

22 May 2018

## **Bluejay Mining plc ('Bluejay' or the 'Company') Development Update**

Bluejay Mining plc, the AIM and FSE listed company with projects in Greenland and Finland, is pleased to provide an update on activities at the Dundas Ilmenite Project in Greenland ('Dundas' or the 'Project') and outline its plans for 2018 as it continues to advance the Project towards the commencement of mining. Dundas fieldwork is due to commence in June 2018 and is expected to continue until October 2018.

### **Highlights:**

- **Resource expansion at Dundas:**
  - **Iterlak** is the primary focus with plans to significantly increase resources there – based on internal estimates, the Company plans to define resources in excess of 100Mt
  - **Shallow Marine** - An assessment for potential measurable mineralisation is due from SRK Exploration Services Ltd ('SRK') in H2 2018
- **Finalising licencing applications:**
  - Environmental Impact Assessment ('EIA') & Social Impact Assessment ('SIA') are ongoing but await finalisation of the mine plan, which is being designed in the forthcoming Preliminary Feasibility Study ('PFS') and is expected shortly
  - Exploitation licence application due to be submitted at the end of this field season, following completion of the EIA and SIA
- **Customer Acceptance** programmes continue to progress well – additional parties to receive samples
- A mining fleet has been purchased to commence **Civil Engineering** works:
  - Complete the 2018 bulk sampling programme
  - Build the ROM (run-of-mine) pad
  - Stockpile high grade material
  - Commence earth works around the planned plant and port site
- **Disko-Nuussuaq:** 2018 exploration programme to refine targets further in expanded licence area
- **Cash balance of >£15m**

**Bluejay CEO Roderick McIlree said:** "2018 has already been a successful year for Bluejay with a £17 million raise executed and a 400% increase on the JORC Code compliant maiden mineral resource achieved, which not only reaffirms Dundas as the world's highest-grade ilmenite project but also shows our significant scale. Our primary focus now is to ensure that we maintain our momentum towards production. To achieve this, our first objective is to finalise and submit our relevant exploitation licence applications to the Government of Greenland, which we should be in a position to do by the end of this field season. Alongside this, in light of the significant JORC Code compliant mineral resource uplift announced on 23 April 2018, we intend to undertake targeted exploration work to realise the considerable further potential of our Project; there is a lot more here that will be demonstrated over time. In particular, Iterlak was the surprise discovery of 2017 and when one looks at the results obtained from Iterlak in **Table One** it is clear this area offers

substantial growth opportunity. The Company believes that this target area has the potential to surpass the already company-making Moriusaq resource and we are excited to further prove the value proposition of this core component of the >30km long licence area.

“In tandem with our highly active development and expansion programme at Dundas, we will also be setting our sights on translating historical exploration achievements at our Disko-Nuussuaq Magmatic Massive Sulphide ('MMS') Nickel-Copper-Platinum-Cobalt Project in Greenland into significant new verifiable discoveries. We have seven historically identified significant MMS targets at our newly enlarged Disko licence area, with the largest being 5.9km long by 1.1km wide. We look forward to updating shareholders separately on these work programmes in due course. We are confident that Disko could be among the great MMS systems of the world.”

## **Further Information**

**Field Work** - 2017 field work resulted in an increase of >400% in the Project's resource base to 96Mt @ 6.9% ilmenite in-situ with additional upside via the SRK defined exploration target of 20-60Mt at 6-10% ilmenite also identified, the company however is of a view that a higher number can be achieved. The majority of the resource estimate to date has been defined at Moriusaq and this area is the basis for The Company's PFS, whilst the new exploration target covers the Iterlak Delta. With significant expansion potential identified, the 2018 field work programme at Dundas will see focus on Iterlak and the surrounding area, with drilling, resource definition, and additional detailed marine bathymetric surveys all being undertaken. Alongside this, customer acceptance programmes continue, and a bulk sample will also be taken to supply final product parcels to prospective customers.

With the programme approved by the Government of Greenland and the purchase of equipment complete, staff are now coordinating equipment delivery for upcoming sealift and associated operational logistical tasks.

