

ASX/Media Release Dated: 12 March 2019





Richmond

WEBSITE

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## MAIDEN RESOURCE FOR THE CRAKE GOLD PROJECT GROWS TOTAL **MINERAL RESOURCES TO OVER 667,000 OUNCES**

## HIGHLIGHTS

- Highly successful infill and extensional drilling completed at the Crake gold project, 9km west of Kalgoorlie-Boulder in the Western Australian goldfields
- A total of 85 RC holes for 8,096m of resource drilling completed at Crake in 2018<sup>1</sup>
- Maiden independent Mineral Resource Estimate now compiled and stands at:
  - 1.12Mt grading 1.59 g/t Au for 57,700oz at a 1.0 g/t Au lower grade cut-off<sup>2</sup>
- 69% in the Indicated Category with mineralisation open to the west and north<sup>1</sup>
- Intermin's Total Mineral Resource estimate grows to:
  - 10.38Mt grading 2.00g/t Au for 667,500oz at a 1g/t Au lower grade cut-off<sup>2</sup>
- Additional resource drilling planned for Crake and the Binduli project area in 2019
- Initial mining studies assessing optimal mining and processing pathways for open cut mine development will commence in the current March Quarter

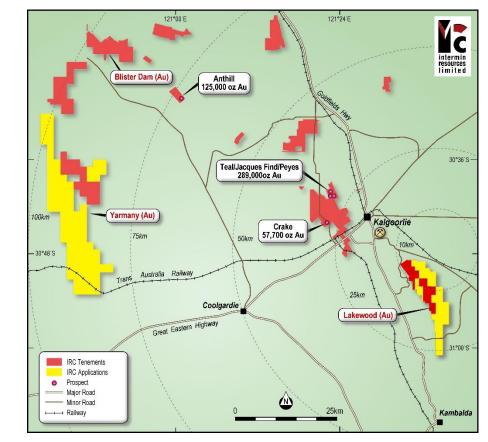


Figure 1: Crake project and Binduli Project area location and surrounding infrastructure

Commenting on maiden resource, Intermin Managing Director Mr Jon Price said:

"The successful drilling in 2018 has clearly demonstrated the potential of the Binduli project area and resulted in a significant maiden resource for the Crake project. We look forward to building on this in 2019 both at Crake and the other priority targets within the Binduli area and believe the project will play a significant part in our future mine development plans."

<sup>1</sup> As announced to the ASX on 10 July, 15 August and 14 November 2018. <sup>2</sup> See Tables 1, 2 and 3 and Competent Persons statement on pages 4 and 10. See also JORC tables on page 12.

## **Overview**

MUOSID:

Intermin Resources Limited (ASX: IRC) ("Intermin" or the "Company") is pleased to announce a maiden Mineral Resource estimate for the Crake prospect located within the 100% owned Binduli gold project, located 9km west of Kalgoorlie-Boulder in the heart of the Western Australian goldfields (Figure 1).

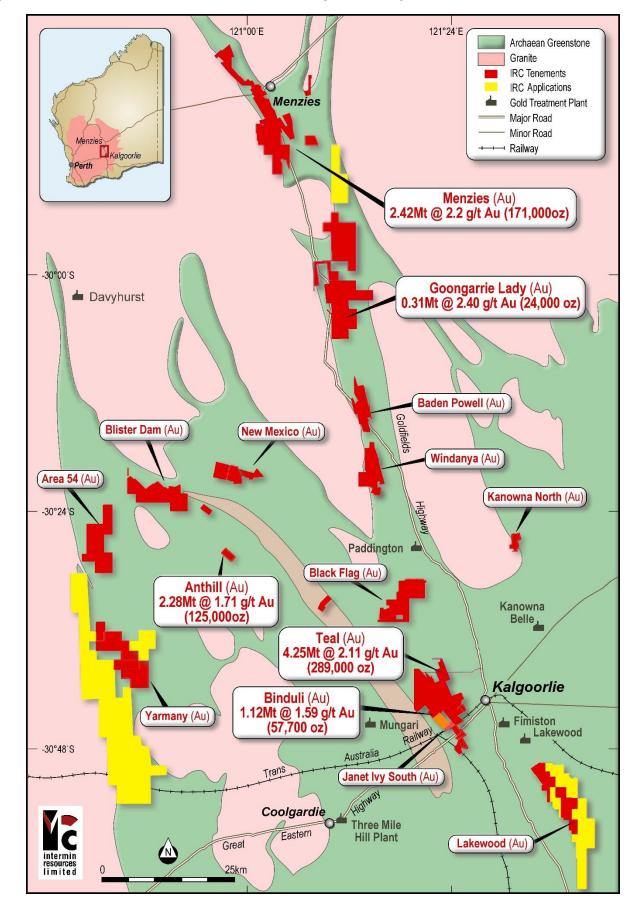


Figure 2: Intermin's gold project locations, regional geology and surrounding infrastructure.

## **Project Geology**

The geology at Crake is similar to the 390,000oz Janet Ivy open pit, located approximately 1,500m to the south, where the gold is hosted in a structurally controlled feldspar porphyry. At the nearby Fort William and Fort Scott open pits, where over 100,000oz have been produced to date, gold is hosted within sheared units of volcanics and clastic sediments.

