	54	8,478	1.2	320	
Mulwarrie	OP	0.5	-	-	-	-	-	-	881	2.8	79	881	2.8	79	13-Nov-1
Bulletin South	OP	0.4	152	2.2	11	546	2.1	36	150	2.1	10	849	2.1	57	
Lochinvar	OP	0.4	-	-	-	423	1.8	24	57	1.6	3	480	1.7	27	19-Feb-1
Nerrin Nerrin	OP	0.5	-	-	-	-	-	-	651	1.3	26	651	1.3	26	
Ophir	OP	0.6	-	-	-	-	-	-	75	1.9	5	75	1.9	5	11-Dec-1
Vettersburg South	OP	0.6	-	-	-	-	-	-	552	1.5	26	552	1.5	26	11-Dec-1
El Dorado	OP	0.5	-	-	-	-	-	-	471	1.5	23	471	1.5	23	
Talbot North	OP	0.4	-	-	-	698	1.8	40	123	1.8	7	820	1.8	47	
Windanya	OP	0.6	-	-	-	-	-	-	360	1.5	17	360	1.5	17	11-Dec-1
South Castlereagh	OP	0.5	-	-	-	111	1.6	6	369	1.3	15	481	1.4	21	1
Grafters	OP	0.5	-	-	-	-	-	-	319	1.3	14	319	1.3	14	1
Ouke North	OP	0.4	-	-	-	851	1.0	28	795	1.0	25	1,646	1.0	53	1
TOTAL RESO	URCES		152	2.3	11	28,880	1.9	1,766	18,277	1.9	1,135	47,300	1.9	2,911	

ACQUISITIO	ONS**		м	EASURED		IN	DICATE	D	INI	FERRED		TOTAL	RESOL	IRCES
Deposit	Туре	Cut-Off	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes		Ounces	Tonnes	Grade	Ounces
		(g/t Au)	(,000t)	(g/t Au)	(,000oz)									
North Kwanana Star	OP	0.5	-	-	-	-	-	-	716	1.4	32	716	1.4	32
Mayday North	OP	0.5	-	-	-	-	-	-	1,410	1.7	79	1,410	1.7	79
TOTAL RESO	DURCES								2,126	1.6	112	2,126	1.6	111

 GLOBAL RESOURCE
 152
 2.3
 11
 28,880
 1.9
 1,766
 20,403
 1.9
 1,247
 49,426
 1.9
 3,022

 \* Differences may occur due to rounding.

\*\* The Mineral Resource Estimate for Mayday and North Kanowna Star are subject to completion of the acquisition of the tenements as announced on 9 September 2019. Completion is expected to occur within 30 days.

#### Table 21: Mineral Resource Table



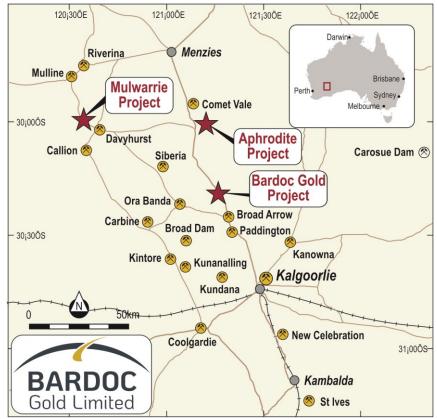


Figure 11: Project Location Plan

## DISCLAIMERS AND FORWARD-LOOKING STATEMENTS

This announcement contains forward looking statements. Forward looking statements are often, but not always, identified by the use of words such as "seek", "target", "anticipate", "forecast", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions.

The forward-looking statements in this announcement are based on current expectations, estimates, forecasts and projections about Bardoc and the industry in which they operate. They do, however, relate to future matters and are subject to various inherent risks and uncertainties. Actual events or results may differ materially from the events or results expressed or implied by any forward-looking statements. The past performance of Bardoc is no guarantee of future performance.

None of Bardoc's directors, officers, employees, agents or contractors makes any representation or warranty (either express or implied) as to the accuracy or likelihood of fulfilment of any forward-looking statement, or any events or results expressed or implied in any forward-looking statement, except to the extent required by law. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.



#### For further information contact:

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#### **Competent Person's Statement – Exploration Results**

Information in this announcement that relates to exploration results is based on information compiled by Mr. Bradley Toms who is the Exploration Manager of Bardoc Gold Limited. Mr. Toms 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 that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Toms consents to the inclusion in the document of the information in the form and context in which it appears.

### **Competent Person's Statements – Mineral Resources**

The information contained in this report relating to Resource Estimation results for Aphrodite, Excelsior, Duke North, Lochinvar, Ophir, Talbot North, Vettersburg South, Talbot North and Windanya relates to information compiled by Mr. Bradley Toms. Mr. Toms is a member of the Australian Institute of Geoscientists and is a full time employee of the company. Mr. Toms has sufficient experience of relevance to the styles of mineralisation and the types of deposit under consideration, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Toms consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Information in this announcement that relates to the Bulletin South Mineral Resource results is based on information compiled by Mr. Patrick Adams who is a Director of Cube Consulting Pty Ltd. Mr. Adams is a Fellow of the AusIMM (CP) and 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 that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Adams consents to the inclusion in the document of the information in the form and context in which it appears.

The information in this report that relates to Mineral Resources for the Mulwarrie Gold Deposit is based on and fairly represents information compiled by Mr John Young and Mr Lauritz Barnes. Mr Young is a Director of Bardoc Gold Ltd and Mr Barnes is a consultant to Bardoc Gold Ltd. Mr Young and Mr Barnes are both members of the Australasian Institute of Mining and Metallurgy and have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Young is the Competent Person for the database, geological model and interpretation plus completed the site inspections. Mr Barnes is the Competent Person for the resource block model estimation. Mr Young and Mr Barnes consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.



The information in this report that relates to Mineral Resources for the South Castlereagh, Grafters, Nerrin Nerrin and El Dorado Gold Deposits is based on and fairly represents information compiled by Mr Ross Whittle-Herbert and Mr Lauritz Barnes. Mr Ross Whittle-Herbert was a full time employee of Bardoc Gold Ltd up until 16<sup>th</sup> August 2019 and Mr Barnes is a consultant to Bardoc Gold Ltd. Mr Whittle-Herbert is a Member of The Australian Institute of Geoscientists and Mr Barnes is a member of the Australasian Institute of Mining and Metallurgy and both have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Ross Whittle-Herbert is the Competent Person for the database, geological model and interpretation plus completed the site inspections. Mr Barnes is the Competent Person for the resource block model estimation. Mr Ross Whittle-Herbert and Mr Barnes consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.



# Appendix 1

## JORC Code, 2012 Edition – Table 1 report - Aphrodite

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Criteria Sampling techniques	<ul> <li>JORC Code explanation</li> <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> <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>Commentary         <ul> <li>Historic</li> <li>The Aphrodite Gold drill sample data has been collected by various exploration companies between 1992 and 2018 Drilling programs included Rotary Air Blast (RAB), and Reverse Circulation (RC) Diamond (DD) drilling techniques. All RC sampling to industry standard using rig mounted cone or riffle splitters to collect +2.5kg sample for assay be certified laboratories. Core samples generally half core, sawn and sampled at 1m intervals. Some sampling to intervals of geological interest.</li> <li>Spitfire</li> <li>About 80% reverse circulation chips and 20% half or quarter core.</li> <li>Chips over 1m rotary or riffle split on site to ~3kg and core was sawn on 1m intervals.</li> <li>Continuous sampling below unmineralised overburden layer.</li> <li>Chips crushed to 3mm then 2.5kg pulverized, core crushed and pulverized entirely.</li> <li>Standard 50g fire assay (84%), AR digest on unknown (16%). Bardoc Gold</li> <li>Reverse circulation drilling used to obtain sample every 1m. 4m composite sampling in upper unmineralised portions of holes. Samples of approx. 3kg were pulverized to produce a 50g charge for fire assay</li> <li>Half core (mostly NQ, occasional HQ) samples of 1m length or less in areas of geological interest. Samples crushed, pulverized and 50g charge extracted for fire assay</li> </ul> </li> <li>Historic</li> <li>RC drilling 5.5" diameter. Diamond core predominantly NQ diameter, minor HQ diameter. Spitfire</li> <li>Reverse circulation (80%) and HQ or NQ core (20%)</li> <li>Aircore and rotary air blast holes excluded from resource estimation. Bardoc Gold</li> <li>Reverse circulation drilling (146mm diameter) using face sampling hammer and HQ and NQ diamond drilling. Rock Roll used to drill through upper, un-mineralised transported sediments prior to casing off with HQ</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>Historic</li> <li>Chip recovery not documented for historic drilling.</li> <li>Core recoveries recorded</li> <li>Spitfire</li> <li>All core measured in tray for recovery.</li> <li>Generally high core recovery recorded.</li> <li>RC chip recovery in recent drilling recorded by weight but not recorded in most historic drilling (prior to 2010).</li> <li>No observed relationship between recovery and grade.</li> <li>Bardoc Gold</li> <li>Diamond core recovery was measured for each run and calculated as a percentage of the drilled interval, in fresh rock, the core recovery was excellent at 100%</li> <li>Size of RC sample piles monitored during drilling. Sample weight recorded by laboratory.</li> </ul>
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining	<ul> <li>Historic</li> <li>RC and Core logging completed to a level that supports Mineral Resource Estimation.</li> <li>Logging both qualitative and quantitative</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>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>All core and RC chips logged</li> <li>Spitfire</li> <li>All core and chip intervals geologically logged.</li> <li>Logging includes lithologies, alteration, mineralization, colour, oxidation, regolith, moisture, and percentage sulphide and veining.</li> <li>Purpose drilled core holes for metallurgical and geotechnical data collection.</li> <li>Bardoc Gold</li> <li>All core and chip intervals geologically logged.</li> <li>Logging includes lithologies, alteration, mineralization, colour, oxidation, regolith, moisture, and percentage sulphide and veining.</li> <li>Core is orientated to facilitate structural measurements.</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>Historic</li> <li>Core was half sawn for original sampling and quarter sawn if duplicates were taken.</li> <li>Sampling by riffle splitting or cone splitting directly off RC rig cyclone</li> <li>Where composite samples were taken the individual riffle split samples were spear sampled to form the composite.</li> <li>Wet samples (rare) were spear sampled</li> <li>Sampling techniques are appropriate for the nature of the deposit</li> <li>RC field duplicate and core samples were analysed with original samples and precision results were adequate.</li> <li>Spitfire</li> <li>Core was half or quarter sawn depending on program.</li> <li>Chips were rotary or riffle split depending on drill program.</li> <li>Duplicate field samples taken from RC chips every 1 in 20 for recent drilling and well recorded. Duplicate sampling of sawn quarter core.</li> <li>Duplicate analysis precision considered good.</li> <li>Sample sizes are generally considered adequate for the material being sampled</li> <li>Bardoc Gold</li> <li>Core was half sawn using Almonte core saw by BDC field staff.</li> <li>Chips were split using a cone splitter. Sample sizes are subjectively monitored and generally considered adequate for the material being sampled.</li> <li>For RC and diamond cores standards and blanks are inserted into the sample stream to ensure sample quality and assess analysed samples for significant variance to primary results, contamination and repeatability.</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>Historic</li> <li>Nearly all RC and DD assays by 40g or 50g fire assay which is a total technique.</li> <li>Blind field duplicates submitted as well as reference standards although documentation not always well preserved in historic programs due to ownership changes.</li> <li>Limited programs of Interlab checks undertaken and not always well recorded. Spitfire</li> <li>All samples assayed by Fire Assay with ICP finish for Au, and Peroxide Fusion Digest with ICP finish for As, S &amp; Cu. Gold fire assay considered a total technique.</li> <li>Majority of samples prepared and assayed by industry standard techniques for gold deposits using well established and certified laboratory services.</li> <li>Recent checking of fire assays by bulk Leachwell and screen fire methods to guard against the possible presence of coarse free gold grains and to investigate refractory character of mineralization.</li> <li>Blind field duplicates submitted as well as reference standards and blanks.</li> <li>Interlab checks undertaken since 2010 Bardoc Gold</li> <li>All samples assayed by Fire Assay with AAS finish for Au. Gold fire assay considered a total technique.</li> <li>Certified reference material standards, 1 in 20 samples.</li> <li>Blanks: Unmineralised material is inserted at regular intervals, as part of the CRM rotation and to check contamination during sample preparation.</li> </ul>



Criteria	JORC Code explanation	Commentary
		Random pulp duplicates are taken on average 1 in every 10 samples by the lab (Lab Checks)
Verification of sampling and assaying	<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>Intersections of core have been observed by independent consultants, Model Earth Pty. Ltd. And numerous company personnel.</li> <li>No specific twin hole program has been undertaken but there are numerous opportunistic twin holes that show reasonable grade correlation given the nature of the mineralization.</li> <li>No adjustments have been made to assay data.</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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Historic</li> <li>Collar locations generally surveyed but techniques sometimes not recorded.</li> <li>Core holes surveyed by north seeking gyro at regular intervals</li> <li>RC holes downhole surveyed by gyro, electronic mutlishot or reflex single shot.</li> <li>One program RC drilling suffered from instrumental errors on dip measurements. Holes were generally short (&lt;120m) and surrounding holes did not exhibit significant dip deviation.</li> <li>All drilling utilized AMG84, Zone 51 grid system</li> <li>Spitfire</li> <li>Downhole surveys by gyro, multi shot or single shot, generally on nominal 30m intervals.</li> <li>Collars located by RTK DGPS by independent surveyor</li> <li>Grid system based on AMG84 Zone 51</li> <li>Surface topography wireframe constructed from LIDAR survey.</li> <li>Some historic hole collars set at nominal elevations and required minor adjustment to the topo surface. Any errors in this process are considered small and are not critical to the resource estimation.</li> <li>Bardoc Gold</li> <li>Downhole surveys by north seeking gyro every 6m for Diamond holes, single shot (magnetic) for RC every 30m.</li> <li>Collars located by RTK DGPS by independent surveyor</li> <li>Grid system changed to MGA94 Zone 51</li> <li>Surface topography wireframe constructed from LIDAR survey.</li> </ul>
Data spacing and distribution	<ul> <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>Data spacing is highly variable, particularly in deeper parts and lateral extremes of the mineralization where it may be sparse.</li> <li>Well drilled areas are at a nominal 20m x 20m drill spacing, less well drilled areas are at 40m x 40m spacing. Grade and geological continuity can be established at his drill spacing. At wider drill spacing, geological continuity is well established and grade continuity less well so.</li> <li>Continuity is appropriate for Mineral Resource Estimation and confidence is reflected in choice of classification</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>Broad mineralizing structures are well recognized and sub-vertical to steep dipping. Mineralised sub-structures appear to be mostly parallel to broader zones.</li> <li>Drill holes are generally oriented to be as perpendicular as possible to these structures, that is east or west orientation and inclined at approximately 60 degrees.</li> <li>Some holes are oriented on north-south sections where an additional mineralised cross structure has been postulated.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Historic</li> <li>Sample security procedures for historic operators unknown.</li> <li>Spitfire</li> <li>Samples hand delivered in sealed bags to the sample preparation facility in Kalgoorlie and Perth. The laboratory then checks the physically received samples against a generated sample submission list and reports back any discrepancies.</li> <li>Bardoc Gold</li> <li>Samples hand delivered in sealed bags to the sample preparation facility in Kalgoorlie and Perth. The laboratory then checks the physically received samples against a generated sample submission list and reports back any discrepancies.</li> </ul>



Criteria	JORC Code explanation	Commentary
		back any discrepancies
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>Sampling techniques for drilling by Aphrodite Gold (2010 to 2013) were reviewed by Tetratech Pty. Ltd in 2013. Procedures were to industry standard.</li> <li>Internal audits of sampling techniques as well as data handling and validation was regularly conducted by Geologists as part of continuous improvement and review of procedures.</li> </ul>

#### Section 2 Reporting of Exploration Results

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 licence to operate in the area.</li> </ul>	<ul> <li>Aphrodite Gold is now a wholly-owned subsidiary of Bardoc Gold Ltd. and has 100% ownership of 5 mining leases, 1 exploration licence and 2 prospecting licences that cover the project area. All are granted with the mining leases nearest expiry year being 2028.</li> <li>There are no known environmental or heritage encumbrances in the immediate vicinity of the deposit which might impact on its exploitation.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Project has had many owners over more than 20 years and has been reviewed multiple times. Historic documents are not always available.</li> <li>Drilling, geological, sampling and assay protocols and methods were to industry standard and adequate for inclusion in Mineral Resource Estimation.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Discontinuous shoots of low to moderate tenor gold mineralisation within two broader sub-parallel mineralised structural zones. Mineralisation is beneath a substantial thickness of leached overburden. Free milling in upper oxidized and partially oxidized zones but mostly refractory in the primary zone.</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>	<ul> <li>No exploration results are being reported in this release so there are no specific drill holes to report.</li> </ul>
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</li> </ul>	<ul> <li>No exploration drill data has been reported in this release, therefore there is no information regarding data aggregation.</li> <li>Metal equivalents are not used</li> </ul>



Criteria	JORC Code explanation	Commentary
	metal equivalent values should be clearly stated.	
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>Mineralisation at Aphrodite is interpreted to be hosted by shear zone and linking structures within the BTZ which trends about NNW.</li> <li>Typically, the angular difference between the drillholes and mineralisation is about 35°, given the sub-vertical nature of the mineralised bodies.</li> <li>Downhole exploration results are not reported in this release.</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 the body of the report for diagrams.
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>	<ul> <li>The previous and current drilling was reported Spitfire Materials Limited (SPI) and Dardoc Gold (BDC). Individual drill hole results are not reported in this release.</li> </ul>
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>	<ul> <li>The previous exploration work completed on the deposit was done by previous owners and are too extensive to report in the context of this announcement.</li> <li>Fresh rock samples are refractory in nature and in order to maximize gold recoveries, alternative processing methods to standard CIL/CIP are being investigated.</li> <li>Arsenic and Sulphur are present in quantities that will require additional consideration of tailings disposal options.</li> </ul>
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>Bardoc Gold is to continue with mine planning studies, including extensive metallurgical test work.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Criteria	JORC Code explanation	Criteria	JORC Code explanation	Comment
Database integrity	been corrupted transcription or k		(since 2010) to for	tabases have been combined with recent drilling dat m a unified database held in a Datashed SQL database missing for historic drilling programs.	



Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Mr Ross Whittle-Herbert visited the site on several occasions to view diamond drilling, core processing, geological logging and sampling procedures. All work was completed to industry standards.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geology of the system and the gold distribution is complex, however recent structural knowledge has elevated confidence in ore lode geometries. There is good continuity of mineralisation established by 20m x 20m close spaced drilling near surface and reasonable continuity from 40m x 40m drilling. Ore shoot geometries are predicted from structural evidence and confirmed from geostatistics.</li> <li>The use of historical drilling provides a level of uncertainty as the company cannot validate the collar location and downhole survey data.</li> <li>The lithology units have been modelled using drilling data and consist of a north-south striking, sub-vertical sequence of sediments, volcaniclastics and porphyry. Mineralisation is oriented NNW within 2 major shear systems. Individual structures are evident within the shear systems and are associated with veining, alteration, foliation and gold. Geological information such as veining, alteration and structure, plus gold and Arsenic grades, were used to guide the interpretation.</li> <li>Structural continuity of the shear systems is extensive. The grade continuity within the shears is less continuous.</li> </ul>
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 lower limits of the Mineral Resource.	<ul> <li>Mineralisation within the 2 major shears extends for ~1.6km along strike and 500m in elevation. The shears are separated by ~120m. Locally, between the major shears are mineralised linking structures. An extensive supergene blanket extends for up to 400m east of the deposit. Depth below surface to the top of the resource is between 35 and 60m.</li> </ul>
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> </ul>	<ul> <li>BDC has used 3DM wireframes to constrain the mineralised shear zones. All lodes have been interpreted on a sectional basis using the available exploration drilling data on variable spacing. Lode interpretations were modelled using Leapfrog vein modelling tools.</li> <li>Raw assay samples were composited to 1m. Compositing started where each drill hole entered a mineralised wireframe and continued until exiting the wireframe. A minimum composite width of 0.7m was chosen and any residual composites were averaged with the previous sample.</li> <li>An estimation completed in 2018 and an ID2 estimate, using the same composites and search parameters were used as comparisons to the current resource.</li> <li>Estimation was completed using Ordinary Kriging using Micromine software</li> <li>Variograms were generated using composited drill data in Snowden Supervisor v8 software.</li> <li>Search ellipse dimensions and orientation reflect the parameters derived from the variography analysis and the Kriging Neighbourhood Analysis.</li> <li>Sulphur and Arsenic were estimated with ID2 method using Micromine software</li> <li>The following criteria were considered when choosing gold grade top cuts: <ul> <li>The coherence and stability of the upper tail of the gold grade distribution;</li> <li>Visual inspection of the spatial location of outlier values;</li> </ul> </li> <li>The estimation panel size used was 10mE x 20mE x 5mRL.</li> <li>Interpolation parameters – the search ellipse was aligned to the mineralised trend of each domain and oriented the same as the modelled rotations defined from the variography. A minimum of 8 samples and a maximum distance varying between 70m and 90m, depending on mineralised lode and defined by kriging neighbourhood analysis. For each successive run search distances increased and minimum samples decreased. Classification was used to mitigate risk associated with less well estimated blocks.</li> </ul>



	·	
	<ul> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>Validation was completed         <ul> <li>visually, comparing block estimated grades to local drilling and;</li> <li>Using swath plots on a N-S, E-W and depth and</li> <li>Comparing estimated grades to composite grades on a domain by domain basis.</li> </ul> </li> </ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	Tonnages were based on a dry basis.
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>The selection of mineralised domains has used geological factors such a logged quartz and sulphides in conjunction with a ~1g/t Au cut off which represents the mineralised shear in all modelled domains.</li> <li>The underground MRE has been reported above 2.5g/t Au cut-off and below 190m RL which represents 200m below surface</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining 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.</li> </ul>	<ul> <li>No minimum width is applied to the resource. Minimum widths are assessed and applied during the reserve process.</li> <li>It is assumed that planned dilution is factored into the process at the mine planning stage</li> </ul>
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.	<ul> <li>The Aphrodite deposit has never been mined. However BDC has conducted metallurgical test work on all ore types. The refractory nature of the fresh (and some transitional) ores has prompted investigations into pressure oxidation (POX) and Albion ore processing methods for these ores. The preferred processing method at this stage is to use the Albion method and recoveries and operating costs will be based on this.</li> </ul>
Environmental factors or assumptions	<ul> <li>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 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.</li> </ul>	<ul> <li>At this time no issues are anticipated with waste and process residue handling that would be outside the regular operating conditions for mines of this type in the Eastern Goldfields.</li> </ul>



Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The geological model and continuity of the mineralisation is currently reasonably well understood The MRE is classified into indicated and inferred to reflect the confidence in the estimate of different areas of the MRE. The classification is based on drill hole spacing, geological continuity and estimation quality parameters.         <ul> <li>Indicated – Areas with drill spacing up to approximately ~40mE x 40mN and with reasonable confidence in the geological interpretation.</li> <li>Inferred – Areas with drill spacing up to ~80mE x 80mN.</li> </ul> </li> <li>There is a high level of confidence in input data, geology and gold grades. At depth where drilling is more separated, confidence in geological and grade continuity is reduced and this is accounted for by having an inferred or unclassified classification.</li> <li>The Mineral Resource estimate appropriately reflects the view of the</li> </ul>
Audits or reviews	Competent Person
Auaits or reviews Discussion of relative accuracy/ confidence	<ul> <li>The results of any audits or reviews of Mineral Resource estimates.</li> <li>The current resource estimate is not independently reviewed at this stage.</li> <li>The relative accuracy of the Mineral Resource estimate is reflected in the relative accuracy of the Mineral Resource estimate is reflected in the relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource estimate is reflected in the reporting of the Stinute accuracy of the Resource estimate is reflected in the reporting of the assumed end proportiet, a qualitative accuracy of the relative accuracy of the restimate is out affect the relative accuracy and confidence of the estimate, 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.</li> <li>These statements of relative accuracy and confidence of the estimate as out a should be compared with production data, where available.</li> </ul>



## JORC , 2012 Edition – Tables - Zoroastrian

# Section 1 Sampling techniques and data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</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. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 carse gold that has inherent sampling problems. Unusual commodities or mineralisation.</li> </ul>	<ul> <li>The mineralization was primarily sampled by Reverse Circulation (RC) and Diamond Core (DC) drilling on nominal 40m x 20m (N x E) grid spacing. The holes were generally drilled towards grid east at varying angles to optimally intersect the mineralized zones.</li> <li>The drilling database consists of historic (pre 2009) and EXG drilling data. The historic data consists of 19 DD and 420 RC holes; EXG drilling consists of 12 DD, 22 Reverse Circulation with diamond tail (RCD), 579 RC and 1800 Reverse Circulation grade control (RCGC) holes.</li> <li>Complete details are un-available for historic drilling.</li> <li>Generally, BDC RC recovered chip samples were collected and passed through a cone splitter.</li> <li>Limited numbers of field duplicates and screen fire assays have been undertaken to support sample representivity.</li> <li>EXG DD core has been sampled by submission of cut half core.</li> <li>All BDC RC drilling was sampled on one metre down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg – 3.5kg sample was taken to a Kalgoorlie contract laboratory. Samples were oven dried, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g or 50g charge. Approximately 200g of pulp material is returned to EXG for storage and potential assay at a later date. The BDC DC samples are collected at nominal dintervals by EXG staff from core that has been cut in half and transported to a Kalgoorlie based laboratory. Samples were oven dried, crushed to a nominal 10mm by a jaw crusher, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by Standard fire assay techniques with a 40g of 50g charge. Approximately 200g of pulp material is returned to EXG for storage and potential assay at a later date.</li> <li>Due to the presence of coarse gold and arsenopyrite some 15</li></ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Prior to 2009 19 DC and 420 RC holes were drilled by previous owners over the area. These holes are without documentation of the rig type and capability, core size, sample selection and handling.</li> <li>For (post 2009) EXG and BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling is NQ2 size core (nominal 50.6mm core diameter) or HQ (nominal 63.5mm core diameter).</li> <li>All EXG and BDC drill core is orientated by the drilling contractor with a down the hole Ace system. Core diameter is noted in the assay results table for DC assay results.</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>All EXG and BDC RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. At least every 10<sup>th</sup> metre is collected in a plastic bag and these are weighed when they are utilized for the collection of field duplicate samples. All samples received by the laboratory are weighed with the data collected and stored in the database.</li> <li>The EXG and BDC DC samples are orientated, length measured and compared to core blocks placed in the tray by the drillers, any core loss or other variance from that expected from the core blocks is logged and recorded in the database. Sample loss or gain is reviewed on an ongoing basis and feedback given to the drillers to enable the best representative sample to always be obtained.</li> <li>EXG RC samples are visually logged for moisture content, sample recovery and contamination. This is information is stored in the database. The RC drill system utilizes a face sampling hammer which is industry best practice and the contractor aims to maximize recovery at all times. RC holes are drilled dry whenever practicable to maximize recovery of sample.</li> </ul>



		<ul> <li>The DC drillers use a core barrel and wire line unit to recover the core, they aim to recover all core at all times and adjust their drilling methods and rates to minimise core loss, i.e. different techniques for broken ground to ensure as little core as possible is washed away with drill cuttings.</li> <li>Study of sample recovery vs gold grade does not show any bias towards differing sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction.</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>All EXG and BDC RC samples are geologically logged directly into hand-held Geobank devices.</li> <li>All EXG and BDC DC is logged for core loss, marked into metre intervals, orientated, structurally logged, geotechnically logged and logged with a hand lens with the following parameters recorded where observed: weathering, regolith, rock type, alteration, mineralization, shearing/foliation and any other features that are present</li> <li>All EXG and BDC DC is photographed both wet and dry after logging but before cutting.</li> <li>The entire lengths of EXG RC holes are logged on a 1m interval basis, i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such. Drill core is logged over its entire length and any core loss or voids intersected are recorded.</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>BDC Exploration results reported for drill core are half core taken from the right hand side of the core looking down hole. Core is cut with an on-site diamond core saw.</li> <li>All EXG and BDC RC samples are put through a cone splitter and the sample is collected in a unique pre-numbered calico sample bag. The moisture content of each sample is recorded in the database.</li> <li>The EXG and BDC RC samples are sorted, oven dried, the entire sample is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge.</li> <li>The EXG and BDC DC samples are oven dried, jaw crushed to nomina &lt;10mm, 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge.</li> <li>EXG and BDC DC samples are oven dried, jaw crushed to nomina &lt;10mm, 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 40g fire assay charge.</li> <li>EXG and BDC RC and DC samples submitted to the laboratory are sorted and reconciled against the submission documents. EXG inserts blanks and standards with blanks submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 20. The laboratory uses their own internal standards of 2 duplicates, 2 replicates, 2 standards and 1 blank per 50 fire assays. The laboratory also uses barren flushes or the pulveriser.</li> <li>In the field every 10<sup>th</sup> metre from the bulk sample port on the cone splitter is bagged and placed in order on the ground with other samples. This sample is then used for collection of field duplicates are only collected where the origin</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> </ul>	<ul> <li>the gold grade ranges returned.</li> <li>EXG and BDC has routinely used local Kalgoorlie Certified Laboratories for all sample preparation and analysis. The most commonly used laboratories have been SGS Australia and Bureau Veritas Australia which has two facilities in Kalgoorlie. No complete details of the sample preparation analysis or security are available for either the historic AC, DD or RC drilling results in the database.</li> <li>The assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for gold analysis at this project giver its mineralization style. The technique involves using a 40g or 50g sample charge with a lead flux which is decomposed in a furnace with the prill being</li> </ul>



	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	<ul> <li>totally digested by 2 acids (HCl and HNO3) before measurement of the gold content by an AA machine.</li> <li>The QC procedures are industry best practice. The laboratory is accredited and uses its own certified reference material. The laboratory has 2 duplicates, 2 replicates, 1 standard and 1 blank per 50 fire assays.</li> <li>EXG and BDC submits blanks at the rate of 1 in 50 samples and certified reference material standards at the rate of 1 in 20 samples in the normal run of sample submission numbers. As part of normal procedures EXG examines all standards and blanks to ensure that they are within tolerances.</li> </ul>
Verification of sampling and assaying	<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>Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists.</li> <li>Consultant geologist, Rick Adams from Cube Consulting, John Harris of Geological Services and independent geologist Matt Ridgway, have inspected drill core and RC chips in the field to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization. Recent drilling has been inspected by BDC site geologists.</li> <li>A number of diamond core holes were drilled throughout the deposit to twin RC holes. These twinned holes returned results comparable to the original holes and were also used to collect geological information and material for metallurgical assessment. A number of RC holes have also been drilled that confirmed results obtained from historical drillholes.</li> <li>Primary data is sent digitally every 2-3 days from the field to BDC's Database</li> </ul>
		<ul> <li>Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the database.</li> <li>No adjustments or calibrations were made to any assay data used in this report.</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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drill holes have their collar location recorded from a hand held GPS unit. Subsequent to drilling holes were picked up using RTKGPS by the mine surveyor or by contracted surveyors. Downhole surveys are completed every 30m downhole. No detailed down hole surveying information is available for the historic RC or DD drilling.</li> <li>EXG routinely contracted down hole surveys during the programmes of exploration RC drilling. Surveys were completed using a digital electronic multi-shot tool. Diamond drilling was downhole surveyed by rig operators using a north seeking gyro. All survey tools were maintained by Contractors to manufacturer specifications.</li> </ul>
		<ul> <li>All drill holes and resource estimation use the MGA94, Zone 51 grid system.</li> <li>The topographic data used was obtained from consultant surveyors and is based on a LiDAR survey flown in 2012. It is adequate for the reporting of Exploration Results and subsequent Mineral Resource estimates.</li> </ul>
Data spacing and distribution	<ul> <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. Whether sample compositing has been applied.</li> </ul>	<ul> <li>The nominal exploration drill spacing is 40m x 40m with many E-W cross-sections in-filled to 20m across strike. This has been infilled with variable spacing for Resource estimate purposes to 20 x 20m and with Grade control to 7.5 x 5m (N x E) spacing.</li> <li>The drill spacing, spatial distribution and quality of assay results is sufficient to support the JORC classification of material reported previously and is appropriate for the nature and style of mineralisation being reported.</li> <li>The majority of RC holes were sampled at 1m, but when this isn't the case, sample compositing to 4m has been applied.</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</li> </ul>	<ul> <li>The majority of drilling is to grid east. The bulk of the mineralized zones are perpendicular to the drilling direction. Structural logging of orientated drill core supports the drilling direction and sampling method.</li> <li>2019 DC drilling was oriented towards the SSE or NNW, (sub) parallel to a unit of fractionated (prospective) dolerite. As such core has intersected mineralised structures at oblique angles</li> <li>No drilling orientation and sampling bias has been recognized at this time.</li> </ul>



	introduced a sampling bias, this should be assessed and reported if material.	
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>RC samples are delivered directly from the field to the Kalgoorlie laboratory by BDC personnel on a daily basis with no detours, the laboratory then checks the physically received samples against an EXG generated sample submission list and reports back any discrepancies</li> <li>Drill core is transported daily directly from the drill site to BDC's secure core processing facility by BDC personnel with no detours. The core is then placed on racks and processed until it requires cutting. Core was initially transported directly by EXG's staff to the Kalgoorlie laboratory where it is cut in half by laboratory staff and then sampled by EXG staff. BDC obtained a core saw and subsequently cut core at the core processing facility. The core is then prepared for assay in Kalgoorlie</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>An internal review of sampling techniques and procedures was completed in March 2013. No external or third party audits or reviews have been completed.</li> </ul>

# **1.1** Section 2 Reporting of Exploration Results - Zoroastrian (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,</li> </ul>	<ul> <li>The results reported in this Announcement are on granted Mining tenements held by GPM Resources Pty Ltd, a wholly owned subsidiary of Bardoc Gold Limited.</li> </ul>				
		partnerships, overriding royalties, native title	Tenement	Holder	Area (Ha)	Expiry Date
		interests, historical sites, wilderness or	M24/11	GPM Resources	1.80	23/03/2025
		national park and environmental settings.	M24/43	GPM Resources	9.28	15/10/2026
	•	The security of the tenure held at the time of	M24/99	GPM Resources	190.75	02/12/2028
		reporting along with any known impediments	M24/121	GPM Resources	36.95	02/11/2029
		to obtaining a licence to operate in the area.	M24/135	GPM Resources	17.75	10/06/2029
			M24/869	GPM Resources	7.16	21/10/2024
			M24/870	GPM Resources	7.04	21/10/2024
			M24/871	GPM Resources	9.72	21/10/2024
			M24/951	GPM Resources	190.03	16/04/2036
Exploration done by other parties	•	Acknowledgment and appraisal of exploration by other parties.	royalties, Project. • Exploratio EXG's and Minerals, both ope	me the tenements are in go duties or other fees impa- on by other parties has been d BDC's exploration activities Aberfoyle and Halycon Grou n pit and underground mini ation, soil sampling and drillin	reviewed and was u s. This includes wo p. Previous parties ng, geophysical dat	Kalgoorlie North sed as a guide to rk by AMAX, Hill have completed
Geology	•	Deposit type, geological setting and style of mineralisation.	<ul> <li>interpretation, soil sampling and drilling.</li> <li>The deposit occurs on the eastern limb of a narrow NNW trending structure, the Bardoc-Broad Arrow syncline within the Bardoc Tectonic Zone. In this zone the sequence comprises highly deformed fault slice lenses of intercalated Archaean mafic and ultramafic volcanics and metasediments.</li> <li>The mineralisation in the Zoroastrian area is predominately associated with a complex array of multiple dimensional and variable orientated quartz veins and stock works within the differentiated Zoroastrian Dolerite. In places a surficial 1-2m thick calcrete/lateritic gold bearing horizon and small near surface supergene pods exist.</li> <li>The Zoroastrian dolerite is thought to be the stratigraphic equivalent of the Paddington dolerite which hosted the 1m+oz mine at Paddington itself with both deposits bounded to the west by the Black Flag sediments and to the east by the Mount Corlac ultramafics. Shear zones up to 10m wide containing gold bearing laminated quartz veining (5cm to 1m wide) occur on both contacts.</li> <li>In late 2018 a fractionated unit within the dolerite sequence was defined</li> </ul>			onic Zone. In this slice lenses of metasediments. y associated with vrientated quartz trian Dolerite. In norizon and small equivalent of the lington itself with ments and to the p to 10m wide o 1m wide) occur



		<ul> <li>NNW a dips steeply to the NE. This unit is a preferred host for gold mineralisation where intersected by mineralised structures.</li> <li>At Zoroastrian slivers of the intruded sequence occur apparently internal to the dolerite throughout the area suggesting a more complex thrust/folding structural system than is readily apparent. Geological and structural interpretation at Zoroastrian is further complicated by contradicting and conflicting mapping and logging of the different units particularly between basalt and dolerite</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>	<ul> <li>See Table 4 of this announcement</li> <li>No results from previous un-reported exploration are the subject of this announcement.</li> <li>Dip is the inclination of the hole from the horizontal (i.e. a vertically down drilled hole from the surface is -90°). Azimuth is reported in magnetic degrees as the direction toward which the hole is drilled. MGA94 and magnetic degrees vary by approximately 1° in this project area</li> <li>Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. Interception depth is the distance down the hole as measured along the drill trace. Intersection width is the downhole distance of an intersection as measured along the drill trace.</li> <li>Hole length is the distance from the surface to the end of the hole, as measured along the drill trace.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high 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>No high grade cuts have been applied to assay results. RC assay results are distance weighted using 1m for each assay.</li> <li>Intersections are reported if the interval is at least 1m wide at 0.5g/t Au grade. Intersections greater than 1m in downhole distance can contain up to 2m of low grade or barren material.</li> <li>No metal equivalent reporting is used or applied.</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 (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>The intersection width is measured down the hole trace, it is not usually the true width. Cross sections in this announcement allows the relationship between true and down hole width to be viewed.</li> <li>Data collected historical workings and shafts exist within the area and structural measurements from orientated diamond core drilling show the primary ore zones to be sub-vertical to steep west dipping in nature with a general northerly strike.</li> <li>All drill results within this announcement are downhole intervals only and due to variable mineralisation and style true widths are not able to be calculated until modelling of the mineralisation.</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>	Plan and cross sectional views are contained within this announcement.
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>	<ul> <li>All results &gt;= 0.5g/t Au are reported. The results are length weighted composites based on the Au grade and down hole length, a maximum of 2m of internal dilution is included.</li> </ul>
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</li> </ul>	<ul> <li>No other exploration data is considered meaningful and material to this announcement.</li> </ul>



	survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>Exploration work is ongoing at this time and may involve the drilling of more drill holes, both DC and RC, to further extend the mineralised zones and to collect additional detailed data on known mineralized zones.</li> <li>No additional information can be made available at this time as it is conceptual in nature and commercially sensitive.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources - Zoroastrian