Fieldwork will commence late in June 2018 and is expected to continue until October 2018. Staffing is expected to be approximately 25-30 personnel peaking at 40, and accommodation will be provided in the former settlement of Moriusaq with some additional accommodation and ablution facilities as required (see diagrams below).

**Iterlak drilling** - The sonic drill and support vehicles will be deployed south of Iterlak Delta early in July 2018 and progress west towards and across the delta. A detailed drilling programme has been planned for the active and raised beach and deltaic targets. This programme will be supported from the established camp at Moriusaq.

Both Iterlak beaches (raised and active) and delta have thus far only been auger drilled to one metre thereby offering growth potential as we demonstrate more accurate depths to basement in this area. Deeper drilling is required to further define resources, and test theories on the genesis of the deposit. The Iterlak area offers a satellite source of very high-grade material that could provide an additional higher grade supplemental feed for the operation.

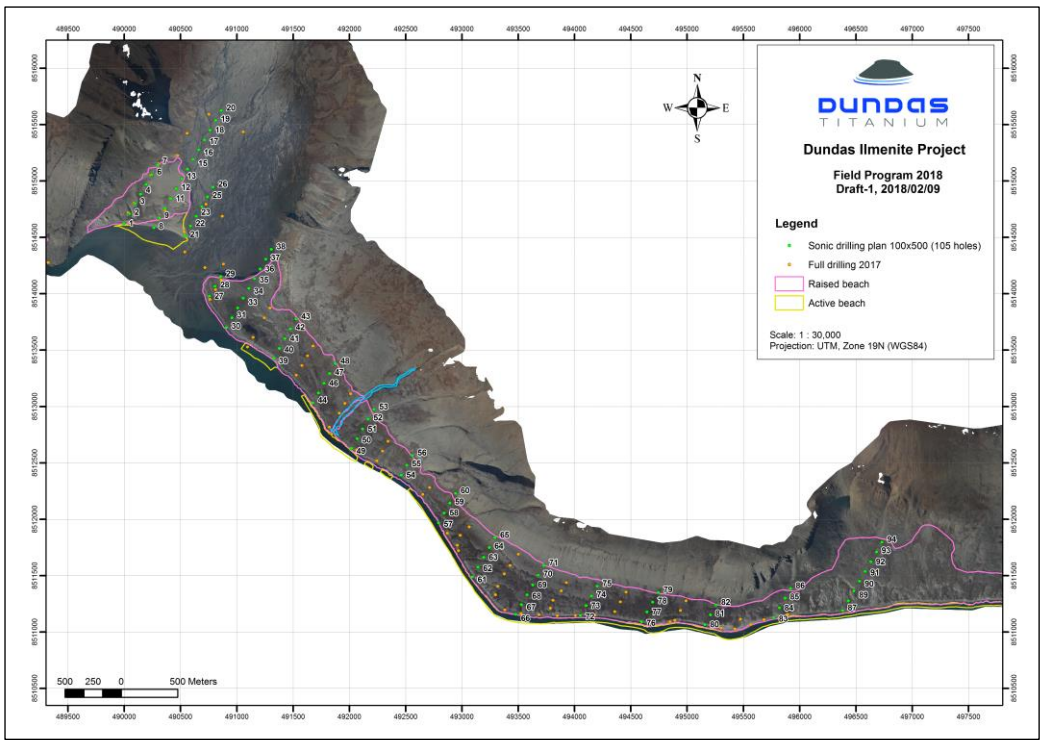


Figure One: Preliminary drilling plan for the Iterlak Delta