At Crake, the gold mineralisation strikes NW and dips shallowly to the SW. A poorly developed southern plunge is tentatively interpreted. The gold lodes are often tabular shaped and 20m thick but can blow out to >60m width. High grade shoots appear to result from intersecting structures. The Crake drilling focussed on a mineralised, variably altered pink porphyry with minor amounts of pyrite and magnetite. Higher grades usually coincide with stronger pyrite mineralisation (up to 3% by volume). There is little correlation between gold and magnetite.

## Resource Update

In March 2018, the Binduli joint venture tenements were returned to Intermin on a 100% basis. A total of 85 RC holes for 8,096m was subsequently drilled in 2018. The RC drilling was completed on an approximate 20m pattern, spanned 450m and covered mineralisation from 10m to 170m vertical depth.

Significant downhole RC intercepts reported in 2018 included<sup>1</sup>:

- 23m @ 4.16 g/t Au from 61m including 3m @ 20.73g/t Au from 66m (BRC18020)
- 13m @ 4.10g/t Au from 65m including 2m @ 18.53g/t Au from 75m (BRC18036)
- 18m @ 3.13 g/t Au from 70m (BRC18043)
- 15m @ 2.75 g/t Au from 27m (BRC18069)
- 9m @ 4.38 g/t Au from 39m (BRC18079)
- 15m @ 1.96 g/t Au from 75m (BRC18029)
- 12m @ 1.75 g/t Au from 45m (BRC18057)
- 8m @ 2.51 g/t Au from 106m (BRC18018)

The new data has been used to compile a detailed independent Mineral Resource Estimate compliant with the JORC 2012 Code. The Mineral Resource for Crake stands at:

## • 1.12Mt @ 1.59 g/t Au for 57,700 ounces at a 1.0 g/t Au lower grade cut-off<sup>2</sup>

Further breakdowns of ore types and categories are shown in Table 1 - 3.

Table 1: Crake Project – Resource Summary Comparison at different cut-off grades\*

	Total Orc	linary Kriged	d Uncut	Total ID2 Cut		
cutoff	Tonnes	Au (g/t)	Ounces	Tonnes	Au (g/t)	Ounces
0.5	3,052,229	1.04	101,640	2,995,972	1.04	100,466
0.6	2,461,760	1.15	91,236	2,410,190	1.16	90,164
0.7	2,061,535	1.25	82,885	2,003,985	1.27	81,741
0.8	1,698,463	1.36	74,166	1,698,682	1.36	74,389
0.9	1,399,516	1.47	66,015	1,418,286	1.46	66,735
1	1,126,990	1.59	57,700	1,134,451	1.59	58,084
1.5	438,852	2.21	31,129	436,568	2.23	31,249
2	191,772	2.87	17,672	185,432	2.93	17,466
2.5	88,665	3.66	10,432	91,541	3.70	10,904
3	55,636	4.23	7,561	52,404	4.46	7,508

<sup>&</sup>lt;sup>1</sup>As announced to the ASX on 10 July, 15 August and 14 November 2018.

<sup>&</sup>lt;sup>2</sup> See Tables 1, and 3 and Competent Persons statement on pages 4 and 10. See also JORC tables on page

Table 2:	Crake Project -	Comparison	of Indicated an	nd Inferred Resources*
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Indicated					
cutoff	Tonnes	Au (g/t)	Ounces		
0.5	2,188,964	1.04	73 <mark>,</mark> 294		
0.6	1,778,852	1.15	66,055		
0.7	1,483,417	1.26	59,900		
0.8	1,209,293	1.37	53,299		
0.9	969,007	1.50	46,748		
1	745,088	1.67	39,916		
1.5	299,669	2.39	23,017		
2	150,002	3.07	14,799		
2.5	87,402	3.67	10,325		
3	55,597	4.23	7,557		

cutoff	cutoff Tonnes Au (g/t) Ounces						
0.5	863,263	1.02	28,335				
0.6	682,906	1.15	25,175				
0.7	578,116	1.24	22,981				
0.8	489,169	1.33	20,857				
0.9	430,509	1.39	19,259				
1	381,902	1.45	17,776				
1.5	139,183	1.81	8,115				
2	41,770	2.14	2,876				
2.5	1,263	2.66	108				
3	39	3.06	4				

#### Table 3: Crake Project – Comparison of Oxide, Transitional and Fresh Ore Types\*

	Oxide OK-Cut			Transition OK-Cut			Fresh OK-Cut		
cutoff	Tonnes	Au (g/t)	Ounces	Tonnes	Au (g/t)	Ounces	Tonnes	Au (g/t)	Ounces
0.5	266,168	1.22	10,454	387,642	1.12	13,959	2,398,418	1.00	77,215
0.6	219,688	1.36	9,639	312,517	1.26	12,630	1,929,554	1.11	68,954
0.7	190,465	1.47	9,031	252,325	1.40	11,376	1,618,744	1.20	62,469
0.8	167,731	1.57	8,487	210,915	1.53	10,382	1,319,816	1.30	55,280
0.9	145,479	1.69	7,882	183,723	1.63	9,642	1,070,314	1.41	48,469
1	128,748	1.78	7,370	158,346	1.74	8,868	839,896	1.53	41,446
1.5	64,592	2.36	4,909	97,758	2.09	6,563	276,502	2.21	19,656
2	32,624	2.97	3,116	55,545	2.35	4,190	103,602	3.11	10,367
2.5	19,012	3.53	2,156	12,375	2.93	1,164	57,277	3.86	7,113
3	12,348	3.98	1,581	3,190	3.66	375	40,098	4.35	5,605