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data is logged in the field directly into the Geobank mobile device. Lab submission sheets are digitally recorded in the same way. Assay data are received from the laboratories in an electronic format and are imported directly into a standard DataShed system. All data have been validated by the BDC Database Administrator and geological management prior to inclusion in the resource estimate.</li> <li>Any errors recorded from the various validation processes are manually checked and correlated back to the original collection of data. If necessary, field checks are made to confirm validation issues.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	Mr Ross Whittle-Herbert visited the site on numerous occasions to view ore geometries in the open pit and review RC chips and diamond core.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geology of the system and the gold distribution is complex, however a greater understanding of the geology has been gained from the mining of Central open pit. The continuity of mineralisation and volume controls are well established where drilling is at a nominal 30 x 30 m hole spacing.</li> <li>The use of historical drilling provides a level of uncertainty as the company cannot validate the QAQC data and downhole survey data. As such throughout the deposit the company has twinned historical holes to confirm results and location.</li> <li>The close spaced RC grade control drilling and mining pit floor exposure has allowed a detailed re-evaluation of the geological controls on mineralisation by EXG. In addition, subsequent re-logging of diamond core and RC chips has enabled the identification and distinction between mineralised steep and flat structures. The new interpretation of these controls materially impacts the estimation of the Mineral Resources.</li> <li>The result of this revision is that the majority of the mineralisation outside of Central open pit is associated with the steep shear hosted (60-degree west dipping) ladder veins. The bulk of mineralisation near surface in Central open pit was associated with the flat structures. However as the pit deepened, almost all the mineralisation was associated with the steep west dipping structure.</li> <li>The selection of mineralised domains has used geological factors such a logged quartz and sulphides in conjunction with a 1g/t cut-off for the underground model. The 1g/t threshold was chosen based on an observation from recent diamond drilling that there is frequently a very</li> </ul>



Dimensions	<ul> <li>sharp grade contact on the hanging wall of the steep lodes. Gold values transition from background to ore grades over a very short distance. The hanging wall contact is the one likely to be followed in ore drives. The footwall contact was also interpreted to a 1g/t cut-off, although grades can be more diffuse, transitioning to background values over a longer distance.</li> <li>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 lower limits of the Mineral Resource.</li> <li>Mineral Resource.</li> </ul>
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extremed and the goologits and based on pit floor mapping, and observation, ore mark-outs and the close spaced RCGC drilling at spacing's drawameters and maximum distance of extrapolation from data points. If a comparison and RCCC drilling data on variable spacing ranging from 7.5 x 5m to 20 x 20m to 40 x 40m (N x E-W).</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate to the data base.</li> <li>The availability of check estimates, previous estimates and/or mine production. Records and whether the Mineral Resource estimate to the data.</li> <li>The assumptions made regarding recovery of the propertial of such data.</li> <li>The assumptions develoal interpolation, the block size of rolek model interpolation, the block size in relation to the avaerage somple spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpolation mean grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to variable solut and validity for the drill hole data, and use of reconciliation dratin forvaitable.</li> <li>The process of validation, the che</li></ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> <li>Tonnages were based on a dry basis.</li> </ul>
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.     The underground Mineral Resource has been reported above a 2.5g/t Au cut-off below 240mRL, which is 200m below surface.



Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining 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.	<ul> <li>A cut-off of 2.5g/t was chosen for material below 240mRL to highlight the potential for underground extraction. Further work, including additional drilling, will determine the optimal mining method for this material.</li> </ul>
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.	<ul> <li>The Zoroastrian deposit has been mined successfully with no metallurgical issues. Gold recoveries in excess of 90% were achieved during mining of Central open pit.</li> </ul>
Environmental factors or assumptions	<ul> <li>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 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.</li> </ul>	There are no environmental issues concerning the extraction or disposal of waste or tailing material.
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>There are three sources of experimental bulk density data. The first are the results of systematically collected DD core measurements and the second were downhole caliper SG readings every 0.1m for selected holes. The third source was bulk in-pit density determinations gathered by the mining staff. The DD core results provide a source of competent rock bulk density data however the data lacks any representative data for less competent oxide and transitional weathered rock. The in-pit data represents an attempt to measure the densities of the less competent material.</li> <li>A total of 103 determinations have been made from 13 EXD DD holes. Determinations were made using two methods – for 5 holes the densities were determined using a down hole probe, the Auslog A659 Caliper Tool, the balance were selected core sent to the Genalysis Laboratory in Kalgoorlie where specific gravity was determined by gravimetric technique. The majority of these data were taken on fresh dolerite core, with a small number of oxidised and transitional dolerite core results. The average depth of these determinations have been made between the 430m, and 400m pit floor RLs, at surveyed locations within 29 high and low grade ore mark-out blocks. The RLs of these determinations places them within the oxide and transitional weathering profile.</li> <li>Density measurements (Archimedes method) were made from recent 2019 DD drilling in fresh rock. In total 60 ore and 54 waste measurements were</li> </ul>



Classification	<ul> <li>used. This resulted in an average waste density of 2.89kg/m<sup>3</sup> and or of 2.97kg/m<sup>3</sup>. A fresh ore density of 2.9 was adopted in the resource Oxide and Transitional ore densities used were 2.0 kg/m<sup>3</sup> and 2 respectively</li> <li>On balance BDC believe that there are sufficient data to a assignment of average values to the MRE block model but not evalues assumed bulk density values for ore and waste based on the int weathering surfaces.</li> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. 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).</li> <li>The MRE has been validated by "ground truth" methods whereby evalues on firm that the deeper MR areas estimated ou</li> </ul>	e model. 2.5 kg/m <sup>3</sup> llow the nough to ave used erpreted ently well neralised tructures effect the estimates has been he results
	<ul> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The Mineral Resource estimate appropriately reflects the view Competent Person</li> </ul>	at will be etal.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.     The Ordinary Kriged underground MRE has not been reviewed.	
Discussion of relative accuracy/ confidence	<ul> <li>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 Mineral Resource in accordance with the guidelin 2012 JORC Code.</li> <li>The significant amount of production (&gt;700kt) and geological info available from historical mining production data allows for a high confidence in geological continuity can be estimated to a degree of accuracy high factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	es of the ormation degree of ade and h enough icated or ages and resource



## JORC, 2012 EDITION – TABLES – DUKE NORTH

## 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> </ul>	<ul> <li>The mineralization was sampled by Reverse Circulation (RC) drilling on a nominal 20m x 20m grid spacing. The holes were generally drilled towards grid west at 60° to optimally intersect the mineralized zones. All sampling from inclined RC drilling</li> <li>Excelsior Gold (EXG) - All RC recovered samples were collected and passed through a cone splitter on 1m intervals. The recovered samples were passed through a cone splitter and a representative 2.5kg – 3.5kg sample was taken to a Kalgoorlie contract laboratory for gold assay. Samples were oven dried, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 50g charge. Approximately 200g of pulp material is returned to Excelsior for storage and potential re-assay at a later date</li> </ul>
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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>Parcontinental (Pancon) – RC drilling to obtain 1m samples which were riffle split to approx.3kg for gold analysis by 50g charge fire assay</li> <li>Goldfields (GLD) - All RC holes sampled at 1m intervals and placed on the ground (Non resource drilling) or in plastic bags (resource drilling) from the cyclone. Dry samples were riffle split to ~4kg. Wet samples were scoop sampled. All samples analysed by fire assay, 50g charge</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>EXG - The RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit.</li> <li>Pancon - 5", 5,25" and 5.5" RC drilling on local grid</li> <li>GLD - 5.5" RC on local grid</li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	• EXG - All RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. At least every 10 <sup>th</sup> metre is collected in a plastic bag and these are weighed when they are utilized for the collection of field duplicate samples. The weight of the sample in the plastic bag is recorded and the total sample recovery can be calculated. All samples received by the laboratory are weighed with the data collected and stored in the database. The DC samples are orientated, length measured and compared to core blocks placed in the tray by the drillers, any core loss or other variance from that expected from the core blocks is logged and recorded in
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>the database. Sample loss or gain is reviewed on an ongoing basis and feedback given to the drillers to enable the best representative sample to always be obtained.</li> <li>Pancon – No information on sample recoveries</li> <li>Goldfields – No information on sample recovery</li> </ul>
	<ul> <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>EXG - RC samples are visually logged for moisture content, sample recovery and contamination. This is information is stored in the database. The RC drill system utilizes a face sampling hammer which is industry best practice and the contractor aims to maximize recovery at all times. RC holes are drilled dry whenever practicable to maximize recovery of sample</li> </ul>



Criteria	JORC Code explanation	Commentary
		• EXG - Study of sample recovery vs gold grade does not show any bias towards differing sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction. The sample recovery vs gold grade is assessed on an ongoing basis throughout the drilling program.
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>EXG - All RC samples are geologically logged. Specifically, each interval is visually inspected with a hand lens and the following parameters are recorded where observed: weathering, regolith, rock type, alteration, mineralization, hardness, shearing/foliation and any other features that are present. All drill core is logged for core loss, marked into metre intervals, orientated, structurally logged, geotechnically logged and logged with a hand lens with the following parameters recorded where observed: weathering, regolith, rock type, alteration, mineralization, hardness, shearing/foliation and any other features that are present. This information is transferred electronically from the geologist to the database. Where possible the logging records the abundance of specific minerals or the amount of alteration (including weathering) using defined ranges. The entire length of RC holes are logged on a 1m interval basis, ie 100% of the drilling is logged, where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such. Drill core is logged over its entire length and any core loss or voids intersected are recorded.</li> <li>Pancon - All holes were geologically logged, recording lithology, texture, grainsize, alteration minerals. Amounts of veining, alteration minerals and sulphide logged as a percentage. Entire holes logged</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> </ul>	<ul> <li>EXG - All RC samples are put through a cone splitter and the representative sample is collected in a unique pre- numbered calico sample bag. The moisture of a sample is recorded in the database. The drilling method is designed to maximize sample recovery and representative splitting of samples. The drilling methods also maximize dry samples as they are designed to keep water out of the hole when possible</li> <li>Pancon - Samples collected every 1m in large plastic bags from the cyclone. Each interval riffle split into ~4kg samples. Unknown what sampling method was utilized or wet samples, although water intersections are not noted in any historic or recent EXG drilling</li> <li>GLD - All holes sampled at 1m intervals and placed in plastic bags from the cyclone. Dry samples were riffle split to ~4kg. Wet samples were scoop sampled.</li> <li>EXG - The sample preparation technique for all samples follows industry best practice, by an accredited laboratory. The techniques and practices are appropriate for the type and style of mineralization. The RC samples are sorted, oven dried, riffle split to 3kg as required, then pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge. The DC samples are oven dried, jaw crushed to nominal &lt;10mm, 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <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>approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge.</li> <li>Pancon – Exact sample preparation techniques unknown but sample prep carried out by accredited laboratory (SGS or AAL) and assumed to be to industry standard and appropriate for sample type.</li> <li>GLD - Exact sample preparation techniques unknown but sample prep carried out by accredited laboratory (SGS or AAL) and assumed to be to industry standard and appropriate for sample type.</li> <li>EXG - RC and DC samples submitted to the laboratory are sorted and reconciled against the submission documents. Excelsior inserts blanks and standards with blanks submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 20. The laboratory uses their own internal standards of 2 duplicates, 2 replicates, 2 standards, and 1 blank per 50 fire assays. The laboratory also uses barren flushes on the pulveriser.</li> <li>Pancon – A system of field duplicates and standards were submitted with each dispatch to monitor laboratory performance, as stated in annual (WAMEX) reports. Results are not available for analysis.</li> <li>GLD - A system of resamples with standards and blanks were submitted with all samples dispatched, as stated in annual (WAMEX) reports. Results are not available for analysis.</li> <li>EKG - In the field every 10<sup>th</sup> metre from the bulk sample port on the cone splitter is bagged and placed in order on the ground with other samples. This sample is then used for collection of field duplicates via riffle splitting. RC field duplicates are not ycollected where the original assay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory for the standard assay process. The la</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>EXG, Pancon &amp; GLD - Analysis by fire assay, 50g charge. The fire assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for the testing of gold at this project given its mineralization style. The technique involves using a 50g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCl and HNO<sub>3</sub>) before measurement of the gold content by an AA machine.</li> <li>Not used for reporting or interpretation of gold mineralization.</li> <li>EXG - The QC procedures are industry best practice. The laboratory is accredited and uses its own certified reference material. The laboratory has 2 duplicates, 2 replicates, 1 standard and 1 blank per 50 fire assays. At the same time Excelsior submits blanks at the rate of 1 in 50 samples and certified reference material standards at the rate of 1 in 20 samples in the normal procedures Excelsior examines all standards and blanks to ensure that they are within tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists. Field duplicates exhibit</li> </ul>



Verification of sampling and assaying	• The verification of significant intersections by	<ul> <li>relatively poor levels of precision attributable to a naturally high grade variance between closely spaced samples. Lab repeat (blind and non blind) precision is good. Accuracy is acceptable</li> <li>Pancon &amp; GLD – only assay repeat data available for</li> </ul>
sampling and	• The verification of significant intersections by	analysis and precision is good
	<ul> <li>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>EXG – Drill intersection have been inspected by EXG geologists other than the one responsible for this report. Independent personnel have not viewed drill intersections.</li> <li>Pancon &amp; GLD – Unknown</li> <li>EXG – Holes not deliberately twinned but widths and tenor of mineralization were similar to historic RC intersections</li> <li>EXG - Primary data is sent digitally every 2-3 days from the field to Excelsior's Database Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the database.</li> <li>Pancon – Handwritten geology logs digitally captured. Assay data management procedures unknown</li> <li>GLD – Data management procedures unknown</li> <li>No adjustments or calibrations were made to any assay data used in this report</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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>EXG - Prior to drilling the drill hole locations were pegged using either contract surveyors or hand held GPS units. After drilling, all drill hole locations are picked up by contract surveyors using a RTK system. RC drill holes were not downhole surveyed, all holes drilled to &lt; 100m depth. All drill holes are drilled and recorded on MGA94, Zone 51</li> <li>Pancon – Collar locations surveyed on local grid by qualified surveyor from Paddington mine. Local grid to MGA94 zone51 conversion by 2 point transformation. Downhole surveys carried out by contract surveyors, Downhole Surveys. Results of surveying showed that RC holes remained straight with a slight shift of up to 2° in dip and 5° in azimuth. By the bottom of the hole most holes had straightened to within 1° of planned dip and azimuth.</li> <li>GLD – Collars surveyed by unknown method. Holes not down hole surveyed.</li> <li>The topographic data used was obtained from consultant surveyors and is based on a LiDaAR survey flown in 2012. It is adequate for the reporting of Exploration Results and subsequent Mineral Resource estimates. Historic underground is known to have existed on the deposit, the extents of which are unknown. The mineral resource has not been depleted for historic mining</li> </ul>
Data spacing and distribution	<ul> <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>The nominal drill spacing is 20m x 20m. This spacing includes data that has been verified from previous exploration activities on the project.</li> <li>The data spacing is sufficient to establish geological and grade continuity to support the definition of Mineral Resource and classifications as defined under the JORC 2012 code</li> <li>Sampled have been composited for resource calculations</li> </ul>



Criteria	JORC Code explanation	Commentary
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>The majority of drilling is inclined to local grid west (~240° MGA). The bulk of the mineralized zone is perpendicular to the drilling direction.</li> <li>No drilling orientation and sampling bias has been recognized at this time.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Unknown for earlier operators</li> <li>EXG - Sample security is part of Excelsior's QAQC and sampling procedures. RC samples are delivered directly from the field to the Kalgoorlie laboratory by Excelsior personnel on a daily basis with no detours, the laboratory then checks the physically received samples against an Excelsior generated sample submission list and reports back any discrepancies. Drill core is transported daily directly from the drill site to Excelsior's secure core processing facility by Excelsior personnel with no detours. The core is then placed on racks within a secure shed and processed until it requires cutting. Core is then transported directly by Excelsior's staff to the Kalgoorlie laboratory where it is cut in half by laboratory staff and then sampled by Excelsior staff. The core is then prepared for assay in Kalgoorlie to the pulverizing stage whereupon the laboratory transports it using a contractor directly to their Perth based assay facility.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>EXG - An internal review of sampling techniques and procedures was completed in March 2013. During 2016 Cube Consulting PTY reviewed EXG sampling practices as part of a review of EXG's Zoroastrian deposit. Cube established that sample collection, numbering, tracking and handling is undertaken by trained EXG personnel with geological support and appears to be of industry standard.</li> <li>The Duke North Mineral Resource has not been externally reviewed.</li> </ul>

## Section 2 Reporting of Exploration Results Duke North

Criteria	JORC Code explanation	Commentary
and land tenureownership including agreement.statusissues with third parties such as	<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</li> </ul>	The Duke North resource is on granted Mining Leases held by GPM Resources Pty Ltd, a wholly owned subsidiary of Excelsior Gold Limited.
	interests, historical sites, wilderness or national	TENEMENT HOLDER
	<ul> <li>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 licence to operate in the area.</li> </ul>	M24/134 GPM Resources PTY LTD
		<ul> <li>At this time the tenements are believed to be in good standing. There are no known impediments to obtaining a license to operate, other than those set out by statutory requirements which have not yet been applied for.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Exploration by other parties has been reviewed and is used as a guide to Excelsior's exploration activities. Previous parties have completed, geophysical data collection and interpretation, soil sampling and drilling.