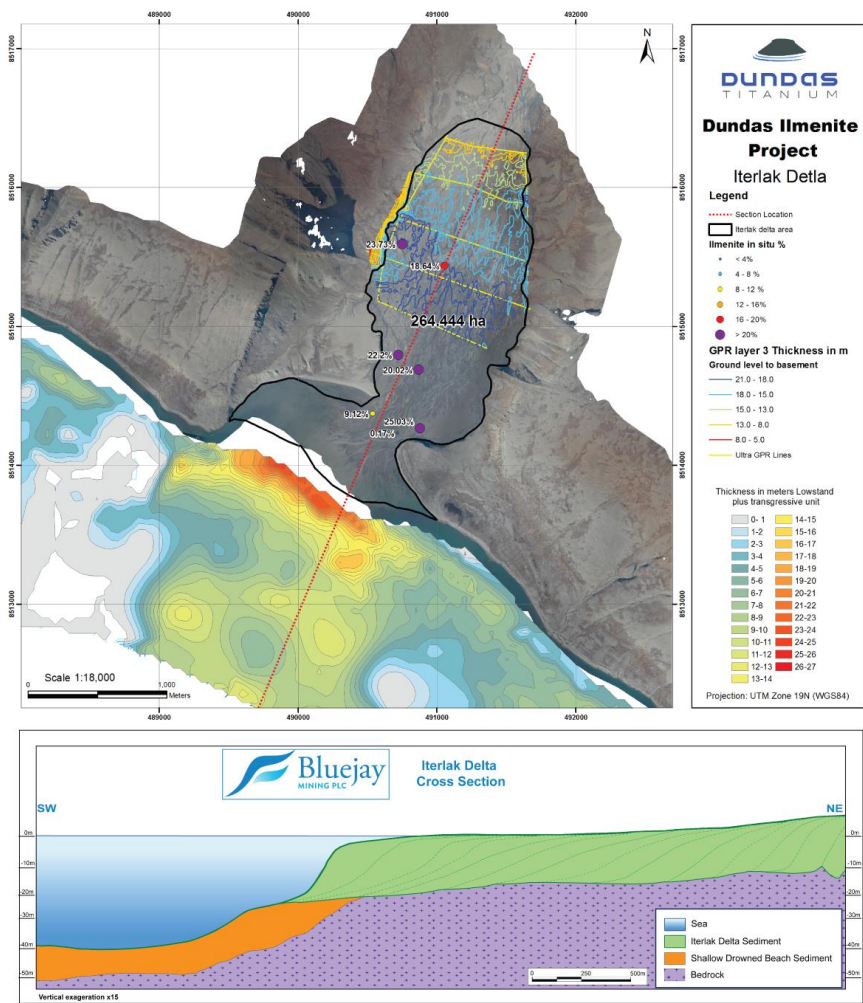


Figure Two: Plan and section of the Iterlak Delta and shallow marine environments with sediment accumulations from GPR and marine surveys, also ilmenite in-situ from 2017 sampling

Iterlak Delta (shown above in Figure One & Two) represents, in Bluejay’s opinion, the largest potential onshore exploration target over the Dundas licence area. SRK has assigned an exploration target of 20-60Mt at 6% to 9% ilmenite in-situ, which Bluejay aims to expand in the upcoming work programme. The Iterlak Delta, at a total surface area of more than 2.65 million square metres, is a primary source of the ilmenite for the broader licence area. **The company has set itself a target of delivering a maiden resource at Iterlak of >100Mt of material at an expected higher grade than Moriusaq.** Grades from Iterlak to date can be seen below in **Table One**.

Included below are laboratory results from the trench samples recovered from the delta in 2017. These samples are unique in terms of the in-situ ilmenite content, but also the ilmenite content relative to heavy mineral percentage. The heavy mineral content of these samples is almost completely ilmenite, which further solidifies the delta as a major sediment depositional centre.