\* The information in these table that relates to Mineral Resources is based on information compiled by Messrs David O'Farrell and Andrew Hawker. Both are Members of the Australasian Institute of Mining and Metallurgy, Mr O'Farrell is a full time employee of Intermin Resources Ltd and Mr Hawker is an independent consultant to Intermin Resources Ltd. The information was prepared under the JORC Code 2012. Messrs O'Farrell and Hawker have sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration, Results, Mineral Resource and Ore Reserves'. Messrs O'Farrell and Hawker consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

The mineralisation remains open to the west and north and further drilling is planned to test extensions to mineralisation in 2019. Attributable discovery costs incurred in 2018 for Crake are estimated to be approximately \$12/oz.

Intermin's global gold Resources now stands at 10.38Mt grading 2.00g/t Au for 667,500oz at a 1g/t Au lower cut-off grade<sup>1</sup>.

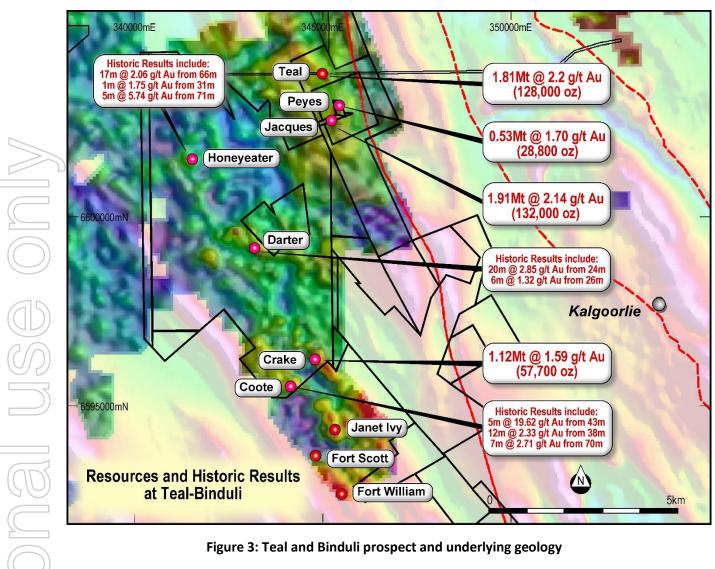
## **Next Steps**

Intermin believes the mineralisation at Crake is significant with further RC drilling planned at Crake and the greater Binduli project area including high priority drill targets at Coote, Darter and Honeyeater (Figure 3).

Initial scoping studies assessing optimal mining and processing pathways for open cut mine development will commence in the current March Quarter.

The Company believes the Binduli project area has the potential to be a significant contributor to the long term mine development plans currently being assessed.

<sup>2</sup> See Table on Page 9 and Competent Persons statement on pages 4 and 10. See also JORC tables on page 12.



## Listing Rule 5.8.1 Disclosures

## Geology and Geological Interpretation

The Archean Crake gold deposit comprises a well-defined mineralised porphyry with associated oxide and/or minor palaeochannel hosted gold in the near surface area. The porphyry strikes NW and dips shallowly to the SW. A poorly developed southern plunge is tentatively interpreted. Mineralisation is strongly influenced by a NNW striking shear (a splay off the Zuleika shear zone) and an intersecting east-west structure. The sequence has been folded. The mineralisation currently spans approximately 440m in strike length.

## Sampling and Sub-sampling

The current Crake deposit has recently been sampled using reverse circulation (RC) on a nominal 20m by 20m initial grid spacing to a maximum depth of 170 metres. Historical drilling at Crake totalled 50 drill holes with most of these being exploration RC/AC/RAB holes. There have been no diamond holes drilled at Crake. For the 2018 resource, 1m RC samples were obtained by cone splitter and were utilised for lithology logging and assaying. Duplicates were often taken with the rig cyclone/splitter

## Sample Analysis Method

All IRC drilling samples were fire assayed using a 50g charge at SGS Laboratories in Kalgoorlie. Sample weights were recorded and averaged 2-3 kg. For historical drilling the samples were analysed in a similar way, but with some samples being tested using the aqua-regia method. Comparison of the two methods in historical reports were satisfactory.

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#### **Drilling Techniques**

In the resource area RC drilling with a  $4^{3/4}$  inch face sampling hammer was used for all the holes. Samples were mostly dry, wet samples were typically in barren zones. Good sample recoveries were observed.

#### **Estimation Methodology**

Interpretations were made by an independent consultant Hawker geological Services (HGS). The wireframes were reviewed by Intermin before being finalised. An evaluation of the statistical background was used for identifying the lower cut-off in the interpretation. A histogram of the lower values was used in determining a background of 0.2ppm.