Criteria	JORC Code explanation	Commentary
		All work appears to be of high quality and to industry standards of the time.
Geology	Deposit type, geological setting and style of mineralisation.	• The mineralization at Duke North is an orogenic lode style deposit, predominantly hosted by mafic rocks. The mineralization strikes towards the NW (330°) and dips steeply NE. The mineralisation is generally within a medium to coarse grained intrusive dolerite, along its contact with an ultramafic unit. The mineral assemblage includes sericite>silica>pyrite/arsenopyrite+-leucoxene.
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>	<ul> <li>Individual drill holes are not included in this mineral resource estimate. However the following general parameters apply to drilling used in the resource estimation:         <ul> <li>Easting and northing are in MGA94 Zone 51.</li> <li>RL is AHD</li> <li>Dip is the inclination of the hole from the horizontal (ie a vertically down drilled hole from the surface is -90°. Azimuth is reported in magnetic degrees as the direction toward which the hole is drilled. MGA94 and magnetic degrees vary by approximately 1° in this project area</li> <li>Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. Intersection width is the downhole distance of an intersection as measured along the drill trace</li> </ul> </li> </ul>
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>Exploration results are not being reported</li> <li>Drilling intervals are composited to 1m lengths to ensure sample assays have the same support for estimation.</li> <li>No metal equivalent reporting is used or applied.</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</li> </ul>	<ul> <li>Drilling is dominantly inclined at 60° to the south west (240°), optimally intersecting the steep NE dipping, NW striking mineralized shear zone. Drill intercepts are longer than true widths as drilling does not intersect the shear at 90°. The interpretation of a mineralized envelope for resource modelling has established true widths along the strike of the deposit</li> </ul>
Diagrams	<ul> <li>known').</li> <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</li> </ul>	See plans and sections in report



Criteria	JORC Code explanation	Commentary
	sectional views.	
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>	<ul> <li>Individual exploration results are not reported.</li> </ul>
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>	<ul> <li>No other exploration data that may have been collected is considered meaningful and material to this report.</li> </ul>
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.</li> </ul>	<ul> <li>Future exploration may involve the drilling of more drill holes, both drill core and RC, to further extend the mineralised zones and to collect additional detailed data on known mineralized zones.</li> <li>Future drilling areas are not highlighted as they are not yet planned.</li> </ul>
	interpretations and future drilling areas, provided this information is not commercially sensitive.	

## Section 3 Estimation and Reporting of Mineral Resources Duke North

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data is logged in the field directly into the Geobank mobile device. Lab submission sheets are digitally recorded in the same way. Assay data are received from the laboratories in an electronic format and are imported directly into a standard DataShed system. All data have been validated by the EXG Database Administrator and geological management prior to inclusion in the resource estimate.</li> <li>Data utilized in the resource estimate is derived directly from the SQL database via queries (Views)</li> <li>Any errors recorded from the various validation processes are manually checked and correlated back to the original collection of data. If necessary, field checks are made to confirm validation issues.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	Mr Ross Whittle-Herbert has not visited the Duke North Deposit
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>	<ul> <li>The geology of the system and the gold distribution is relatively simple, being along the sheared mafic/ultramafic contact. The continuity of mineralisation is well established where drilling is at a nominal 20 x 20 m hole spacing.</li> <li>The mafic/ultramafic contact has been modelled and used to guide the interpretation of the mineralization.</li> <li>There are no alternative interpretations.</li> <li>The use of historical drilling provides a level of uncertainty as the company cannot validate the QAQC data and downhole survey data.</li> <li>Geological and grade continuity is established along strike for 900m. Continuity down dip is less well known, primarily due to lack of drilling.</li> </ul>



Criteria	JORC Code explanation	Commentary
	• The factors affecting continuity both of grade and geology.	
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 lower limits of the Mineral Resource.	<ul> <li>Mineralisation extends 900m along strike, and to a depth of 180m below surface. There is a depletion zone that extends to about 30m below surface in the south of the deposit. The mineralized structure varies from 1m to 23m in width.</li> </ul>
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>in width.</li> <li>EXG has used 3DM wireframes to constrain the mineralised shear zone. All lodes have been interpreted on a sectional basis using the available exploration drilling data on predominantly 20m spaced lines.</li> <li>On the basis of sample size, selectivity assumption (2mE x SmN x 2.5mRL) and selected estimation methodology, a 1m down hole composite was selected for this estimation. 1m composite intervals falling within the wire framed estimation domains were coded in the database.</li> <li>It was evident that some of the estimation domains contained extreme outlier gold values. The highly positively skewed gold distributions mean that conventional linear estimation methods, such as Ordinary Kriging ("OK") are very likely to produce over-smoothed block grade estimates. For this reason, it was decided to undertake grade estimation using the non-linear Localised Uniform Conditioning ("LUC") method. The following criteria were considered when choosing gold grade top cuts: <ul> <li>The coherence and stability of the upper tail of the gold grade distribution;</li> <li>Visual inspection of the spatial location of outlier values;</li> </ul> </li> <li>The statistics show that in some cases there is a large reduction in mean grade and variability following top cutting. This is due to the elimination of the disproportionate effect of extreme outlier gold grade values. It should be noted that the difficulties posed by these extreme outliers significantly increases the inherent risk in the gold grade estimates.</li> <li>The LUC estimates were implemented using the Minestis* software package before being transferred into a Micromine<sup>™</sup> block model.</li> <li>No consideration has been given to by-products.</li> <li>One check estimate has been undertaken by EXG as a validation step. This is a comparison to an OK resource model completed in 1997 by Goldfields. Results indicate that the LUC model based on exploration data compares to within 2% of contained metal at a 0.5g/t Au cut-off.</li> <li>The estima</li></ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages were based on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The selection of mineralised domains has used geological factors in conjunction with a ~0.3g/t Au cut off which represents the mineralised shear in all modelled domains.



Criteria	JORC Code explanation	Commentary
		• The MRE has been reported above a 0.6g/t Au cut-off grade in the expectation of extraction by open pit mining methods.
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining 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.</li> </ul>	<ul> <li>This MRE has been undertaken on the assumption of open pit mining methods, the selection of SMU size was based on the scale of mining equipment used during mining of a similar depost, Zoroastrian.</li> </ul>
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.	The Duke North deposit has not been mined by conventional CIL/CIP methods. No Metallurgical test work has been completed and as such gold recoveries are unknown.
Environmental factors or assumptions	<ul> <li>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 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.</li> </ul>	There are no environmental issues concerning the extraction or disposal of waste or tailing material.
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Bulk density determinations specific to Duke North ore and waste have not been undertaken. Results from a similar deposit in the region (Zoroastrian) have been utilized for this MRE. The following describe the sources of data used for the Zoroastrian deposit which is also dolerite hosted:</li> <li>There are three sources of experimental bulk density data.         <ul> <li>The first are the results of systematically collected DD core measurements and the second were downhole caliper SG readings every 0.1m for selected holes. The third source was bulk in-pit density determinations gathered by the mining staff. The DD core results provide a source of competent rock bulk density data however the data lacks any representative data for less competent oxide and transitional weathered rock. The in-pit data represents an attempt to measure the densities of the less competent material.</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>A total of 103 determinations have been made from 13 EXD DD holes. Determinations were made using two methods – for 5 holes the densities were determined using a down hole probe, the Auslog A659 Caliper Tool, the balance were selected core sent to the Genalysis Laboratory in Kalgoorlie where specific gravity was determined by gravimetric technique. The majority of these data were taken on fresh dolerite core, with a small number of oxidised and transitional dolerite core results. The average depth of these determinations is 104m downhole.</li> <li>A total of 190 in-pit determinations have been made between the 430m, and 400m pit floor RLs, at surveyed locations within 29 high and low grade ore markout blocks. The RLs of these determinations places them within the oxide and transitional weathering profile.</li> <li>On balance EXG believe that there are sufficient data to allow the assignment of average values to the MRE block model but not enough to allow a spatially representative estimation of bulk density. EXG have used assumed bulk</li> </ul>
		density values for ore and waste based on the interpreted weathering surfaces. The bulk of the Duke North MRE is within dolerite and the densities applied are appropriate. For the minor portions of the MRE within sediment and ultramafic there are likely to some variations in bulk density.
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The geological model and continuity of the mineralisation is currently well understood due to the relatively close spaced RC drilling.</li> <li>The MRE is classified into indicated and inferred to reflect the confidence in the estimate of different areas of the MRE. No areas of the model attain a measured classification.</li> <li>There is some risk attached to the assumed densities applied to the model and this could impact negatively or positively on the tonnage and hence metal content.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The November 2017 MRE has not been reviewed or externally audited.



Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource in accordance with the guidelines of the 2012 JORC Code.</li> <li>Grade and geological continuity can be estimated to a degree of accuracy high enough to allow for a proportion of the resource to be classified as Indicated or Inferred where appropriate.</li> <li>The LUC block model estimate is a local resource estimate which has block sizes chosen at the expected "SMU" selection size. Globally the accuracy of the estimate has not been quantified by simulation or similar methods. However the overall tonnage and grade compares favorably with a previous estimate, the total metal being within 2%.</li> </ul>



# JORC, 2012 Edition – Tables – El Dorado

# 1.2 Section 1 Sampling techniques and data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</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. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The mineralization was primarily sampled by Reverse Circulation (RC) drilling on nominal 40m x 20m (N x E) grid spacing. The holes were generally drilled towards magnetic 235 degrees at varying angles to optimally intersect the mineralized zones.</li> <li>Complete details are un-available for historic drilling.</li> <li>BDC RC chip samples were collected and passed through a cone splitter in 1m intervals.</li> <li>Limited numbers of field duplicates and screen fire assays have been undertaken to support sample representivity.</li> <li>All BDC RC drilling was sampled on one metre down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg – 3.5kg sample was taken to a Kalgoorlie contract laboratory. Samples were oven dried, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to BDC for storage and potential additional assay at a later date</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>RAB drilling makes up about 5% of the historic drilling and RC the other 95%. There are several campaigns of historic drilling between 1984 and 1995. These holes are sometimes without documentation of the rig type and capability, core size, sample selection and handling.</li> <li>For (post 2009) BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill 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>All BDC RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. At least every 10<sup>th</sup> metre is collected in a plastic bag and these are weighed when they are utilized for the collection of field duplicate samples. All samples received by the laboratory are weighed with the data collected and stored in the database.</li> <li>BDC RC samples are visually logged for moisture content, sample recovery and contamination. This is information is stored in the database. The RC drill system utilizes a face sampling hammer which is industry best practice and the contractor aims to maximize recovery at all times. RC holes are drilled dry whenever practicable to maximize recovery of sample.</li> <li>Study of sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction.</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>All BDC RC samples are geologically logged directly into hand-held Geobank devices.</li> <li>Whilst logging geologists record weathering, alteration minerals and intensity, host rock, mineralisation amongst other things for every metre.</li> <li>The entire lengths of BDC RC holes are logged on a 1m interval basis, i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such.</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> </ul>	<ul> <li>All BDC RC samples are put through a cone splitter and the sub sample is collected in a unique pre-numbered calico sample bag. The moisture content and volume recovered of each sample is recorded in the database.</li> <li>The BDC RC samples are sorted, oven dried, the entire sample is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is</li> </ul>



	<ul> <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>then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge.</li> <li>BDC RC and DC samples submitted to the laboratory are sorted and reconciled against the submission documents. BDC inserts blanks and standards with blanks submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 20. The laboratory uses their own internal standards of 2 duplicates, 2 replicates, 2 standards, and 1 blank per 50 fire assays. The laboratory also uses barren flushes on the pulveriser.</li> <li>In the field every 10<sup>th</sup> metre from cone splitter is bagged and placed in order on the ground with other samples. This sample is then used for collection of field duplicates via riffle splitting. RC field duplicate samples are collected after results are received from the original assay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory for the standard assay process. The laboratory is blind to the original sample number.</li> <li>The sample sizes are considered to be appropriate for the type, style, thickness, grain size and consistency of mineralization located at this project. The sample size is also appropriate for the sampling methodology employed and the gold grade ranges returned.</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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>BDC has routinely used local Kalgoorlie Certified Laboratories for all sample preparation and analysis. The most commonly used laboratories have been Intertek Genalysis and Bureau Veritas Australia. No complete details of the sample preparation, analysis or security are available for either the historic RAB, AC, DD or RC drilling results in the database.</li> <li>The assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for the testing of gold at this project given its mineralization style. The technique involves using a 40g or 50g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCl and HNO3) before measurement of the gold content by an AA machine.</li> <li>The QC procedures are industry best practice. The laboratories are accredited and use their own certified reference materials.</li> <li>BDC submits blanks at the rate of 1 in 50 samples in the normal run of sample submission numbers. As part of normal procedures BDC examines all standards and blanks to ensure that they are within tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists.</li> </ul>
Verification of sampling and assaying	<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>BDC's Exploration Manager and Senior Resource Geologist have inspected RC chips and drill core in the field to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization.</li> <li>A number of RC holes have also been drilled that confirmed results obtained from historical drillholes. No holes have been directly twinned, there are however holes within 15m of each other.</li> <li>Primary data is sent digitally every 2-3 days from the field to BDC's Database Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the database.</li> <li>No adjustments or calibrations were made to any assay data used in this report.</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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drill holes have their collar location recorded from a differential RTK GPS unit by consultant surveyors. Downhole surveys are completed every 30m downhole during drilling and 5m intervals after end of hole. Incomplete down hole surveying information is available for the historic RC or DD drilling.</li> <li>BDC routinely contracted down hole surveys during the programmes of exploration drilling for each drill hole completed using either digital electronic multi-shot tool or north seeking gyro, both of which are maintained by Contractors to manufacturer specifications. The current drill program was downhole surveyed by the drill contractor using north seeking gyro.</li> <li>All drill holes and resource estimation use the MGA94, Zone 51 grid system.</li> </ul>



Data spacing and	Data spacing for reporting of Exploration	<ul> <li>The topographic data used was obtained from a LIDAR survey flown in 2012 and it is adequate for the reporting of Exploration Results and subsequent Mineral Resource Estimates.</li> <li>The nominal exploration drill spacing is 40m x 20m with many E-W cross-</li> </ul>
distribution	<ul> <li>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>sections in-filled to 15m across strike.</li> <li>The drill spacing, spatial distribution and quality of assay results is appropriate for the nature and style of mineralisation being reported in the Mineral Resource Estimate.</li> <li>The majority of RC holes were sampled at 1m, but when this isn't the case, sample compositing to 4m has been applied.</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>The majority of previous drilling is to magnetic 235 degrees. The bulk of the mineralized zones are perpendicular to this drilling direction. The current drilling is oriented towards similar angles in order to intersect the lodes in the optimal direction.</li> <li>No relationship between drilling orientation and sampling bias is recognised at this time</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>RC samples are delivered directly from the field to the Kalgoorlie laboratory by BDC personnel on a daily basis with no detours, the laboratory then checks the physically received samples against an BDC generated sample submission list and reports back any discrepancies</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>An internal review of sampling techniques and procedures was completed in March 2018. No external or third party audits or reviews have been completed.</li> </ul>

# 1.3 Section 2 Reporting of Exploration Results – El Dorado

Criteria	JORC Code explanation	Commentary
Mineral tenement and	<ul> <li>Type, reference name/number, location and ownership including agreements or material</li> </ul>	<ul> <li>The El Dorado prospect is on a granted Mining Tenements held by GPM Resources Pty Ltd.</li> </ul>
land tenure	issues with third parties such as joint ventures,	Tenement Holder Area (Ha) Expiry Date
status	partnerships, overriding royalties, native title interests, historical sites, wilderness or national	El Dorado         GPM Resources Pty Ltd         796.9         29/12/2029
	<ul> <li>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 licence to operate in the area.</li> </ul>	At this time the tenements are believed to be in good standing.
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Exploration by other parties has been reviewed and is used as a guide to BDC's exploration activities. This includes work by Goldfields, Samantha, ARM and other exploration companies. Previous parties have completed historic and underground mining, geophysical data collection and interpretation, soil sampling and drilling.</li> <li>The historical RC data is suitable for use in a Mineral Resource Estimate.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	• El Dorado gold mineralisation is hosted predominantly in a 30-40 metre wide dolerite underlain to the west by the sediments and felsic volcaniclastics units of the Black Flag Sequence and overlain to the east by a talc-carbonated ultramafic. Brittle-ductile shear zones containing quartz veining and associated gold mineralisation occur on both of the contacts. The stratigraphic position and style of the primary gold mineralisation is very similar to other deposits known and mined in the area.
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> </ul>	<ul> <li>See previous announcements for BDC drill hole information. There are no new drill results being released for this announcement</li> <li>No results from previous un-reported exploration are the subject of this announcement.</li> <li>Easting and Northing define the collar location in MGA94 zone 51 map projection. The map projection is a transverse Mercator projection, which conforms with the internationally accepted Universal Transverse Mercator Grid system. Collar elevations are RL's (elevation above sea level)</li> <li>Dip is the inclination of the hole from the horizontal (i.e. a vertically down drilled hole from the surface is -90°). Azimuth for current drilling is reported</li> </ul>



	<ul> <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> <li>In magnetic degrees as the direction toward which the hole is drilled. MGA94 and magnetic degrees vary by approximately 1° in this project area</li> <li>Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. Intercept depth is the distance of an intersection as measured along the drill trace.</li> <li>Hole length is the distance from the surface to the end of the hole, as measured along the drill trace.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</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 stated.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</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 (e.g. 'down hole length, true width not known').</li> <li>The intersection width is measured down the hole trace, it is not usually the true width. Cross sections in previous announcements allow the relationship between true and down hole width to be viewed.</li> <li>Data collected from historical workings and shafts within the area and from structural measurements show the primary ore zones to be sub-vertical (northeast dipping) in nature with a general northwesterly (magnetic) strike.</li> <li>All drill results within previous announcements are downhole intervals only and true widths are not reported. True widths are approximately 40% of the reported drill intercept widths.</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> <li>Plan and cross sectional views are available in previous announcements.</li> </ul>
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> <li>All results &gt;= 0.5g/t Au are previously reported by BDC. The results are length weighted composites based on the Au grade and down hole length, a maximum of 2m of internal dilution is included.</li> </ul>
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> <li>No other exploration data is considered meaningful and material to this announcement.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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> <li>Exploration work is ongoing at this time and may involve the drilling of more drill holes, both DC and RC, to further extend the mineralised zones and to collect additional detailed data on known and as yet unidentified mineralized zones.</li> </ul>



### 1.4 Section 3 Estimation and Reporting of Mineral Resources – El Dorado

Criteria	JORC Code explanation	Commentary		
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data is logged in the field directly into the Geobank mobile device. Lab submission sheets are digitally recorded in the same way. Assay data are received from the laboratories in an electronic format and are imported directly into a standard DataShed system. All data have been validated by the BDC Database Administrator and geological management prior to inclusion in the resource estimate.</li> <li>Any errors recorded from the various validation processes are manually checked and correlated back to the original collection of data. If necessary, field checks are made to confirm validation issues.</li> </ul>		
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Mr Ross Whittle-Herbert visited the site on numerous occasions to view ore geometries in the field and review RC chips.</li> </ul>		
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geology of the system and the gold distribution is modelled as a set of sub-parallel, NNW-SSE striking, steeply dipping narrow lodes.</li> <li>The continuity of mineralisation and volume controls are reasonably well established where drilling is at a nominal 15m (X) by 15m (Y) hole spacing.</li> <li>The use of historical drilling provides a level of uncertainty as the company cannot validate all the QAQC data and downhole survey data.</li> <li>The selection of mineralised domains has used geological factors such as geological contacts, logged quartz and sulphides in conjunction with a 0.3g/t cut-off for the underground model. Gold values transition from background to ore grades over a very short distance.</li> </ul>		
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 lower limits of the Mineral Resource.	<ul> <li>The mineralised corridor extends 350m NNW/SSE, up to 20m across (in multiple narrow lodes) and up to 150m vertically.</li> <li>Mineralised structures are present at surface for some lodes.</li> </ul>		
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>	<ul> <li>BDC has used 3DM wireframes interpreted on a sectional basis to constrain the mineralised zones, based on RC drilling at spacing's down to 15m N x 15m E-W.</li> <li>1m compositing was considered appropriate for the estimation given the sometimes narrow nature of the steep lodes. 1m composite intervals falling within the wire framed estimation domains were coded in the database.</li> <li>Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools plus visual inspection of the spatial location of outlier values. Based on this statistical analysis of the data population some top cuts were applied, including domains D1 (25 ppm), D2 (20 ppm) and D3 (15 ppm).</li> <li>Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for Au only.</li> <li>Directional variograms were modelled by domain using traditional variograms. Nugget values are moderate to high (around 50%) and structure ranges up to 70m. The variograms were poorly formed and with D1 containing the most samples, its modelled variography was applied to the remainder of the domains.</li> <li>Block model was constructed with parent blocks of 2m (E) by 5m (N) by 10m (RL) and sub-blocked down to 0.5m (E) by 1.25m (N) by 2.5m (RL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains.</li> <li>Three estimation passes were used with the first pass using a limit of 30m, the second pass 60m and the third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 3 samples.</li> <li>Search ellipse sizes were based primarily on a combination of the resource wireframes to the block model included a volumetric comparison of the resource wireframes to the block model includ</li></ul>		



	<ul> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> <li>Example 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -</li></ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> <li>Tonnages are reported on a dry basis.</li> </ul>
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> <li>A cut-off of 0.5g/t was chosen.</li> <li>The adopted cut-off grades were based on assumptions of potential open pit mining &amp; milling costs.</li> <li>The project could be amenable to trucking to a mill.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining 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.</li> <li>It is assumed the lodes would be mined using typical Eastern Goldfields open pit methodologies.</li> <li>Further work, including additional drilling, will determine the optimal mining method for this material.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>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.</li> <li>There has been no metallurgical assumptions applied to the Mineral Resource Estimate. There has been no metallurgical testing of mineralisation at El Dorado.</li> </ul>
Environmental factors or assumptions	<ul> <li>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 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.</li> <li>No milling operation scenario has been proposed, however very large gold mining operation sexist only 15 kilometres from these prospects and local and regional environmental impacts have been manageable. It is likely that a similar scenario would exist with the project.</li> <li>At this stage no environmental impact study completed at El Dorado.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Rock density is assumed – no actual measurements exist from El Dorado.</li> <li>The following bulk densities have been assumed from nearby comparable operations:</li> <li>Oxide: 1.8</li> <li>Supergene: 2.2</li> <li>Transition: 2.5</li> <li>Fresh: 2.7</li> </ul>
	• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.



Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in the underlying database and the available bulk densit information.</li> <li>In part, the lodes have been drilled down to 15m x 15m spacing, on northin, and easting, with drill lines running approximately ENE-WSW. To the north and south drilling is at greater spacing.</li> <li>In part, the deposit is adequately drilled to have potentially been defined a higher confidence classification using only drilling density as a criteria However, a number of issues remain unresolved with the base data and geological/structural models, including:</li> <li>Rock density is assumed – no actual measurements exist from El Dorado. Only diamond core hole has been drilled at depth in the northern part of the resource – further core holes are required to confirm geological and structural interpretation assumptions.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral This reported Mineral Resource Estimate has not been reviewed.     Resource estimates.
Discussion of relative accuracy/ confidence	<ul> <li>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 tresource 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.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>



# JORC, 2012 Edition – Tables – Grafters

# 1.5 Section 1 Sampling techniques and data

Criteria	JORC Code explanation	Commentary
Sampling	• Nature and quality of sampling (e.g. cut	The mineralization was primarily sampled by Reverse Circulation (RC) and
techniques	<ul> <li>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. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant</li> </ul>	<ul> <li>Diamond Core (DC) drilling on nominal 40m x 20m (N x E) grid spacing. The holes were generally drilled towards Grafters magnetic 255 degrees; at varying angles to optimally intersect the mineralized zones.</li> <li>Complete details are un-available for historic drilling.</li> <li>BDC RC recovered chip samples were collected and passed through a cone splitter in 1m intervals.</li> <li>Limited numbers of field duplicates and screen fire assays have been undertaken to support sample representivity.</li> <li>All BDC RC drilling was sampled on one metre down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg – 3.5kg sample was taken to a Kalgoorlie contract laboratory. Samples were oven dried, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to BDC for storage and potential assay at a later date. The BDC DC samples are collected at nominated intervals by BDC staff from core that has been cut in half. Samples were oven dried, crushed to a nominal 10mm by a jaw crusher, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to BDC for storage and potential assay at a later date. BDC DC samples are collected at nominated intervals by BDC staff from core that has been cut in half. Samples were oven dried, crushed to a nominal 10mm by a jaw crusher, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to BDC for storage and potential assay at a later date.</li> </ul>
Drilling techniques	<ul> <li>disclosure of detailed information.</li> <li>Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>RAB drilling makes up about 25% of the historic drilling and RC the other 75%. There are several campaigns of historic drilling between 1984 and 1994. These holes are sometimes without full documentation of the rig type and capability, core size, sample selection and handling.</li> <li>For (post 2009) BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling is NQ2 size core (nominal 50.6mm core diameter) or HQ (nominal 63.5mm core diameter).</li> <li>All BDC drill core is orientated by the drilling contractor, usually every 3m run.</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>All BDC RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. At least every 10<sup>th</sup> metre is collected in a plastic bag and these are weighed when they are utilized for the collection of field duplicate samples. All samples received by the laboratory are weighed with the data collected and stored in the database.</li> <li>The BDC DC samples are orientated, length measured and compared to core blocks placed in the tray by the drillers, any core loss or other variance from that expected from the core blocks is logged and recorded in the database. Sample loss or gain is reviewed on an ongoing basis and feedback given to the drillers to enable the best representative sample to always be obtained.</li> <li>BDC RC samples are visually logged for moisture content, sample recovery and contamination. This is information is stored in the database. The RC drill system utilizes a face sampling hammer which is industry best practice and the contractor aims to maximize recovery at all times. RC holes are drilled dry whenever practicable to maximize recovery of sample.</li> <li>The DC drillers use a core barrel and wire line unit to recover the core, they aim to recover all core at all times and adjust their drilling methods and rates to minimise core loss, i.e. different techniques for broken ground to ensure as little core as possible is washed away with drill cuttings.</li> <li>Study of sample recovery vs gold grade does not show any bias towards differing sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction.</li> </ul>
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral	<ul> <li>All BDC RC samples are geologically logged directly into hand-held Geobank devices.</li> </ul>



	<ul> <li>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>All BDC DC is logged for core loss, marked into metre intervals, orientated, structurally logged, geotechnically logged and logged with a hand lens with the following parameters recorded where observed: weathering, regolith, rock type, alteration, mineralization, shearing/foliation and any other features that are present</li> <li>All BDC DC is photographed both wet and dry after logging but before cutting.</li> <li>The entire lengths of BDC RC holes are logged on a 1m interval basis, i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such. Drill core is logged over its entire length (ie 100%) and any core loss or voids intersected as the presented due to voids on the vectorded.</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>are recorded.</li> <li>All BDC RC samples are put through a cone splitter and the sample is BDC Exploration results reported for drill core are half core taken from the right hand side of the core looking down hole. Core is cut by a Kalgoorlie based laboratory and returned to site for sampling.</li> <li>All BDC RC samples are put through a cone splitter and the sample is collected in a unique pre-numbered calico sample bag. The moisture content of each sample is recorded in the database.</li> <li>The BDC RC samples are sorted, oven dried, the entire sample is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge.</li> <li>The BDC DC samples are oven dried, jaw crushed to nominal &lt;10mm, 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for a 40g or 50g fire assay charge.</li> <li>BDC RC and DC samples submitted to the laboratory are sorted and reconciled against the submission documents. BDC inserts blanks and standards with blanks submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 50 and standards with other samples. This sample is then used for collection of field duplicates via riffle splitting. RC field duplicate samples are collected after results are received from the original asay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory for the standard assay process. The laboratory is blind to the original sample number.</li> <li>The sample sizes are considered to be appropriate for the type, style, thickness and consistency of mineralization located at this project. The sample size is also appropriate for the sampling</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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>BDC has routinely used local Kalgoorlie Certified Laboratories for all sample preparation and analysis. The most commonly used laboratories have been Intertek Genalysis and Bureau Veritas Australia. No complete details of the sample preparation, analysis or security are available for either the historic RAB, AC, DD or RC drilling results in the database.</li> <li>The assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for the testing of gold at this project given its mineralization style. The technique involves using a 40g or 50g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCl and HNO3) before measurement of the gold content by an AA machine.</li> <li>The QC procedures are industry best practice. The laboratories are accredited and use their own certified reference materials.</li> <li>BDC submits blanks at the rate of 1 in 50 samples and certified reference material standards at the rate of 1 in 20 samples in the normal run of sample submission numbers. As part of normal procedures BDC examines all standards and blanks to ensure that they are within tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists.</li> </ul>



Verification of sampling and assaying	either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. Add avia are con en da Not	C's Exploration Manager and Senior Resource Geologist have inspected chips and drill core in the field to verify the correlation of mineralized nes between assay results and lithology/alteration/mineralization. humber of RC holes have also been drilled that confirmed results obtained om historical drillholes. No holes have been directly twinned, there are wever holes within 20m of each other. mary data is sent digitally every 2-3 days from the field to BDC's Database ministrator (DBA). The DBA imports the data into the commercially ailable and industry accepted DataShed database software. Assay results e merged when received electronically from the laboratory. The sponsible geologist reviews the data in the database to ensure that it is rrect and has merged properly and that all data has been received and tered. Any variations that are required are recorded permanently in the tabase.
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> <li>Quality and adequacy of topographic control.</li> <li>BE mage gy</li> <li>All</li> <li>Th an</li> </ul>	drill holes have their collar location recorded from a differential RTK GPS it by consultant surveyors. Downhole surveys are completed every 30m wnhole. Incomplete down hole surveying information is available for the storic RC or DD drilling. DC routinely contracted down hole surveys during the programmes of ploration drilling for each drill hole completed using either digital ectronic multi-shot tool or north seeking gyro, both of which are aintained by Contractors to manufacturer specifications. The current drill ogram was downhole surveyed by the drill contractor using north seeking
Data spacing and distribution	<ul> <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</li> <li>Th</li> </ul>	e nominal exploration drill spacing is 40m x 20m with many E-W cross- ctions in-filled to 10m across strike. e drill spacing, spatial distribution and quality of assay results is propriate for the nature and style of mineralisation being reported. e majority of RC holes were sampled at 1m, but when this isn't the case, mple compositing to 4m has been applied.
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     Th	e majority of previous drilling is to magnetic 255 degrees. The bulk of the neralized zones are perpendicular to this drilling direction. e current drilling is oriented towards similar angles in order to intersect e lodes in the optimal direction. No relationship between drilling orientation and sampling bias is recognised at this time.
Sample security	The measures taken to ensure sample      Security.     Dr     pro     pro     be	samples are delivered directly from the field to the Kalgoorlie laboratory BDC personnel on a daily basis with no detours, the laboratory then ecks the physically received samples against an BDC generated sample bmission list and reports back any discrepancies ill core is transported daily directly from the drill site to BDC's core occessing facility by BDC personnel. The core is then placed on racks and occessed until it requires cutting. BDC cut and sample the core on site fore transporting it with no detours to the contract Kalgoorlie assay poratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.An in	internal review of sampling techniques and procedures was completed March 2018. No external or third party audits or reviews have been mpleted.

# 1.6 Section 2 Reporting of Exploration Results – Grafters

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

Criteria	JORC Code explanation	Commentary	
Mineral	• Type, reference name/number, location and	The Grafters prospect is on a granted Mining Tenements held by GPM     Descurrence Deviated	
tenement and	ownership including agreements or material	Resources Pty Ltd.	



land tenure		issues with third parties such as joint ventures,	_	nement	Holder	Area (Ha)	Expiry Date
status		partnerships, overriding royalties, native title interests, historical sites, wilderness or national		rafters 24/956	GPM Resources Pty Ltd	123.4	30/05/2037
		park and environmental settings.	_		l ie the tenements are believe	d to be in good star	nding
	•	The security of the tenure held at the time of	•	At this thi			nunig.
		reporting along with any known impediments					
		to obtaining a licence to operate in the area.					
Exploration done by other parties	•	Acknowledgment and appraisal of exploration by other parties.	•		on by other parties has been		
by other purces		by other purities.			oloration activities. This incle other exploration companie	-	
					and underground mining,		
				interpreta	ation, soil sampling and drillin	ng.	
			٠		rical RC data is suitable for us		
Geology	•	Deposit type, geological setting and style of	•		geology has been interpret		•
		mineralisation.			Rock types consist of gabbro s, including black shale wh		
					the basalt and the se		
				mineralisa	ation is confined to quartz st	ockworks, 5 to 10n	n wide in sheared
				-	ed sediments and the basa	•	-
D.: W.L L.					contact. These sediments ar		
Drill hole Information	•	A summary of all information material to the understanding of the exploration results	•	•	ous announcements for BDC esults being released for this		ion. There are no
		including a tabulation of the following	•		from previous un-reported		ne subject of this
		information for all Material drill holes:	1	announce			,
		• easting and northing of the drill hole collar	•	-	nd Northing define the colla		-
		<ul> <li>elevation or RL (Reduced Level – elevation above seg level in matrix) of the drill hole</li> </ul>			. The map projection is a tra		
		above sea level in metres) of the drill hole collar			with the internationally acce m. Collar elevations are RL's	-	
		<ul> <li>dip and azimuth of the hole</li> </ul>	•	-	inclination of the hole from		
		$\circ $ down hole length and interception depth		-	e from the surface is -90°). A		
		• hole length.		0	tic degrees as the direction		
	•	If the exclusion of this information is justified on the basis that the information is not Material	•		nd magnetic degrees vary by		
		and this exclusion does not detract from the	•		e length of the hole is the dis as measured along the drill t		
		understanding of the report, the Competent			hole as measured along the		
		Person should clearly explain why this is the		downhole	distance of an intersection a	as measured along t	he drill trace.
		case.	•	-	th is the distance from the	surface to the en	d of the hole, as
Data aggregation	-	In constitute Fundamentian Desults unsighting	_		along the drill trace.		-+
methods	•	In reporting Exploration Results, weighting averaging techniques, maximum and/or	•		no new exploration results in rade cuts have been applie		
		minimum grade truncations (e.g. cutting of	-	0 0	e distance weighted using the	,	,
		high grades) and cut-off grades are usually		each assay			
		Material and should be stated.	•		BDC announcements have re	•	
	•	Where aggregate intercepts incorporate short			m wide at 0.5g/t Au grade	-	
		lengths of high grade results and longer lengths of low grade results, the procedure used for	•		distance can contain up to 2 equivalent reporting is used	-	Jan en material.
		such aggregation should be stated and some	<u> </u>	no metal	equivalent reporting is used	e. apprica.	
		typical examples of such aggregations should					
		be shown in detail.					
	•	The assumptions used for any reporting of metal equivalent values should be clearly	1				
		stated.	1				
Relationship	•	These relationships are particularly important	•	The inters	ection width is measured dow	wn the hole trace, it	t is not usually the
between		in the reporting of Exploration Results.			n. Cross sections in this and		the relationship
mineralisation widths and		If the geometry of the minor limits with			rue and down hole width to		
intercept lengths	•	If the geometry of the mineralisation with respect to the drill hole angle is known, its	•		cted from historical workings measurements from orienta		
		nature should be reported.			re zones to be sub-vertical (e		
			1	northwest	erly (magnetic) strike.		-
	•	If it is not known and only the down hole	•		sults within this announcem		
		lengths are reported, there should be a clear	1		ns are not reported. True w	idths are approxim	ately 40% of the
		statement to this effect (e.g. 'down hole length, true width not known').	1	reported of	frill intercept widths.		
Diagrams	•	Appropriate maps and sections (with scales)	•	Plan and c	ross sectional views are avai	lable in previous an	nouncements
		and tabulations of intercepts should be	<u> </u>				
		included for any significant discovery being	1				
		reported These should include, but not be	1				



Balanced reporting	<ul> <li>limited to a plan view of drill hole collar locations and appropriate sectional views.</li> <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>	<ul> <li>All results &gt;= 0.5g/t Au are reported. The results are length weighted composites based on the Au grade and down hole length, a maximum of 2m of internal dilution is included.</li> </ul>
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>	<ul> <li>No other exploration data is considered meaningful and material to this announcement.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>Exploration work is ongoing at this time and may involve the drilling of more drill holes, both DC and RC, to further extend the mineralised zones and to collect additional detailed data on known and as yet unidentified mineralized zones.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources – Grafters

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data is logged in the field directly into the Geobank mobile device. Lab submission sheets are digitally recorded in the same way. Assay data are received from the laboratories in an electronic format and are imported directly into a standard DataShed system. All data have been validated by the BDC Database Administrator and geological management prior to inclusion in the resource estimate.</li> <li>Any errors recorded from the various validation processes are manually checked and correlated back to the original collection of data. If necessary, field checks are made to confirm validation issues.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Mr Ross Whittle-Herbert visited the site on numerous occasions to view ore geometries in the field and review RC chips and diamond drill core.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geology of the system and the gold distribution is modelled as two sets (north and south) of sub-parallel, NNW-SSE striking, steeply dipping narrow lodes.</li> <li>The southern area also has two small sub-horizonal oxide/supergene modelled zones.</li> <li>The continuity of mineralisation and volume controls are reasonably well established where drilling is down to a nominal 10m (X) by 10m (Y) hole spacing.</li> <li>The use of historical drilling provides a level of uncertainty as the company cannot validate all the QAQC data and downhole survey data.</li> <li>The selection of mineralised domains has used geological factors such as geological contacts, logged quartz and sulphides in conjunction with a 0.3g/t cut-off for the underground model. Gold values transition from background to ore grades over a very short distance.</li> </ul>
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 lower limits of the Mineral Resource.	<ul> <li>The mineralised corridor extends 400m NNW/SSE, up to 20m east/west (in multiple narrow lodes) and up to 110m vertically.</li> <li>The mineralised corridor extends 160m NNW/SSE, up to 15m east/west (in multiple narrow lodes) and up to 100m vertically.</li> <li>Mineralised structures are present at surface for some lodes.</li> </ul>



Estimation and modelling	The nature and appropriateness of the estimation technique(s) applied and key     BDC has used 3DM wireframes interpreted on a sectional basis to constrain the mineralised zones, based on RC drilling at spacing's in places down to the mineralised zones.
techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimates takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine dranage characterization).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the costructure anges. the comparison of model data to dril hole data, and use of reconciliation data if available.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process used, the comparison of model data to dril hole data, and use of reconciliation data if available.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process used, the comparison of model data to dril hole data, and use of reconciliation data if available.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process used, the comparison of model data to dril hole data, and use of reconciliation data if available.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process used, the comparison of model data to dril hole data, and use of reconciliation data if available.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li>     &lt;</ul>
Moisture	No consideration has been made to by-products.     Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> <li>A cut-off of 0.5g/t was chosen.</li> <li>The adopted cut-off grades were based on assumptions of potential ope pit mining &amp; milling costs.</li> <li>The project could be amenable to trucking to a mill.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining 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.</li> <li>It is assumed the lodes would be mined using typical Eastern Goldfield open pit methodologies. Further work, including additional drilling, will determine the optima mining method for this material.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>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</li> <li>There has been no metallurgical assumptions applied to the Minera Resource Estimate. There has been no metallurgical testing of mineralisation at El Dorado.</li> </ul>



	should be reported with an explanation of the basis of the metallurgical assumptions made.
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible water 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 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.</li> <li>No milling operation scenario has been proposed, however very large gold mining operations exist only 30 kilometres from these prospects and local and regional environmental impacts have been manageable. It is likely that a similar scenario would exist with the project.</li> <li>At this stage, there is no environmental impact study completed at Grafters.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> <li>Rock density is assumed – no actual measurements exist from Grafters. The following bulk density is assumed – no actual measurements exist from Grafters.</li> <li>The following bulk density is assumed – no actual measurements exist from Grafters.</li> <li>The following bulk density is assumed – no actual measurements exist from Grafters.</li> <li>The following bulk density is assumed – no actual measurements exist from Grafters.</li> <li>The following bulk density is assumed – no actual measurements exist from Grafters.</li> <li>The following bulk density is assumed – no actual measurements exist from Grafters.</li> <li>The following bulk density is assumed – no actual measurements exist from Grafters.</li> <li>Oxide: 1.8</li> <li>Supergene: 2.2</li> <li>Transition: 2.5</li> <li>Fresh: 2.7</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in the underlying database and the available bulk density information.</li> <li>In part, the lodes have been drilled down to a 10m x 10m spacing, on northing and easting, with drill lines running approximately ENE-WSW. To the north and south drilling is at greater spacing.</li> <li>In part, the deposit is adequately drilled to have potentially been defined as higher confidence classification using only drilling density as a criteria. However, a number of issues remain unresolved with the base data and geological/structural models, including;</li> <li>Rock density is assumed – no actual measurements exist from Grafters.</li> <li>Only diamond core hole has been drilled at depth in the northern part of the resource – further core holes are required to confirm geological and structural interpretation assumptions.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral     Resource estimates.     This reported Mineral Resource Estimate has not been reviewed.



Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>Thes statements of relative accuracy and confidence of the estimate should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> </ul>	<ul> <li>The relative accuracy of the Mineral Resource Estimates is reflected in the reporting of the Mineral Resource in accordance with the guidelines of the 2012 JORC Code.</li> <li>The statement relates to global estimates of tonnes and grade.</li> </ul>
	• These statements of relative accuracy and	



### JORC , 2012 Edition – Tables – Nerrin Nerrin

# Section 1 Sampling techniques and data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</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. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The mineralization was primarily sampled by Reverse Circulation (RC) drilling on nominal 40m x 20m (N x E) grid spacing. The holes were generally drilled towards magnetic 090 degrees at varying angles to optimally intersect the mineralized zones.</li> <li>Complete details are un-available for historic drilling.</li> <li>BDC RC chip samples were collected and passed through a cone splitter in 1m intervals.</li> <li>Limited numbers of field duplicates and screen fire assays have been undertaken to support sample representivity.</li> <li>All BDC RC drilling was sampled on one metre down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg – 3.5kg sample was taken to a Kalgoorlie contract laboratory. Samples were oven dried, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to BDC for storage and potential additional assay at a later date</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>RAB drilling makes up about 20% of the historic drilling and RC the other 80%. There are several campaigns of historic drilling between 1984 and 1999. These holes are sometimes without documentation of the rig type and capability, core size, sample selection and handling. There is 1 historic diamond core hole, the core has not been located as it has been removed from site.</li> <li>For (post 2009) BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill 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>All BDC RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. At least every 10<sup>th</sup> metre is collected in a plastic bag and these are weighed when they are utilized for the collection of field duplicate samples. All samples received by the laboratory are weighed with the data collected and stored in the database.</li> <li>BDC RC samples are visually logged for moisture content, sample recovery and contamination. This is information is stored in the database. The RC drill system utilizes a face sampling hammer which is industry best practice and the contractor aims to maximize recovery at all times. RC holes are drilled dry whenever practicable to maximize recovery of sample.</li> <li>Study of sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction.</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>All BDC RC samples are geologically logged directly into hand-held Geobank devices.</li> <li>Whilst logging geologists record weathering, alteration minerals and intensity, host rock, mineralisation amongst other things for every metre.</li> <li>The entire lengths of BDC RC holes are logged on a 1m interval basis, i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such.</li> </ul>
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken.	• All BDC RC samples are put through a cone splitter and the sub sample is collected in a unique pre-numbered calico sample bag. The moisture content and volume recovered of each sample is recorded in the database.



	<ul> <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>The BDC RC samples are sorted, oven dried, the entire sample is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge.</li> <li>BDC RC and DC samples submitted to the laboratory are sorted and reconciled against the submission documents. BDC inserts blanks and standards with blanks submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 20. The laboratory uses their own internal standards of 2 duplicates, 2 replicates, 2 standards, and 1 blank per 50 fire assays. The laboratory also uses barren flushes on the pulveriser.</li> <li>In the field every 10<sup>th</sup> metre from cone splitter is bagged and placed in order on the ground with other samples. This sample is then used for collection of field duplicates via riffle splitting. RC field duplicate samples are collected after results are received from the original assay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory for the standard assay process. The laboratory is blind to the original sample number.</li> <li>The sample sizes are considered to be appropriate for the type, style, thickness, grain size and consistency of mineralization located at this project. The sample size is also appropriate for the sampling methodology oppleved and the gold grade range resure for the sampling methodology oppleved and the gold grade range resure for the sample is project.</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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>employed and the gold grade ranges returned.</li> <li>BDC has routinely used local Kalgoorlie Certified Laboratories for all sample preparation and analysis. The most commonly used laboratories have been Intertek Genalysis and Bureau Veritas Australia. No complete details of the sample preparation, analysis or security are available for either the historic RAB, AC, DD or RC drilling results in the database.</li> <li>The assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for the testing of gold at this project given its mineralization style. The technique involves using a 40g or 50g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCl and HNO3) before measurement of the gold content by an AA machine.</li> <li>The QC procedures are industry best practice. The laboratories are accredited and use their own certified reference materials.</li> <li>BDC submits blanks at the rate of 1 in 50 samples and certified reference material standards at the rate of 1 in 20 samples in the normal run of sample submission numbers. As part of normal procedures BDC examines all standards and blanks to ensure that they are within tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists.</li> </ul>
Verification of sampling and assaying	<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>BDC's Exploration Manager and Senior Resource Geologist have inspected RC chips and drill core in the field to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization.</li> <li>A number of RC holes have also been drilled that confirmed results obtained from historical drillholes. No holes have been directly twinned, there are however holes within 15m of each other.</li> <li>Primary data is sent digitally every 2-3 days from the field to BDC's Database Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the database.</li> <li>No adjustments or calibrations were made to any assay data used in this report.</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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drill holes have their collar location recorded from a differential RTK GPS unit by consultant surveyors. Downhole surveys are completed every 30m downhole during drilling and 5m intervals after end of hole. Incomplete down hole surveying information is available for the historic RC or DD drilling.</li> <li>BDC routinely contracted down hole surveys during the programmes of exploration drilling for each drill hole completed using either digital electronic multi-shot tool or north seeking gyro, both of which are maintained by Contractors to manufacturer specifications. The current drill program was downhole surveyed by the drill contractor using north seeking gyro.</li> </ul>



Data spacing and distribution	<ul> <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. Whether sample compositing has been applied.</li> </ul>	<ul> <li>All drill holes and resource estimation use the MGA94, Zone 51 grid system.</li> <li>The topographic data used was obtained from a LIDAR survey flown in 2012 and it is adequate for the reporting of Exploration Results and subsequent Mineral Resource Estimates.</li> <li>The nominal exploration drill spacing is 40m x 20m with many E-W cross-sections in-filled to 15m across strike.</li> <li>The drill spacing, spatial distribution and quality of assay results is appropriate for the nature and style of mineralisation being reported in the Mineral Resource Estimate.</li> <li>The majority of RC holes were sampled at 1m, but when this isn't the case, sample compositing to 4m has been applied.</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>The majority of previous drilling is to grid east (89 degrees magnetic). The bulk of the mineralized zones are perpendicular to this drilling direction. The BDC drilling is oriented towards similar angles in order to intersect the mineralisation in the optimal direction.</li> <li>No relationship between drilling orientation and sampling bias is recognised at this time.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>RC samples are delivered directly from the field to the Kalgoorlie laboratory by BDC personnel on a daily basis with no detours, the laboratory then checks the physically received samples against an BDC generated sample submission list and reports back any discrepancies</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• An internal review of sampling techniques and procedures was completed in March 2018. No external or third party audits or reviews have been completed.

## Section 2 Reporting of Exploration Results – Nerrin Nerrin

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

Criteria	JORC Code explanation	Commenta	ry		
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 licence to operate in the area.</li> </ul>	Resources Tenement M24/348 M24/532	n Nerrin prospect is grante Pty Ltd, a wholly owned sub Holder GPM Resources GPM Resources e the tenements are believe	osidiary of Bardoc Go Area (Ha) 610.5 9.69	ld Limited. Expiry Date 10/01/2032 20/05/2020
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	BDC's exp Julia Min completer and interp	n by other parties has beer ploration activities. This incluses and other exploration d historic and underground pretation, soil sampling and of ical RC and DC data is suit	udes work by Goldf companies. Previo mining, geophysica drilling.	ields, Samantha, us parties have I data collection
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	siltstones. narrow to quartz vein dolerite ar within the	gies encountered in the area East of the shale is a heavi the south and widens consic ning is present within the lith nd ultramafics is intensely sh Zoroastrian Dolerite. The m n with a north-south t ite.	ly weathered doleri derably to the north. hology. The eastern heared. Most of the ineralisation is simila	te body which is Moderate milky contact between mineralisation is ar to that seen at
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> </ul> </li> </ul>	<ul> <li>new drill r</li> <li>No results announcer</li> <li>Easting an</li> </ul>	bus announcements for BDC esults being released for this from previous un-reported ment. Ind Northing define the colla . The map projection is a tra	announcement exploration are th ar location in MGAS	e subject of this 94 zone 51 map



	<ul> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</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>	<ul> <li>conforms with the internationally accepted Universal Transverse Mercator Grid system. Collar elevations are RL's (elevation above sea level)</li> <li>Dip is the inclination of the hole from the horizontal (i.e. a vertically down drilled hole from the surface is -90°). Azimuth for current drilling is reported in magnetic degrees as the direction toward which the hole is drilled. MGA94 and magnetic degrees vary by approximately 1° in this project area</li> <li>Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. Intercept depth is the distance down the hole as measured along the drill trace. Intersection width is the downhole distance of an intersection as measured along the drill trace.</li> <li>Hole length is the distance from the surface to the end of the hole, as measured along the drill trace.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</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>There are no new exploration results in this announcement.</li> <li>No high grade cuts have been applied to assay results. RC and DC assay results are distance weighted using their applicable down hole width for each assay.</li> <li>Previous BDC announcements have reported intersections if the interval is at least 1m wide at 0.5g/t Au grade. Intersections greater than 1m in downhole distance can contain up to 2m of low grade or barren material.</li> <li>No metal equivalent reporting is used or applied.</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 (e.g. 'down hole length,</li> </ul>	<ul> <li>The intersection width is measured down the hole trace, it is not usually the true width. Cross sections in previous announcements allow the relationship between true and down hole width to be viewed.</li> <li>Data collected from historical workings and shafts within the area and from structural measurements show the primary ore zones to be steeply west dipping with an overall N-S strike.</li> <li>All drill results within previous announcements are downhole intervals only and true widths are not reported. True widths are approximately 40-60% of the reparted drill intervals within</li> </ul>
Diagrams	<ul> <li>true width not known').</li> <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>	<ul> <li>the reported drill intercept widths.</li> <li>Plan and cross sectional views are available in previous announcements</li> </ul>
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>	<ul> <li>Results for the targeted economic mineral (gold) have been previously reported by BDC.</li> </ul>
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>	• No other exploration data is considered meaningful and material to this announcement.
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>Exploration work is ongoing at this time and may involve the drilling of more drill holes, both DC and RC, to further extend the mineralised zones and to collect additional detailed data on known and as yet unidentified mineralized zones.</li> </ul>



#### Section 3 Estimation and Reporting of Mineral Resources – Nerrin Nerrin

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data is logged in the field directly into the Geobank mobile device. Lab submission sheets are digitally recorded in the same way. Assay data are received from the laboratories in an electronic format and are imported directly into a standard DataShed system. All data have been validated by the BDC Database Administrator and geological management prior to inclusion in the resource estimate.</li> <li>Any errors recorded from the various validation processes are manually checked and correlated back to the original collection of data. If necessary, field checks are made to confirm validation issues.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Mr Ross Whittle-Herbert visited the site on numerous occasions to view ore geometries in the field and review RC chips.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geology of the system and the gold distribution is modelled as a set of sub-parallel, N-S striking, steeply dipping narrow lodes.</li> <li>The continuity of mineralisation and volume controls are reasonably well established where drilling is at a nominal 20-25m (E) by 20-25m (N) hole spacing.</li> <li>The use of historical drilling provides a level of uncertainty as the company cannot validate all the QAQC data and downhole survey data.</li> <li>The selection of mineralised domains has used geological factors such as geological contacts, logged quartz and sulphides in conjunction with a 0.3g/t cut-off for the underground model. Gold values transition from background to ore grades over a very short distance.</li> </ul>
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 lower limits of the Mineral Resource.	<ul> <li>The mineralised corridor extends 600m north/south, up to 35m east/west (in multiple narrow lodes) and up to 180m vertically.</li> <li>Mineralised structures are present at surface for some lodes.</li> </ul>
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>	<ul> <li>BDC has used 3DM wireframes interpreted on a sectional basis to constrain the mineralised zones, based on RC drilling at spacing's down to 20m N x 20m E-W.</li> <li>1m compositing was considered appropriate for the estimation given the sometimes narrow nature of the steep lodes. 1m composite intervals falling within the wire framed estimation domains were coded in the database.</li> <li>Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools plus visual inspection of the spatial location of outlier values. Based on this statistical analysis of the data population some top cuts were applied, including domains D1 and D8 (20 ppm) and D5, 6 10 and 12 (10 ppm).</li> <li>Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for Au only.</li> <li>Directional variograms were modelled by domain using traditional variograms. Nugget values are moderate to high (around 40%) and structure ranges up to 70m. The variograms were poorly formed and with D1 containing the most samples, its modelled variography was applied to the remainder of the domains.</li> <li>Block model was constructed with parent blocks of 2m (E) by 10m (N) by 10m (RL) and sub-blocked down to 0.5m (E) by 2.5m (NL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains.</li> <li>Three estimation passes were used with the first pass using a limit of 30m, the second pass 60m and the third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 3 samples.</li> <li>Search ellipse sizes were based primarily on a combination of the variography and the trends of the wire framed mineralized zones. Hard boundaries were applied between all estimation domains.</li></ul>



	<ul> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> <li>Validation of the block model included a volumetric comparison of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing and elevation. Visual comparisons of input composite grades vs. block model grades vs. bloc</li></ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> <li>Tonnages are reported on a dry basis.</li> </ul>
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> <li>A cut-off of 0.5g/t was chosen.</li> <li>The adopted cut-off grades were based on assumptions of potential open pit mining &amp; milling costs.</li> <li>The project could be amenable to trucking to a mill.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining 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.</li> <li>It is assumed the lodes would be mined using typical Eastern Goldfields open pit methodologies.</li> <li>Further work, including additional drilling, will determine the optimal mining methods for this material.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>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 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.</li> <li>No metallurgical assumptions have been built into the resource models. There has been no metallurgical testwork completed on mineralisation at Nerrin Nerrin.</li> <li>The mineralisation is within the Zoroastrian Dolerite and is similar to that seen at Zoroastrian. Recent mining at Zoroastrian by EXG produced recoveries of 92% in fresh material.</li> </ul>
Environmental factors or assumptions	<ul> <li>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 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.</li> <li>No milling operation scenario has been proposed, however very large gold mining operations exist only 15 kilometres from these prospects and local and regional environmental impacts have been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Rock density is assumed – no actual measurements exist from Nerrin Nerrin. The following bulk densities have been assumed from nearby comparable operations:</li> <li>Oxide: 1.8</li> <li>Supergene: 2.2</li> <li>Transition: 2.5</li> <li>Fresh: 2.7</li> </ul>



Classification Audits or reviews	<ul> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> <li>The basis for the classification of the Mineral Resource has been classified on the basis geological model, continuity of mineralized zon confidence in the underlying database and the ar information.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The results of any audits or reviews of Mineral</li> <li>The results of any audits or reviews of Mineral</li> </ul>	es, drilling density, vailable bulk density 20-25m spacing, on kimately E-W. To the tially been defined as density as a criteria. th the base data and st from Nerrin Nerrin. In the northern part of onfirm geological and
Discussion of relative accuracy/ confidence	<ul> <li>Resource estimates.</li> <li>Where appropriate a statement of the relative accuracy of the Mineral Resource Estimate accuracy and confidence level in the Mineral Resource in accordance with 2012 JORC Code.</li> <li>The relative accuracy of the Mineral Resource in accordance with 2012 JORC Code.</li> <li>The statement appropriate 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.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	tes is reflected in the the guidelines of the