Bluejay ID	+5mm %	-5mm + 2mm %	-2mm +63µm %	-63 µm %	%THM	TiO2 In Sink	Ilmenite -THM ratio %	Ilmenite %	Ilmenite % post screen @ 2mm
IT004	11.5	9.2	75.5	3.8	<b>33.13</b>	36.00	75.5	<b>25.03</b>	<b>31.56</b>
IT009	25.5	16.6	56.2	1.6	<b>28.77</b>	39.30	82.5	<b>23.73</b>	<b>41.03</b>
IT006	30.9	7.5	60.0	1.7	<b>27.91</b>	37.90	79.5	<b>22.20</b>	<b>36.01</b>
IT005	17.7	8.3	72.3	1.7	<b>24.91</b>	38.30	80.4	<b>20.02</b>	<b>27.07</b>
IT010	32.1	7.3	56.6	4.0	<b>23.82</b>	37.30	78.3	<b>18.64</b>	<b>30.81</b>
IT002	31.4	11.0	54.8	2.8	<b>13.71</b>	31.70	66.5	<b>9.12</b>	<b>15.84</b>
IT003	36.8	14.5	46.7	2.0	<b>1.43</b>	5.72	11.9	<b>0.17</b>	<b>0.36</b>
Average	26.6	10.6	60.3	2.5	<b>22.0</b>	32.3	67.8	<b>17.0</b>	<b>26.11</b>
Resource	25.8	8.7	60.7	4.8	<b>25.7</b>	12.8	26.8	<b>6.90</b>	<b>10.53</b>

**Table One: Assays from the 2017 Iterlak Delta trench sampling that fed the exploration target.**

**Bulk sample and stockpiling of high grade ore** - A bulk sample of several thousand tonnes of sand will be mined from the active beaches at Moriusaq. This material will be used for additional customer acceptance trials as agreed during 2018. The remainder will be used to create a high-grade stockpile on the ROM pad in preparation for processing.

The sample will be mined using loaders and/or excavator and trucked to a stockpile, see equipment in Figure Three. A high output trommel (Figure Four) will be fed with this material, removing the oversize and subsequently upgrading the ROM. A screened ROM stockpile will be created using mobile stackers (Figure Five), in preparation for loading out or later processing.

**Equipment** - A mid-ranged mining fleet has been purchased to complete the bulk sampling programme. In addition, this equipment will be tasked with civil works around the planned plant and port site and assist with road construction.



Figure Three: Purchased 30 tonne excavator, loaders and trucks supplied by Hitachi.

The fleet comprises one 30 tonne Hitachi excavator, two 30 tonne wheel loaders and two 30 tonne articulated dump trucks.

Bluejay has purchased a TRT516 mobile trommel screener for the 2018 bulk sampling program, and part of its long-term operations. The TRT 516 utilizes a high capacity hopper and drum to dry screen ROM at up to 250 tons per hour. By screening at the dig face, this mobile unit will help to remove a significant portion of the 25.8% coarse oversize that makes up the deposit. Based on the average particle size analysis of the latest Mineral Resource Estimate, removing the +5mm fraction will significantly **upgrade the in-situ ilmenite content from 6.9% to 9.3%**, prior to delivery to the process plant.



Figure Four: TRT516 high output mobile trommel screener

Bluejay has also purchased two mobile stacking units, which will assist with near-shore vessel loading, and screened ROM stacking which will compliment next year's processing plant build.



Figure Five: Mobile stacking unit

**Accommodation and Infrastructure** - To assist with ongoing field operations, and early stage construction activities, Bluejay has purchased a containerised accommodation and ablution block. These modular movable units expand on the existing infrastructure on site and allow greater flexibility should operations focus on more regional areas of the deposit.