Although a statistical background identified a 0.2ppm Au value (Figure 4), there was flexibility in altering the lower cut-off based on geological interpretation to maintain lode continuity. Criteria used in the interpretations were:

- Interpretations were based on data supplied by Intermin.
- A nominal 0.2ppm lower cut-off grade with flexibility for geological continuity.
- Sections extended 10m beyond the last interpreted section.
- Maintain geological and regolith continuity to conform with the lode style: laterite, supergene, hypergene etc.

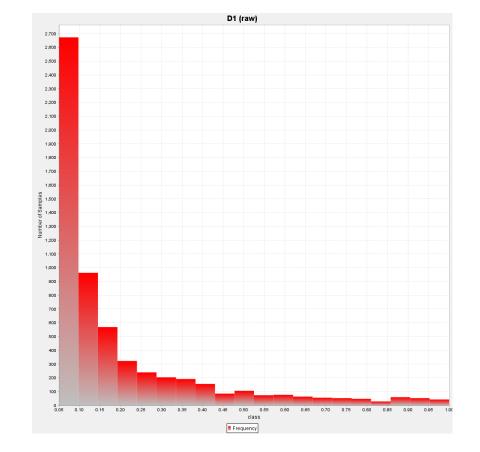


Figure 4: Histogram of all sample data from project area showing a distinct grade variation at 0.1ppmAu.

#### **BLOCK OPTIMISATION**

Surpac macros were created to aid in testing the sample data for optimised block size, maximum number of samples and maximum search. The latter 2 tests are for the first pass interpolations. The test involves comparing the Kriging Efficiency against the Conditional Bias Slope at the point where they are close to 1 and the results become static or flat. The test was conducted on Lode 1 (Primary) and lode 6 (Flat) as these had the largest sample populations. The results are as follows:

- Lode 1: Test location 6596138 X=344739 Z=298
  - Block size = 10m 0
  - Max number samples = 10-30 0
  - Max search = 10m 0
- Lode 6: Test location Y=6596196 X=344685 Z=347
  - Block size = 10m 0
  - Max number samples = 10-30 0
  - Max search = 20m 0
  - 0

A 3D perspective view is shown in Figure 5.

## **INTERPOLATION**

Interpolations were conducted for each lode independently using macros and applied using ordinary Kriging (OK) uncut sample data, and inverse distance squared (ID2). The inverse distance interpolation were conducted to validate the mathematically complex Kriging method with a simple mathematical method. Separate macros and data orientations were conducted for the flat lying supergene lodes and primary lodes.

The following interpolation protocols were used for each interpolation pass:

Primary Lodes (Lodes 1, 2, 3 & 5)

- Pass 1: Min 10 to max 30 samples and a max 10m search. This is normally a good test for measured categorised deposits.
- Pass 2: Min 4 to max 20 samples and max 40m search.
- Pass 3: Min 2 to max 20 samples and max 80m search.
- Pass 4: Min 1 to max 15 samples and max 150m search using isotropic parameters.

- Pass 1: Min 6 to max 20 samples and a max 10m search. This is normally a good test for measured categorised deposits.
- Pass 2: Min 4 to max 20 samples and max 40m search.
- Pass 3: Min 2 to max 20 samples and max 80m search.
- Pass 4: Min 1 to max 15 samples and max 150m search using isotropic parameters.

## **BULK DENSITY**

Bulk density data was taken from resources in the area (Peyes, Jacques and Teal) quoting the following:

- Oxide: 1.8g/cm<sup>3</sup> used for the material above the BOCO weathering profile. •
- Transition: 2.2g/cm<sup>3</sup> used for the material between the BOCO and TOFR weathering profiles.
- Fresh Rock: 2.6g/cm<sup>3</sup> used for the fresh rock material below the TOFR weathering profile.

HGS has not validated the density data, but due to extensive experience in the Kalgoorlie region the data is considered acceptable.

#### **Resource Classification**

Strings were created to define the areas of structural continuity, data density and within the first and second pass interpolation (Figure 5). The lodes had the following classification:

- Indicated: 1, 2
- Inferred: 1, 2, 3, 4, 5 & 6

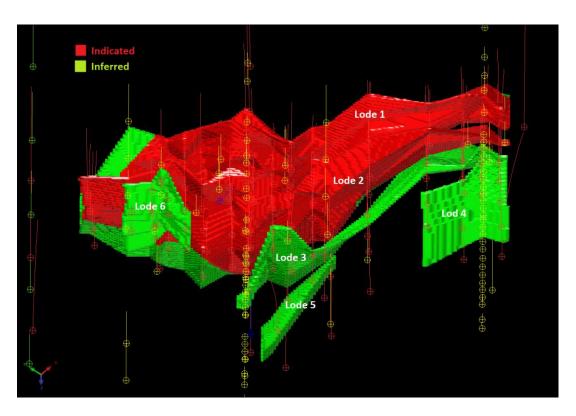


Figure 5: Lode classification showing drill density

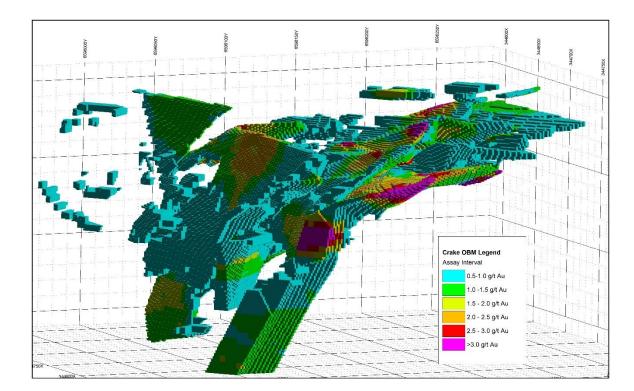


Figure 6: 3D view looking to the NW along Crake OBM

No upper cutoff grade was applied as the high grade level of influence was minimal.

#### Mining and Metallurgical Methods and Parameters and other modifying factors considered to date

Intermin will undertake optimisation studies, specifically for a potential open cut mine in the future. Further drilling to increase resources and confidence is planned.

No metallurgical work has been undertaken. Sulphides and visible gold were noted in fresh ore.

Intermin is a gold exploration and mining company focussed on the Kalgoorlie and Menzies areas of Western Australia which are host to some of Australia's richest gold deposits. The Company is developing a mining pipeline of projects to generate cash and self-fund aggressive exploration, mine developments and further acquisitions. The Teal gold mine has been recently completed.

Intermin is aiming to significantly grow its JORC-Compliant Mineral Resources, complete definitive feasibility studies on core high grade open cut and underground projects and build a sustainable development pipeline.

Intermin has a number of joint ventures in place across multiple commodities and regions of Australia providing exposure to Vanadium, Copper, PGE's, Gold and Nickel/Cobalt. Our quality joint venture partners are earning in to our project areas by spending over \$7 million over 3 years enabling Intermin to focus on the gold business while maintaining upside leverage.

#### Intermin Resources Limited – Summary of Gold Mineral Resources (at a 1g/t Au cut-off grade)

$\left( \right)$	Deposit		Measured			Indicated			Inferred			Total Resour	ce
	(1g/t cut-off)	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz	Mt	Au (g/t)	Oz
	Teal				2.91	2.08	194,848	1.34	2.19	94,140	4.25	2.11	288,833
6	Menzies				0.77	2.52	62,400	1.65	2.14	108,910	2.42	2.20	171,310
U	Anthill				1.51	1.76	85,495	0.77	1.61	40,084	2.28	1.71	125,582
1	Goongarrie	0.17	2.62	14,000	0.10	2.15	6,900	0.04	2.14	3,000	0.31	2.40	23,900
Û	Binduli				0.74	1.67	39,900	0.38	1.45	17,800	1.12	1.59	57,700
$\square$	TOTAL	0.17	2.62	14,000	6.03	2.00	389,500	4.18	1.96	264,000	10.38	2.00	667,500

#### intermin Resources Limited – Summary of Vanadium / Molybdenum Mineral Resources (at 0.29% V<sub>2</sub>O<sub>5</sub> cut-off grade)

Category	Tonnage (Mt)	Grade % V₂O₅	Grade g/t MoO₃	Notes
Inferred (1)	1,764	0.31	253	(1) Rothbury
Inferred (2)	671	0.35	274	(2) Lilyvale
Inferred (3)	96	0.33	358	(3) Manfred
Inferred (4)	48	0.31	264	(4) Burwood (100% metal rights)
TOTAL	2,579	0.32	262	

#### Notes:

1. <u>Competent Persons Statement</u> - The information in this report that relates to Mineral Resource is based on information compiled by Messrs David O'Farrell, Simon Coxhell and Andrew Hawker. All are Members of the Australasian Institute of Mining and Metallurgy, Mr O'Farrell is a full time employee of Intermin Resources Ltd and Messrs Coxhell and Hawker are consultants to Intermin Resources Limited. The information was prepared and first disclosed under the JORC Code 2004 and has been updated to comply with the JORC Code 2012. Messrs O'Farrell, Coxhell and Hawker have sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration, Results, Mineral Resource and Ore Reserves'. Messrs O'Farrell, Coxhell and Hawker consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

2. Forward Looking Statements - No representation or warranty is made as to the accuracy, completeness or reliability of the information contained in this release. Any forward looking statements in this release are prepared on the basis of a number of assumptions which may prove to be incorrect and the current intention, plans, expectations and beliefs about future events are subject to risks, uncertainties and other factors, many of which are outside of Intermin Resources Limited's control. Important factors that could cause actual results to differ materially from the assumptions or expectations expressed or implied in this release include known and unknown risks. Because actual results could differ materially to the assumptions made and Intermin Resources Limited's current intention, plans, expectations and beliefs about the future, you are urged to view all forward looking statements contained in this release with caution. The release should not be relied upon as a recommendation or forecast by Intermin Resources Limited. Nothing in this release should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.