#### JORC, 2012 Edition – Tables – Talbot North

### Section 1 Sampling techniques and data

Criteria	JORC Code explanation	Commentary
Sampling	• Nature and quality of sampling (e.g. cut	• The mineralization was primarily sampled by Reverse Circulation (RC) and
techniques	channels, random chips, or specific specialised	Diamond Core (DC) drilling on nominal 40m x 20m (N x E) grid spacing. The
	industry standard measurement tools	holes were generally drilled towards grid east at varying angles to optimally
	appropriate to the minerals under	intersect the mineralized zones.
	investigation, such as down hole gamma	Complete details are un-available for historic drilling.
	sondes, or handheld XRF instruments, etc).	<ul> <li>Generally, BDC RC recovered chip samples were collected and passed</li> </ul>
	These examples should not be taken as	through a cone splitter.
	limiting the broad meaning of sampling.	<ul> <li>Limited numbers of field duplicates have been undertaken to support</li> </ul>
	<ul> <li>Include reference to measures taken to ensure</li> </ul>	sample representivity.
	sample representivity and the appropriate	<ul> <li>All BDC RC drilling was sampled on one metre down hole intervals. The</li> </ul>
	calibration of any measurement tools or	
	systems used.	recovered samples were passed through a cone splitter and a nominal 2.5kg – 3.5kg sample was taken to a Kalgoorlie contract laboratory. Samples were
	• Aspects of the determination of	oven dried, reduced by riffle splitting to 3kg as required and pulverized in a
	mineralisation that are Material to the Public	
	Report. In cases where 'industry standard'	single stage process to 85% passing 75 $\mu$ m. The sample is then prepared by
		standard fire assay techniques with a 40g charge. Approximately 200g of
	work has been done this would be relatively	pulp material is returned to BDC for storage and potential assay at a later
	simple (e.g. 'reverse circulation drilling was	date. The BDC DC samples are collected at nominated intervals by BDC staff
	used to obtain 1 m samples from which 3 kg	from core that has been cut in half. Samples were oven dried, crushed to a
	was pulverised to produce a 30 g charge for	nominal 10mm by a jaw crusher, reduced by riffle splitting to 3kg as required
	fire assay'). In other cases more explanation	and pulverized in a single stage process to 85% passing 75 $\mu$ m. The sample
	may be required, such as where there is coarse	is then prepared by standard fire assay techniques with a 40g charge.
	gold that has inherent sampling problems.	Approximately 200g of pulp material is returned to BDC for storage and
	Unusual commodities or mineralisation types	potential assay at a later date.
	(e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling to shair as	· · · ·	The sector of the first state is a later of state of the sector of the s
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-	<ul> <li>There is a significant historical data set of drill and sample data for Talbot</li> </ul>
	hole hammer, rotary air blast, auger, Bangka,	North. It is comprised of RAB 12%, trench sampling from open pit grade
	sonic, etc) and details (e.g. core diameter,	control 35% and RC/DC 53%.
	triple or standard tube, depth of diamond	• For (post 2009) BDC drilling, the RC drilling system employed the use of a
	tails, face-sampling bit or other type, whether	face sampling hammer and a nominal 146mm diameter drill bit. The DC
	core is oriented and if so, by what method,	drilling is NQ2 size core (nominal 50.6mm core diameter).
	etc).	• All BDC drill core is orientated by the drilling contractor, usually every 3m
		run.
•	• Method of recording and assessing core and	• All BDC RC 1m samples are logged for drilling recovery by a visual estimate
recovery	chip sample recoveries and results assessed	and this information is recorded and stored in the drilling database. At least
	Measures taken to maximise sample recovery	every 10 <sup>th</sup> metre is collected in a plastic bag and these are weighed when
	and ensure representative nature of the	they are utilized for the collection of field duplicate samples. All samples
	samples	received by the laboratory are weighed with the data collected and stored
	• Whether a relationship exists between sample	in the database.
	recovery and grade and whether sample bias	• The BDC DC samples are orientated, length measured and compared to
	may have occurred due to preferential	core blocks placed in the tray by the drillers, any core loss or other variance
	loss/gain of fine/coarse material.	from that expected from the core blocks is logged and recorded in the
		database. Sample loss or gain is reviewed on an ongoing basis and feedback
		given to the drillers to enable the best representative sample to always be
		obtained.
		• BDC RC 1m samples are visually logged for moisture content, sample
		recovery and contamination. This information is stored in the database. The
		RC drill system utilizes a face sampling hammer which is industry best
		practice and the contractor aims to maximize recovery at all times. RC holes
		are drilled dry whenever practicable to maximize recovery of sample.
		• The DC drillers use a core barrel and wire line unit to recover the core, they
		aim to recover all core at all times and adjust their drilling methods and
		rates to minimise core loss, i.e. different techniques for broken ground to
		ensure as little core as possible is washed away with drill cuttings.
		• Study of sample recovery vs gold grade does not show any bias towards
		differing sample recoveries or gold grade. The drilling contractor uses
		standard industry drilling techniques to ensure minimal loss of any size
		fraction.
	• Whether core and chip samples have been	• All BDC RC samples are geologically logged directly into hand-held Geobank
Logging	• whether core and chip sumples have been	
Logging	geologically and geotechnically logged to a	devices.
Logging		
Logging	geologically and geotechnically logged to a	devices.



	<ul> <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>rock type, alteration, mineralization, shearing/foliation and any other features that are present</li> <li>All BDC DC is photographed both wet and dry after logging but before cutting.</li> <li>The entire lengths of BDC RC holes are logged on a 1m interval basis, i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such. Drill core is logged over its entire length (ie 100%) and any core loss or voids intersected are recorded.</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>All BDC RC samples are put through a cone splitter and the sample is bagged on site by the drilling contractor into pre-numbered calico bags.</li> <li>All BDC RC samples are put through a cone splitter and the sample is collected in a unique pre-numbered calico sample bag. The moisture content of each sample is recorded in the database.</li> <li>The BDC RC samples are sorted, oven dried, the entire sample is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 40g fire assay charge.</li> <li>The BDC DC samples are oven dried, jaw crushed to nominal &lt;10mm, 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for a 40g fire assay charge.</li> <li>BDC uses ½ core sawn by an automated core saw as standard procedure. The retained ¼ of the core is the part of the core that contains the drill hole orientation line and depth intervals. The retained ¼ is stored in systematic way in the Company's on site core yard.</li> <li>BDC RC and DC samples submitted to the laboratory are sorted and standards submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 50 and standards submitted in order on the ground with other samples. This sample is here used for collection of field duplicates are received from the original asay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory are sorted and sample assay. Generally, field duplicates are received from the original sample assay. Generally, field duplicates are received from the original sample assay. Generally, field duplicates are nellected or submitted. For th</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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>BDC has routinely used local Kalgoorlie Certified Laboratories for all sample preparation and analysis. The most commonly used laboratories have been Intertek Genalysis and Bureau Veritas Australia. No complete details of the sample preparation, analysis or security are available for either the historic AC, DD or RC drilling results in the database.</li> <li>The assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for the testing of gold at this project given its mineralization style. The technique involves using a 40g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCI and HNO3) before measurement of the gold content by an AA machine.</li> <li>The QC procedures are industry best practice. The laboratories are accredited and use their own certified reference materials.</li> <li>BDC submits blanks at the rate of 1 in 50 samples and certified reference material standards at the rate of 1 in 20 samples in the normal run of sample submission numbers. As part of normal procedures BDC examines al standards and blanks to ensure that they are within tolerances. Additionally sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists.</li> </ul>



Verification of sampling and assaying	<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>BDC's Exploration Manager and Senior Resource Geologist have inspected RC chips and drill core in the field to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization.</li> <li>A number of RC holes have also been drilled that confirmed results obtained from historical drillholes. No holes have been directly twinned, there are however holes within 15m of each other.</li> <li>Primary data is sent digitally every 2-3 days from the field to BDC's Database Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the database.</li> <li>No adjustments or calibrations were made to any assay data used in this report.</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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drill holes have their collar location recorded from a differential RTK GPS unit by consultant surveyors. Downhole surveys are completed every 30m downhole during drilling and 5m intervals after end of hole. Incomplete down hole surveying information is available for the historic RC or DD drilling.</li> <li>BDC routinely contracted down hole surveys during the programmes of exploration drilling for each drill hole completed using either digital electronic multi-shot tool or north seeking gyro, both of which are maintained by Contractors to manufacturer specifications. The current drill program was downhole surveyed by the drill contractor using north seeking gyro.</li> <li>All drill holes and resource estimation use the MGA94, Zone 51 grid system.</li> <li>The topographic data used was obtained from a LIDAR survey flown in 2012 and it is adequate for the reporting of Exploration Results and subsequent Mineral Resource Estimates.</li> </ul>
Data spacing and distribution	<ul> <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. Whether sample compositing has been applied.</li> </ul>	<ul> <li>The nominal exploration drill spacing is 40m x 20m with many E-W cross-sections in-filled to 15m across strike. There are several 10m spaced cross sections.</li> <li>This report is for the reporting of recent exploration drilling. The drill spacing, spatial distribution and quality of assay results is appropriate for the nature and style of mineralisation being reported.</li> <li>The majority of RC holes were sampled at 1m, but when this isn't the case, sample compositing to 4m has been applied.</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>The majority of previous drilling is to magnetic 055°. The bulk of the mineralized zones are perpendicular to this drilling direction.</li> <li>The current drilling is oriented towards magnetic 055° in order to intersect the lodes in the optimal direction.</li> <li>There is not considered to be a sampling bias introduced from the drilling and geological (including mineralisation) features.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>RC samples are delivered directly from the field to the Kalgoorlie laboratory by BDC personnel on a daily basis with no detours, the laboratory then checks the physically received samples against an BDC generated sample submission list and reports back any discrepancies</li> <li>Drill core is transported daily directly from the drill site to BDC's core processing facility by BDC personnel. The core is then placed on racks and processed until it requires cutting. BDC cut and sample the core on site before transporting it with no detours to the contract Kalgoorlie assay laboratory.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>An internal review of sampling techniques and procedures was completed in March 2018. No external or third party audits or reviews have been completed.</li> </ul>

## 1.7 Section 2 Reporting of Exploration Results – Talbot North

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

# Criteria JORC Code explanation Commentary



Mineral	•	Type, reference name/number, location and		ot North prospect is on a gr	anted Mining Tenem	ent held by GPN	
tenement and land tenure		ownership including agreements or material issues with third parties such as joint ventures,	Resource Tenement	es Pty Ltd. Holder	Area (Ha)	Expiry Date	
status	<ul> <li>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</li> </ul>			M24/133     GPM Resources Pty Ltd     692.8     29/12/20       • At this time the tenements are believed to be in good standing.			
Exploration done by other parties Geology	•	to obtaining a licence to operate in the area. Acknowledgment and appraisal of exploration by other parties. Deposit type, geological setting and style of mineralisation.	<ul> <li>Exploration by other parties has been reviewed and is used as a guide to BDC's exploration activities. This includes work by Goldfields, Samantha Pancontinental and other exploration companies. Previous parties have completed historic and underground mining, geophysical data collection and interpretation, soil sampling and drilling.</li> <li>The historical RC and DC data is suitable for use in a Mineral Resource Estimate</li> <li>Talbot North is located on the Bardoc tectonic Zone of the Kalgoorlie</li> </ul>				
			Terrane. It has three lithologies which strike NW and dip 65° to 80° to the south west. From west to east these are shale, basalt and ultramafic. The western sediments are part of the Black Flag Beds. The basalt varies in width from about 90m in the south to 40m in the north. The basalt is separated by two shale units of varying width between 30cm to 10m. Mineralisation lies almost entirely within the basalt, being both lithologically and structurally controlled. Mineralisation along the western contact i associated with a contact parallel quartz vein in the footwall. A pervasive chlorite-carbonate alteration with arsenopyrite is associated with the gold mineralisation. NE striking structures appear to dextrally offset the mineralisation in places and may increase gold grades locally.				
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>	<ul> <li>new drill results being released for this announcement</li> <li>No results from previous un-reported exploration are the subject of announcement.</li> <li>Easting and Northing define the collar location in MGA94 zone 51 projection. The map projection is a transverse Mercator projection, we conforms with the internationally accepted Universal Transverse Merca Grid system. Collar elevations are RL's (elevation above sea level)</li> <li>Dip is the inclination of the hole from the horizontal (i.e. a vertically d drilled hole from the surface is -90°). Azimuth for current drilling is reportion magnetic degrees as the direction toward which the hole is drift MGA94 and magnetic degrees vary by approximately 1° in this project and MGA94 and magnetic degrees vary by approximately 1° in this project and bown hole length of the hole is the distance from the surface to the ere the hole, as measured along the drill trace. Intercept depth is the distance down the hole as measured along the drill trace. Intersection width is downhole distance of an intersection as measured along the drill trace.</li> <li>Hole length is the distance from the surface to the end of the hole measured along the drill trace.</li> <li>Hole length is the distance from the surface to the end of the hole measured along the drill trace.</li> <li>There are no new exploration results in this announcement.</li> <li>No high grade cuts have been applied to assay results. RC and DC a results are distance weighted using their applicable down hole width each assay.</li> <li>Previous BDC announcements have reported intersections if the intervation are subsection.</li> <li>No metal equivalent reporting is used or applied.</li> </ul>			ne subject of thi 94 zone 51 map projection, which nsverse Mercato a level) a vertically down frilling is reported hole is drilled this project area face to the end o th is the distance ction width is the he drill trace.	
Data aggregation methods	•	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.				RC and DC assa n hole width fo s if the interval i ater than 1m in	
Relationship between mineralisation widths and intercept lengths	•	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its	true wic betweer • Data col	rsection width is measured d Ith. Cross sections in this an I true and down hole width t lected from historical workin al measurements from orien	nnouncement allows o be viewed. gs and shafts within t	the relationshi	



Diagrams	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> <li>Appropriate maps and sections (with scales)</li> </ul>	<ul> <li>primary ore zones to be sub-vertical (west dipping) in nature with a general northerly (magnetic) strike.</li> <li>All drill results within previous announcements are downhole intervals only and true widths are not reported. True widths are approximately 40% of the reported drill intercept widths.</li> <li>Plan and cross sectional views are available in previous announcements.</li> </ul>
	<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>	
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.	<ul> <li>All results &gt;= 0.5g/t Au are previously reported by BDC. The results are length weighted composites based on the Au grade and down hole length, a maximum of 2m of internal dilution is included.</li> </ul>
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>	<ul> <li>No other exploration data is considered meaningful and material to this announcement.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>Exploration work is ongoing at this time and may involve the drilling of more drill holes, both DC and RC, to further extend the mineralised zones and to collect additional detailed data on known and as yet unidentified mineralized zones.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources – Talbot North

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data is logged in the field directly into the Geobank mobile device. Lab submission sheets are digitally recorded in the same way. Assay data are received from the laboratories in an electronic format and are imported directly into a standard DataShed system. All data have been validated by the BDC Database Administrator and geological management prior to inclusion in the resource estimate.</li> <li>Any errors recorded from the various validation processes are manually checked and correlated back to the original collection of data. If necessary, field checks are made to confirm validation issues.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>BDC's Senior Resource Geologist (Mr Ross Whittle-Herbert) and Exploration Manager (Bradley Toms) visited the site on numerous occasions to view ore geometries in the field and review RC chips and diamond core.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geology of the system and the gold distribution is modelled as a set of sub-parallel, NW-SE striking, steeply dipping lodes.</li> <li>The continuity of mineralisation and volume controls are reasonably well established where drilling is at a nominal 15-25m (X) by 25-40m (Y) hole spacing.</li> <li>Additionally, an open pit was completed at Talbot North in the early 1990's. Mapping data and grade control data is available and was used to improve confidence the geology and mineralisation models.</li> <li>The use of historical drilling provides a level of uncertainty as the company cannot validate all the QAQC data and downhole survey data.</li> </ul>



	•	The selection of mineralised domains has used geological factors such as geological contacts, logged quartz and sulphides. Gold values transition
<u></u>		from background to ore grades over a very short distance.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or	Mineralisation extends 600m NW/SE, up to 50m across strike (in multiple narrow lodes) and over 200m vertically.
	otherwise), plan width, and depth below •	
	surface to the upper and lower limits of the Mineral Resource.	
Estimation and	• The nature and appropriateness of the •	BDC has used 3DM wireframes interpreted on a sectional basis to constrain
modelling techniques	estimation technique(s) applied and key assumptions, including treatment of extreme	the mineralised zones, based on RC drilling at spacing's down to 20m N x 20m E-W.
	grade values, domaining, interpolation	
	parameters and maximum distance of extrapolation from data points. If a computer	narrow nature of the steep lodes. 1m composite intervals falling within the wire framed estimation domains were coded in the database.
	assisted estimation method was chosen •	······································
	include a description of computer software and parameters used.	cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical
	• The availability of check estimates, previous	tools plus visual inspection of the spatial location of outlier values. Based on
	estimates and/or mine production records and whether the Mineral Resource estimate	this statistical analysis of the data population some top cuts were applied. Grade estimation using Ordinary Kriging (OK) was completed using
	takes appropriate account of such data.	Micromine software for Au only.
	The assumptions made regarding recovery of by-products.	Directional variograms were modelled by domain using traditional variograms. Nugget values are low to moderate and range up to 81m. The
	• Estimation of deleterious elements or other	considerable anisotropy between the major and semi-major axes indicates
	non-grade variables of economic significance (e.g. sulphur for acid mine drainage	that gold grade is concentrated proximal to the shear intersections and does not extend far up or down dip within the steep shears. This is consistent
	characterization).	with observations in drill holes where a high grade gold intersection can be
	<ul> <li>In the case of block model interpolation, the block size in relation to the average sample</li> </ul>	bounded up-dip and down-dip by intersections of much lower tenor. Block model was constructed with parent blocks of 5m (E) by 10m (N) by 5m
	spacing and the search employed.	(RL) and sub-blocked down to 1m (E) by 2m (N) by 2m (RL). All estimation
	Any assumptions behind modelling of selective mining units.	was completed to the parent cell size. Each pass used a maximum of 24 samples, a minimum of 8 samples for the
	Any assumptions about correlation between	initial estimation run.
	variables.     Description of how the geological	Search ellipse sizes were based primarily on a combination of the variography and the trends of the wire framed mineralized zones. Hard
	Description of how the geological interpretation was used to control the	boundaries were applied between all estimation domains.
	resource estimates.	· · · · · · · · · · · · · · · · · · ·
	Discussion of basis for using or not using grade cutting or capping.	resource wireframes to the block model volumes. Validation of the grade estimate included comparison of block model grades to the declustered
	• The process of validation, the checking	input composite grades plus swath plot comparison by easting, northing and
	process used, the comparison of model data to drill hole data, and use of reconciliation	elevation. Visual comparisons of input composite grades vs. block model grades were also completed.
	data if available.	No consideration has been made to by-products.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the	Tonnages are reported on a dry basis.
	method of determination of the moisture	
Cut-off	<ul> <li>content.</li> <li>The basis of the adopted cut-off grade(s) or</li> </ul>	A cut-off of 0.4g/t was chosen.
parameters	quality parameters applied.	The adopted cut-off grades were based on assumptions of potential open
		pit mining & milling costs. The project could be amenable to trucking to a mill.
Mining factors or	Assumptions made regarding possible mining	
assumptions	methods, minimum mining dimensions and internal (or, if applicable, external) mining	open pit methodologies. Further work, including additional drilling, will determine the optimal
	dilution. It is always necessary as part of the	mining method for this material.
	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.	
Metallurgical	The basis for assumptions or predictions	
factors or	regarding metallurgical amenability. It is	North by Bardoc Gold.
assumptions	always necessary as part of the process of	



ı	eventual economic extraction to consider	It is noted that a large pit was excavated and treated through the nearby
	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.	<ul> <li>It is noted that a large pit was excavated and treated through the hearby Paddington Mill with a total of 307kt @ 1.67g/t Au for 35,500oz Au mined. The pit has been inactive since 2004.</li> </ul>
Environmental factors or assumptions	<ul> <li>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 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.</li> </ul>	<ul> <li>No milling operation scenario has been proposed, however very large gold mining operations exist only 10 kilometres from these prospects and local and regional environmental impacts have been manageable. It is likely that a similar scenario would exist with the project.</li> <li>At this stage, there is no environmental impact study completed at Talbot North.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>A total of 78 determinations have been made from two new (2019) DD holes.</li> <li>Determinations were made using Archimedes method on typically fresh to slightly weather rock.</li> <li>In total 436 measurements were taken from the oxide and transitional zones. Also taken into consideration was some 2,500 measurements from the Talbot South Pit which is located 250m along strike to the south.</li> <li>Oxide, supergene and transitional ore densities used were 1.65 kg/m<sup>3</sup>, 2.2 kg/m<sup>3</sup> and 2.9 kg/m<sup>3</sup> respectively</li> <li>On balance BDC believe that there are sufficient data to allow the assignment of average values to the MRE block model but not enough to allow a spatially representative estimation of bulk density. BDC have used assumed bulk density values for ore and waste based on the interpreted weathering surfaces.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The Mineral Resource has been classified in part as Indicated and Inferred on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information.</li> <li>Indicated – Areas with drill spacing up to approximately 40mE x 40mN and with reasonable confidence in the geological interpretation.</li> <li>Inferred – Areas with drill spacing in excess of 40mE x 40mN. These are less well informed regions of the model and generally only receive an estimated grade on the third estimation run with relaxed estimation parameters.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	This reported Mineral Resource has not been reviewed.



Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	The relative accuracy of the Mineral Resource Estimates is reflected in the reporting of the Mineral Resource in accordance with the guidelines of the 2012 JORC Code. The statement relates to global estimates of tonnes and grade.

# JORC, 2012 Edition – Tables – South Castlereagh

### 1.8 Section 1 Sampling techniques and data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</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. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The mineralization was primarily sampled by Reverse Circulation (RC) and Diamond Core (DC) drilling on nominal 40m x 20m (N x E) grid spacing. The holes were generally drilled towards grid east at varying angles to optimally intersect the mineralized zones.</li> <li>Complete details are un-available for historic drilling.</li> <li>Generally, BDC RC recovered chip samples were collected and passed through a cone splitter.</li> <li>Limited numbers of field duplicates have been undertaken to support sample representivity.</li> <li>All BDC RC drilling was sampled on one metre down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg – 3.5kg sample was taken to a Kalgoorlie contract laboratory. Samples were oven dried, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to BDC for storage and potential assay at a later date. The BDC DC samples are collected at nominated intervals by BDC staff from core that has been cut in half. Samples were oven dried, crushed to a nominal 10mm by a jaw crusher, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by the prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to BDC for storage and potential assay at a later date. The BDC DC samples are collected at nominated intervals by BDC staff from core that has been cut in half. Samples were oven dried, crushed to a nominal 10mm by a jaw crusher, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 40g charge. Approximately 200g of pulp material is returned to BDC for storage and potential assay at a later date.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether</li> </ul>	<ul> <li>RAB drilling makes up about 30% of the historic drilling and RC the other 70%. There are several campaigns of historic drilling between 1983 and 2012. These holes are sometimes without documentation of the rig type and capability, core size, sample selection and handling.</li> </ul>



	core is oriented and if so, by what method, etc).	<ul> <li>For (post 2009) BDC drilling, the RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. The DC drilling is NQ2 size core (nominal 50.6mm core diameter).</li> <li>All BDC drill core is orientated by the drilling contractor, usually every 3m run.</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>All BDC RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. At least every 10<sup>th</sup> metre is collected in a plastic bag and these are weighed when they are utilized for the collection of field duplicate samples. All samples received by the laboratory are weighed with the data collected and stored in the database.</li> <li>The BDC DC samples are orientated, length measured and compared to core blocks placed in the tray by the drillers, any core loss or other variance from that expected from the core blocks is logged and recorded in the database. Sample loss or gain is reviewed on an ongoing basis and feedback given to the drillers to enable the best representative sample to always be obtained.</li> <li>BDC RC 1m samples are visually logged for moisture content, sample recovery and contamination. This information is stored in the database. The RC drill system utilizes a face sampling hammer which is industry best practice and the contractor aims to maximize recovery of sample.</li> <li>The DC drillers use a core barrel and wire line unit to recover the core, they aim to recover all core at all times and adjust their drilling methods and rates to minimise core loss, i.e. different techniques for broken ground to ensure as little core as possible is washed away with drill cuttings.</li> <li>Study of sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction.</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>All BDC RC samples are geologically logged directly into hand-held Geobank devices.</li> <li>All BDC DC is logged for core loss, marked into metre intervals, orientated, structurally logged, geotechnically logged and logged with a hand lens with the following parameters recorded where observed: weathering, regolith, rock type, alteration, mineralization, shearing/foliation and any other features that are present</li> <li>All BDC DC is photographed both wet and dry after logging but before cutting.</li> <li>The entire lengths of BDC RC holes are logged on a 1m interval basis, i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such. Drill core is logged over its entire length (ie 100%) and any core loss or voids intersected are recorded.</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>All BDC RC samples are put through a cone splitter and the sample is bagged on site by the drilling contractor into pre-numbered calico bags.</li> <li>All BDC RC samples are put through a cone splitter and the sample is collected in a unique pre-numbered calico sample bag. The moisture content of each sample is recorded in the database.</li> <li>The BDC RC samples are sorted, oven dried, the entire sample is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 40g fire assay charge.</li> <li>The BDC DC samples are oven dried, jaw crushed to nominal &lt;10mm, 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 40g fire assay charge.</li> <li>The BDC DC samples are oven dried, jaw crushed to nominal &lt;10mm, 3.5kg is obtained by riffle splitting and the remainder of the coarse reject is bagged while the 3.5kg is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for a 40g fire assay charge.</li> <li>BDC uses ½ core sawn by an automated core saw as standard procedure. The retained ½ of the core is the part of the core that contains the drill hole orientation line and depth intervals. The retained ½ is stored in systematic way in the Company's on site core yard.</li> <li>BDC RC and DC samples submitted to the laboratory are sorted and reconciled against the submission documents. BDC inserts blanks and standards with blanks submitted in sample number sequence at 1 in 20. The laboratory uses their own internal standards of 2 duplicates, 2 replicates, 2 standards,</li> </ul>



		<ul> <li>and 1 blank per 50 fire assays. The laboratory also uses barren flushes on the pulveriser.</li> <li>In the field every 10<sup>th</sup> metre from the bulk sample port on the cone splitter is bagged and placed in order on the ground with other samples. This sample is then used for collection of field duplicates via riffle splitting. RC field duplicate samples are collected after results are received from the original sample assay. Generally, field duplicates are only collected where the original assay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory for the standard assay process. The laboratory is blind to the original sample number.</li> <li>For DC, historically no core duplicates (i.e. half core) have been collected or submitted. For the current program the lab was requested to take a sample from the crush reject as a proxy for the field duplicate.</li> <li>The sample sizes are considered to be appropriate for the type, style, thickness and consistency of mineralization located at this project. The sample size is also appropriate for the sampling methodology employed and the gold grade ranges returned.</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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>BDC has routinely used local Kalgoorlie Certified Laboratories for all sample preparation and analysis. The most commonly used laboratories have been Intertek Genalysis and Bureau Veritas Australia. No complete details of the sample preparation, analysis or security are available for either the historic AC, DD or RC drilling results in the database.</li> <li>The assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for the testing of gold at this project given its mineralization style. The technique involves using a 40g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCl and HNO3) before measurement of the gold content by an AA machine.</li> <li>The QC procedures are industry best practice. The laboratories are accredited and use their own certified reference materials.</li> <li>BDC submits blanks at the rate of 1 in 50 samples in the normal run of sample submission numbers. As part of normal procedures BDC examines all standards and blanks to ensure that they are within tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists.</li> </ul>
Verification of sampling and assaying	<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>BDC's Exploration Manager and Senior Resource Geologist have inspected RC chips and drill core in the field to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization.</li> <li>A number of RC holes have also been drilled that confirmed results obtained from historical drillholes. No holes have been directly twinned, there are however holes within 15m of each other.</li> <li>Primary data is sent digitally every 2-3 days from the field to BDC's Database Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the database.</li> <li>No adjustments or calibrations were made to any assay data used in this report.</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> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All drill holes have their collar location recorded from a differential RTK GPS unit by consultant surveyors. Downhole surveys are completed every 30m downhole during drilling and 5m intervals after end of hole. Incomplete down hole surveying information is available for the historic RC or DD drilling.</li> <li>BDC routinely contracted down hole surveys during the programmes of exploration drilling for each drill hole completed using either digital electronic multi-shot tool or north seeking gyro, both of which are maintained by Contractors to manufacturer specifications. The current drill program was downhole surveyed by the drill contractor using north seeking gyro.</li> <li>All drill holes and resource estimation use the MGA94, Zone 51 grid system. The topographic data used was obtained from a LIDAR survey flown in 2012 and it is adequate for the reporting of Exploration Results and subsequent Mineral Resource Estimates.</li> </ul>



Data spacing and distribution	Results.secWhether 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 	e nominal exploration drill spacing is 40m x 20m with many E-W cross- tions in-filled to 15m across strike. There are several 10m spaced cross tions. Is report is for the reporting of recent exploration drilling. The drill cing, spatial distribution and quality of assay results is appropriate for nature and style of mineralisation being reported. Is majority of RC holes were sampled at 1m, but when this isn't the case, nple compositing to 4m has been applied.
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</li> </ul>	e majority of previous drilling is to magnetic east. The bulk of the peralized zones are perpendicular to this drilling direction. current drilling is oriented towards local grid east (magnetic 90 degrees) rder to intersect the lodes in the optimal direction. rer are 2 core holes drilled towards magnetic 142 degrees. In this entation the intersection of the mineralised lodes is at an oblique angle, ulting in wider drill intercepts than the true widths of the mineralised es. In this case there is a sampling bias whereby intercept widths are ater than the true widths of mineralised lodes.
Sample security	The measures taken to ensure sample • RC security.     Dri proproduction	samples are delivered directly from the field to the Kalgoorlie laboratory BDC personnel on a daily basis with no detours, the laboratory then cks the physically received samples against an BDC generated sample mission list and reports back any discrepancies I core is transported daily directly from the drill site to BDC's core cessing facility by BDC personnel. The core is then placed on racks and cessed until it requires cutting. BDC cut and sample the core on site ore transporting it with no detours to the contract Kalgoorlie assay pratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.• An in	internal review of sampling techniques and procedures was completed March 2018. No external or third party audits or reviews have been appleted.

### 1.9 Section 2 Reporting of Exploration Results – South Castlereagh

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

Criteria	JORC Code explanation	Commenta	Commentary		
Mineral tenement and	• Type, reference name/number, location and ownership including agreements or material		Castlereagh prospect is on purces Pty Ltd.	a granted Mining Te	enement held by
land tenure	issues with third parties such as joint ventures,	Tenement	Holder	Area (Ha)	Expiry Date
status	partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.				
	• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.				
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	BDC's exp ARM and historic interpreta Excelsior "Castlere	<ul> <li>BDC's exploration activities. This includes work by Goldfields, Samantha, ARM and other exploration companies. Previous parties have completed historic and underground mining, geophysical data collection and interpretation, soil sampling and drilling.</li> <li>Excelsior Gold excavated a small open pit 500m north along strike at "Castlereagh" in 2015.</li> </ul>		
Geology	• Deposit type, geological setting and style of mineralisation.	predomir associate contact. 1 quartz, se possible s Whilst str surface d transition througho area. Det			
Drill hole Information	• A summary of all information material to the understanding of the exploration results		ous announcements for BDC esults being released for this		on. There are no



	<ul> <li>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>	<ul> <li>No results from previous un-reported exploration are the subject of this announcement.</li> <li>Easting and Northing define the collar location in MGA94 zone 51 map projection. The map projection is a transverse Mercator projection, which conforms with the internationally accepted Universal Transverse Mercator Grid system. Collar elevations are RL's (elevation above sea level)</li> <li>Dip is the inclination of the hole from the horizontal (i.e. a vertically down drilled hole from the surface is -90°). Azimuth for current drilling is reported in magnetic degrees as the direction toward which the hole is drilled. MGA94 and magnetic degrees vary by approximately 1° in this project area</li> <li>Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. Intersection width is the downhole distance of an intersection as measured along the drill trace.</li> <li>Hole length is the distance from the surface to the end of the hole, as measured along the drill trace.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</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>There are no new exploration results in this announcement.</li> <li>No high grade cuts have been applied to assay results. RC and DC assay results are distance weighted using their applicable down hole width for each assay.</li> <li>Previous BDC announcements have reported intersections if the interval is at least 1m wide at 0.5g/t Au grade. Intersections greater than 1m in downhole distance can contain up to 2m of low grade or barren material.</li> <li>No metal equivalent reporting is used or applied.</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 (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>The intersection width is measured down the hole trace, it is not usually the true width. Cross sections in this announcement allows the relationship between true and down hole width to be viewed.</li> <li>Data collected from historical workings and shafts within the area and from structural measurements from orientated diamond core drilling show the primary ore zones to be sub-vertical (west dipping) in nature with a general northerly (magnetic) strike.</li> <li>All drill results within previous announcements are downhole intervals only and true widths are not reported. True widths are approximately 40% of the reported drill intercept widths.</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>	Plan and cross sectional views are available in previous announcements.
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>	<ul> <li>All results &gt;= 0.5g/t Au are previously reported by BDC. The results are length weighted composites based on the Au grade and down hole length, a maximum of 2m of internal dilution is included.</li> </ul>
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>	<ul> <li>No other exploration data is considered meaningful and material to this announcement.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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</li> </ul>	<ul> <li>Exploration work is ongoing at this time and may involve the drilling of more drill holes, both DC and RC, to further extend the mineralised zones and to collect additional detailed data on known and as yet unidentified mineralized zones.</li> </ul>



areas, provided this ii	information is not
commercially sensitive.	,

# 1.10 Section 3 Estimation and Reporting of Mineral Resources – South Castlereagh

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Data is logged in the field directly into the Geobank mobile device. Lab submission sheets are digitally recorded in the same way. Assay data are received from the laboratories in an electronic format and are imported directly into a standard DataShed system. All data have been validated by the BDC Database Administrator and geological management prior to inclusion in the resource estimate.</li> <li>Any errors recorded from the various validation processes are manually checked and correlated back to the original collection of data. If necessary, field checks are made to confirm validation issues.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>BDC's Senior Resource Geologist (Mr Ross Whittle-Herbert) visited the site on numerous occasions to view ore geometries in the field and review RC chips and diamond core.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The geology of the system and the gold distribution is modelled as a set of sub-parallel, N-S to NNW-SSE striking, steeply dipping narrow lodes.</li> <li>The continuity of mineralisation and volume controls are reasonably well established where drilling is at a nominal 15-25m (X) by 15-25m (Y) hole spacing.</li> <li>The use of historical drilling provides a level of uncertainty as the company cannot validate all the QAQC data and downhole survey data.</li> <li>The selection of mineralised domains has used geological factors such as geological contacts, logged quartz and sulphides in conjunction with a 0.3g/t cut-off for the underground model. Gold values transition from background to ore grades over a very short distance.</li> </ul>
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 lower limits of the Mineral Resource.	<ul> <li>Mineralisation extends 450m NNW/SSE, up to 50m east/west (in multiple narrow lodes) and up to 190m vertically.</li> <li>Mineralised structures are present at surface for some lodes.</li> </ul>
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> </ul>	<ul> <li>BDC has used 3DM wireframes interpreted on a sectional basis to constrain the mineralised zones, based on RC drilling at spacing's down to 20m N x 20m E-W.</li> <li>1m compositing was considered appropriate for the estimation given the narrow nature of the steep lodes. 1m composite intervals falling within the wire framed estimation domains were coded in the database.</li> <li>Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools plus visual inspection of the spatial location of outlier values. Based on this statistical analysis of the data population some top cuts were applied, including domains D1 (15 ppm), D2 (25 ppm) and D5 (3 ppm).</li> <li>Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for Au only.</li> <li>Directional variograms were modelled by domain using traditional variograms. Nugget values are high (around 50%) and structure ranges up to 70m. The variograms were poorly formed and with D1 containing the most samples, its modelled variography was applied to the remainder of the domains.</li> <li>Block model was constructed with parent blocks of 2m (E) by 10m (N) by 10m (RL) and sub-blocked down to 0.5m (E) by 2.5m (N) by 2.5m (RL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains.</li> </ul>



Moisture	<ul> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture</li> </ul>
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> <li>A cut-off of 0.5g/t was chosen.</li> <li>The adopted cut-off grades were based on assumptions of potential open pit mining &amp; milling costs.</li> <li>The project could be amenable to trucking to a mill.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining 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.</li> <li>It is assumed the lodes would be mined using typical Eastern Goldfields open pit methodologies. Further work, including additional drilling, will determine the optimal mining method for this material.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>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 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.</li> <li>The South Castlereagh Deposit is located 500m south, in similar rock types and mineralisation styles, of the Castlereagh Open Pit excavated by Excelsior Gold Ltd in 2015. The gold recoveries from Castlereagh Open Pit through the Paddington Mill owned by Norton Goldfields/Zijin exceeded 92%.</li> <li>No metallurgical testwork has been completed on mineralisation at South Castlereagh.</li> </ul>
Environmental factors or assumptions	<ul> <li>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 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.</li> <li>No milling operation scenario has been proposed, however very large gold mining operation scenario has been proposed, however very large gold mining operations exist only 15 kilometres from these prospects and local and regional environmental impacts have been manageable. It is likely that a similar scenario would exist with the project.</li> <li>At this stage, there is no environmental impact study completed at South Castlereagh.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>A total of 78 determinations have been made from two new (2019) DD holes.</li> <li>Determinations were made using Archimedes method on typically fresh to slightly weather rock.</li> <li>In total 35 measurements were taken from within the mineralised domains on fresh to slightly weather rock. This resulted in average fresh ore densities</li> </ul>



Classification	<ul> <li>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.</li> <li>Oxide, supergene and transitional ore densities used were 1.8 kg/ kg/m<sup>3</sup> and 2.5 kg/m<sup>3</sup> respectively</li> <li>On balance BDC believe that there are sufficient data to allo assignment of average values to the MRE block model but not encor allow a spatially representative estimation of bulk density. BDC have assumed bulk density values for ore and waste based on the inter weathering surfaces.</li> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in continuity of geology and metal values, quality, quantity of distribution of the data).</li> <li>In part, the lodes have been drilled on 15-25m x 15-25m spacin northing and easting, with drilling is at greater spacing.</li> <li>In part, the deposit is adequately drilled to have potentially been def higher confidence classification using only drilling density as a cloue classification using only drilling density as a classified or the deposit.</li> <li>Only two diamond core holes have been drilled at depth in the reso further core holes are required to confirm geological and str interpretation assumptions.</li> </ul>	m <sup>3</sup> , 2.2 bw the bugh to re used preted inferred ralized nd the ing, on To the ined as riteria. ita and from 3 press is South burce –
Audits or reviews	The results of any audits or reviews of Mineral         This reported Mineral Resource has not been reviewed.           Resource estimates.         • This reported Mineral Resource has not been reviewed.	
Discussion of relative accuracy/ confidence	<ul> <li>The relative accuracy of the Mineral Resource Estimates is reflected reporting of the Mineral Resource Estimates is reflected reporting of the Mineral Resource in accordance with the guidelines 2012 JORC Code.</li> <li>The statement relates to global estimates of tonnes and grade.</li> <li>The statement relates to global estimates of tonnes and grade.</li> <li>The statement relates to global estimates of tonnes and grade.</li> <li>The statement relates to global estimates of tonnes and grade.</li> <li>The statement relates to global estimates of tonnes and grade.</li> <li>The statement relates to global estimates of tonnes and grade.</li> </ul>	