Visit us at <u>www.intermin.com.au</u>

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#### **Forward Looking and Cautionary Statements**

Some statements in this report regarding estimates or future events are forward looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain any additional mine licenses, permits and other regulatory approvals required in connection with mining and third party processing operations, competition for among other things, capital, acquisition of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest fluctuations, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward looking statements will prove to be correct.

Statements regarding plans with respect to the Company's mineral properties may contain forward looking statements in relation to future matters that can only be made where the Company has a reasonable basis for making those statements.

This announcement has been prepared in compliance with the JORC Code (2012) and the current ASX Listing Rules.

The Company believes that it has a reasonable basis for making the forward looking statements in the announcement, including with respect to any production targets and financial estimates, based on the information contained in this and previous ASX announcements.

## **Appendix 1 – Crake Gold Project**

## JORC Code (2012) Table 1, Section 1, 2 and 3

Exploration results at Crake were reported by Intermin and released to the ASX during 2017. Mr David O'Farrell, Exploration Manager of Intermin compiled the information in Section 1 and Section 2 of the following JORC Table 1 and is the Competent Person for those sections. Mr Andrew Hawker, an independent consultant to Intermin compiled the information in Section 3 of the following JORC Table 1 and is the Competent Person for those sections. Mr Andrew Hawker, an independent consultant to Intermin compiled the information in Section 3 of the following JORC Table 1 and is the Competent Person for those sections. Mr Andrew Hawker, an independent consultant to Intermin compiled the information in Section 3 of the following JORC Table 1 and is the Competent Person for that section.

The following Table and Sections are provided to ensure compliance with the JORC Code (2012 edition) requirements for the reporting of Mineral Resources.

Section 1	Sampling	Techniques	and Data
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Griteria	JORC Code explanation	Commentary
Sampling Techniques	• 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.	<ul> <li>The deposit has been drilled using Rotary Air Blast (RAB), Air Core (AC) and Reverse Circulation (RC) drilling over numerous campaigns by several companies over the past 20 years. The majority of the historic drill holes have a dip of -60° towards the NE. The same orientation was chosen by IRC. 4m composite samples taken with a 450mm x 50mm PVC spear being thrust to the bottom of the sample bag. 1m single splits taken using riffle splitter. Average sample weights were about 2.0 – 3.0 kg.</li> </ul>
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Regular air & manual cleaning of cyclone to remove hung up clays. Standards & replicate assays submitted by IRC and taken by the laboratory. Sample procedures followed by historic operators are assumed to be in line with industry standards at the time. Current QA/QC protocols include the insertion of appropriate commercial standards. Based on statistical analysis of these results, there is no evidence to suggest the samples are not representative.
	<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 (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</li> </ul>	<ul> <li>RC chips were geologically logged over 1m intervals, initially sampled over 4m composite intervals and then specific anomalous intervals were sampled over 1m intervals. Depending on the hole depth, the maximum interval was 4, and minimum was 1m. Samples assayed for Au only. Drilling intersected mainly oxide and transitional mineralisation in shallow areas (&lt;60m vertical depth) and massive, quartz-sulphide hosted gold within leucocratic porphyries at depth. IRC assays were 50g fire assayed for gold to a detection limit of 0.01 g/t, standards and blanks were routinely inserted and tested with favourable results.</li> </ul>

Criteria	JORC Code explanation	Commentary
	(e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	• 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 core is oriented and if so, by what method, etc).	• RC drilling with a 4.75" face sampling hammer bit.
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>RC recovery and meterage was assessed by comparing drill chip volumes (sample bags) for individual meters. Estimates of sample recoveries were recorded. Routine check for correct sample depths are undertaken every rod (6m)</li> <li>RC sample recoveries were visually checked for recovery, moisture and contamination. The cyclone was routinely cleaned ensuring no material build up.</li> <li>Due to the generally good drilling conditions around the sample interval (dry) the geologist believes the samples are representative, some bias would occur in the advent of poor sample recovery (which was not seen). At depth there were some wet samples and these were recorded on geological logs.</li> </ul>
	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Drill chip logging was completed on one metre intervals at the rig by the geologist. The log was made to standard logging descriptive sheets, and transferred into Micromine computer once back at the office.</li> <li>Logging was qualitative in nature.</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</li> </ul>	<ul> <li>RC samples taken.</li> <li>RC samples were collected from the drill rig by spearing each 1m collection bag and compiling a 4m composite sample. Single splits were automatically taken by emptying the bulk sample bag into a riffle splitter. Samples collected in mineralisation were nearly all dry.</li> <li>For Intermin samples, 4m composites were taken for the hole. Composite samples typically &gt;0.2 g/t were then individually picked up and dispatched to SGS. All samples were submitted to SGS Laboratories in Kalgoorlie.</li> <li>Samples were consistent and weighed approximately 2.0-3.0 kg and it is common practice to review 1m results and then</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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>review sampling procedures to suit.</li> <li>Once samples arrived in Kalgoorlie, further work including duplicates and QC was undertaken at the laboratory. Certified reference material samples and duplicates were also submitted for comparative purposes.</li> <li>Mineralisation is located in intensely oxidised saprolitic clays, transitional and fresh rock and the sample collection size is standard practice in the WA Goldfields to ensure representivity.</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 (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>The 1m and 4m composite samples were assayed using Fire Assay check (FA50) technique by SGS Accredited Labs (Kalgoorlie) for gold only.</li> <li>No geophysical assay tools were used.</li> <li>Laboratory QA/QC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures. QC results (blanks, duplicates, standards) were in line with commercial procedures, reproducibility and accuracy.</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>Work was supervised by senior SGS staff experienced in metal assaying. Internal QC data reports confirming the sample quality were supplied monthly. No assay issues were noted.</li> <li>No twin holes undertaken. However several IRC were considered twins to several historic holes. The comparison was considered satisfactory.</li> <li>Data storage as PDF/XL files on company PC in Perth office.</li> <li>No data was adjusted.</li> </ul>

Criteria	JORC Code explanation	Commentary
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 collar locations were initially surveyed using a hand held Garmin GPS, accurate to within 2-4m. These holes were later surveyed more accurately using a RTK-GPS system by a contracted surveyor and data used in the Mineral Resource Estimate. Holes were drilled on a close grid in places and wider in less advanced areas. The grid system used is MGA94 Zone 51. All reported coordinates are referenced to this grid. The topography is extremely flat at the location of the drilling.</li> <li>Grid MGA94 Zone 51.</li> <li>Topography is very flat, small differences in elevation between drill holes will have little effect on mineralisation widths on initial interpretation. The topographic surface has been generated by using the hole collar surveys. It is considered to be of sufficient quality to be valid for this stage of exploration.</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>Holes were variably spaced, but typically around 20m, and were consistent with industry standard resource style drilling.</li> <li>The hole spacing was determined by Intermin to be sufficient when combined with confirmed historic drilling results to define mineralisation classified as JORC 2012 compliant as stated in the Resource Summary Table 1. The sample spacing and the appropriateness of each hole to be included to make up data points for a Mineral Resource has been determined. These assays are from 1m length sample intervals down hole.</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>All IRC drill holes were angled at 60 degrees to achieve an appropriate intercept. Due to some structural complexities of the orebody some holes appeared to have hit multiple structures. Drill logs and quartz content was also incorporated into the resource models. These issues are routine in the eastern goldfields, true widths are often calculated depending upon the geometry. In this case the intercept width is very close to the true width</li> <li>The relationship between the drilling orientation and the orientation of mineralised structures is not considered to have introduced a sampling bias. Given the style of mineralisation and drill spacing/method, it is the most common method for delineating gold resources in Australia.</li> </ul>
Sample security	The measures taken to ensure sample security.	• Samples were collected on site under supervision of the responsible geologist. The work site is on a destocked pastoral station. Visitors need permission to visit site. Once collected samples were cable tied and transported to Kalgoorlie for assaying.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No Audits have been commissioned. Hawker Geological Services Pty Ltd has reviewed the sampling procedure and approved its use.

# 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>Exploration Licence E26/168 (WA). No third party JV partners involved.</li> <li>The tenements are in good standing and no known impediments exist.</li> </ul>
	Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Previous workers in the area include Placer-Delta (2002), Intermin (2010) and Evolution (2018).</li> </ul>
G	Geology	• Deposit type, geological setting and style of mineralisation.	Archean quartz porphyry stockwork.
	Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	<ul> <li>Not applicable however Intermin drilling results have all been released and reported to the ASX.</li> </ul>
		<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> </ul>	
	9	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	No information is excluded.
		<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</li> </ul>	

C	Criteria	JORC Code explanation	Commentary
	Data aggregation methods	<ul> <li>report, the Competent Person should clearly explain why this is the case.</li> <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</li> </ul>	<ul> <li>No weighting or averaging calculations were made, assays reported and compiled on the "first assay received" basis.</li> <li>No upper cut off grade was applied.</li> <li>No metal equivalent calculations were applied.</li> </ul>
	elationship between mineralisation widths and intercept engths	<ul> <li>stated.</li> <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>Oxide and Transitional mineralisation is predominantly flat lying (blanket like) while fresher mineralisation at depth is interpreted to be variably dipping to the south west, the individual ore shoot geometry has been captured and modelled accordingly with wireframe interpretations as there is sufficient drilling data in areas. Given the spacing of the holes, it was deemed adequate to portray the interpreted ore zones.</li> <li>Drill intercepts and true width appear to be very close to each other, or within reason allowing for the minimum intercept width of 1m. Intermin estimates that the true width is variable but probably close to 80-90% of the intercepted width.</li> <li>Given the nature of RC drilling, the minimum width and assay is 1m. Diamond core is best used to determine cm scale mineralisation widths. Intermin downhole intercepts have been tabulated in previously ASX releases. True intercepts are not known however the downhole intercepts appear to represent very close to true width given the orientation of the drilling.</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>	<ul> <li>Summary maps and figures have been included in this and previous IRC releases to describe the locations and orientations of the drilling and Mineral Resource Estimates.</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	<ul> <li>For compilation of resource estimates all data is evaluated from the database to form the basis of mineralisation outlines which have been determined nominally &gt;0.20g/t Au.</li> </ul>

Criteria	JORC Code explanation	Commentary
	Exploration Results.	
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>See details from previous ASX releases from previous owner Intermin Resources Limited (ASX; IRC). These can be accessed via the internet.</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>Scoping or engineering studies have not yet been undertaken. Additional drilling is planned.</li> <li>Commercially sensitive.</li> </ul>

# Section 3 Estimation and Reporting of Mineral Resources

Griteria	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>Recent IRC field data has been collected using Toughbook data entry. Historical drilling data has been captured from historical drill logs where available.</li> <li>The data is verified by company geologists before the data is transcribed into Micromine software and reviewed for accuracy against the planned details and validated using Micromine programs. The resource is based on a reasonable level of accuracy in the historical work, there have been several reports and independent due diligence and QA/QC studies that have lent credibility to the previous work.</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>Company geologists have made numerous site visits to the project area to conduct the drilling for numerous drilling programs. David O'Farrell has visited the site numerous times and supervised while drilling programs have been undertaken. Inspections of procedures have been made throughout the Crake exploration history. All procedures are deemed satisfactory.</li> <li>Not applicable</li> </ul>

Criteria	JORC Code explanation	Commentary
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> <li>The extent and variability of the Mineral</li> </ul>	<ul> <li>Crake - The Mineral Resource area extends over a strike length of 430m. The maximum depth of the model extends to 170</li> </ul>
	Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	metres below surface. Much of the inferred category ore pertains to deeper portions which typically has lower drill density. The deposit is open at depth with strike potential.
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 (eg sulphur for acid mine drainage characterisation).</li> </ul>	1.0m x 1.0m (x, y, z).

	Criteria	JORC Code explanation	Commentary
1100 0211		<ul> <li>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> <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>	
00	Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• The resource tonnage is reported using dry bulk density. Intermin used 1.8 for oxidised, 2.2 for transitional and 2.6 for fresh rock. The Specific gravity values are also consistent with industry standards at other mines located in the Eastern Goldfields.
C	Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The Gold Mineral Resources are reported inside the mineralisation wireframe that was constructed at a 0.2g/t Au cut-off
	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>An optimisation study is being progressed, but regardless of the outcome, further drilling will take place. Any future mining of the deposit as currently understood would be by conventional open cut mining.</li> </ul>

Criteria	JORC Code explanation	Commentary
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>Assumptions made regarding possible waste and parameters reactions disposed</li> </ul>	<ul> <li>No metallurgical work has been conducted at Crake. This will be undertaken in due coarse.</li> <li>Ore would be mined from the deposit and transported to a 3rd party processing facility offsite. The deposit is located on an active exploration lace and this would need to be converted to a granted Mining licenses prior to any mining operation.</li> </ul>
factors or assumptions	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.	an active exploration lease and this would need to be converted to a granted Mining licenses prior to any mining operation.
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</li> </ul>	<ul> <li>Bulk density has been reviewed and considering the fresh ore is mostly within a fresh porphyry, this compares well with from surrounding deposits such as Janet Ivy and Teal and assigned values assumed.</li> <li>Values for the ore categories as determined are: Oxide 1.80 t/m3 Transitional 2.20 t/m3 Fresh 2.60 t/m3</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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 (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</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</li> </ul>	<ul> <li>Mineral Resources have been classified on the basis of confidence in the geological and grade continuity using the drilling density, geological model, pass in which the gold was estimated and the distance to sample selections.</li> <li>Indicated Mineral Resources have been defined generally in areas of 20m by 10-20m drill spacing. Ore outlines that had lower confidence in continuity were ignored and not categorised as inferred. The oxide/supergene zone extends from surface to a maximum depth of approximately 50m. Overall the high drill density and number of holes defining a reasonably consistent ore zone(s), rather than ore type, is the main factor influencing the resource category.</li> <li>As described above the Mineral Resource classification has been based on the quality of the data collected (geology, survey and assay data) the density of the data, grade estimation quality and geological/ mineralisation model.</li> <li>The reported resource estimates are consistent with the view of the deposits by the Competent Person.</li> <li>A review of the Andrew Hawker model has been carried out by David O'Farrell. The model is regarded sufficiently accurate</li> </ul>
Discussion of	Mineral Resource estimates.	<ul> <li>for JORC guidelines and meets the criteria for Indicated and Inferred categories. The analysis of the sections and wireframe validation, resource estimation methodology and validation is consistent with current day practices.</li> <li>The relative accuracy of the Mineral Resource Estimate is reflected in the reporting of the Mineral Resource as per the</li> </ul>
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</li> </ul>	<ul> <li>The relative accuracy of the Mineral Resource Estimate is reflected in the reporting of the Mineral Resource as per the guideline of the 2012 JORC code. The classification is supported by a sound understanding of the geology of the deposit, the drill hole spacing, historic drill data and a reasonable dataset supporting the density used in the resource model. Both competent persons (Andrew Hawker and David O'Farrell) have over 20 years' experience, with several years working in the region.</li> <li>The statement relates to the local estimate of tonnes and grade.</li> <li>No historical production has occurred at Crake E26/168.</li> </ul>

Criteria	JORC Code explanation	Commentary
	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.	
D 15)	• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	