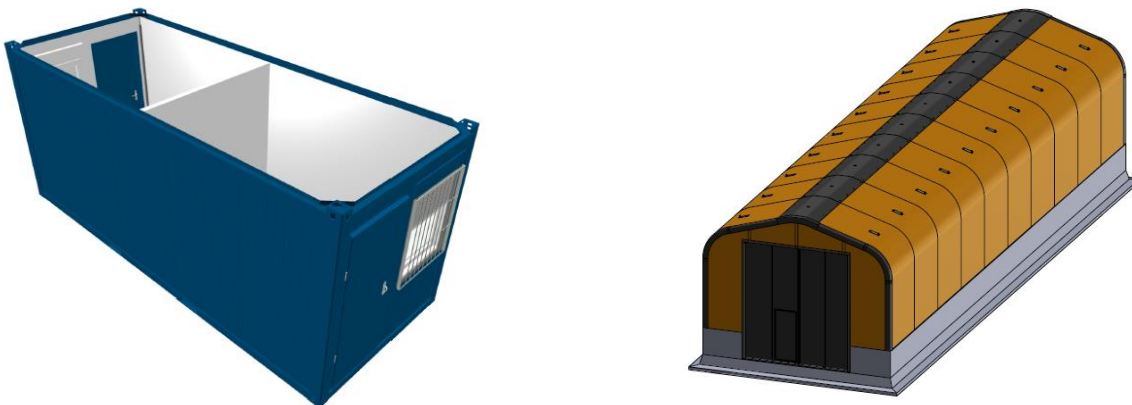


Figure Six: Additional accommodation unit example, left, and warehouse, right.

Bluejay has also purchased warehousing facilities to store equipment when being serviced or not in use.

**DGPS/UAV** - Bluejay has expanded its previously purchased Differential GPS (DGPS) by acquiring a second unit. The DGPS will be used for continued surveying of infrastructure locations, drill hole coordinates, and setting ground control points.

Bluejay has purchased a M210 RTK UAV (unmanned aerial vehicle) which will be used to provide centimetre resolution aerial photos of the license area infrastructure locations. The M210 will also be used to calculate volumetrics of excavation sites, and to calculate stockpile sizes. The M210 is an industrial grade UAV, capable of operating in temperatures up to -20C



Figure Seven: M210 RTK UAV provides centimetre resolution aerial and survey capacity.

**Environmental, Social Impact Assessments** -The Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) are ongoing, and now wait for the finalisation of the mining plan included in the forthcoming Pre-Feasibility Study.

Both environmental and social baseline studies will continue this year and aerial surveying as agreed with the Government of Greenland's Mineral Licence and Safety Authority will continue.

**Bathymetric Survey** - As a result of promising potential of the Ilerlak delta, a survey of the inshore areas along the licence area will also continue towards Ilerlak. The Company-owned 24ft Nordstar with integrated swath bathymetre and side scan sonar systems will map the area. It produces multibeam bathymetric data real time that fulfils IHO SP-44, NOAA and USACE specifications. The system fully compensates for the ship movement and works with an RTK Position system.

**Geotechnical Assessments for Infrastructure** - SRK has completed a factual data report on the geotechnical laboratory test work undertaken on samples recovered from trial pitting and drilling undertaken in the 2017 fieldwork season. The sonic drilling and laboratory test work has provided a first indication of material properties for the granular material overlying bedrock and exposed the likely range of depths to bedrock and bedrock lithology. Geotechnical and hydrological assessments are moving forward in conjunction with the PFS.

**Feasibility Study** - Current work programmes are all focused on the lodgement of an exploitation licence, application for which is due to be submitted to the Government of Greenland around the end of the field season.

- SRK has re-estimated the resources and has issued the factual geotechnical report. The hydrological report is being finalised with the preliminary mining schedule.
- IHC Robbins is close to completing the process plant engineering & design study
- Wood Group Canada (formerly Amec Foster Wheeler Americas Ltd) is to undertake the infrastructure and services part of the study.

## Market Abuse Regulation (MAR) Disclosure

Certain information contained in this announcement would have been deemed inside information for the purposes of Article 7 of Regulation (EU) No 596/2014 until the release of this announcement.

**\*\*ENDS\*\***

### **Further Information**

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### **Notes**

Bluejay is dual listed on the London AIM market and Frankfurt Stock Exchange and primarily focussed on advancing the Dundas Ilmenite Project in Greenland into production in the near term. Dundas has been proven to be the highest-grade mineral sand ilmenite project globally, with a JORC Code compliant Mineral Resource of 96 million tonnes at 6.9% ilmenite (in situ) and an Exploration Target over the Iterlak Delta of between 20 million tonnes and 60 million tonnes at between 6% and 10% ilmenite (in-situ) (see full Mineral Resource Statement below).

The Company's strategy is focused on securing an offtake partner and commencing commercial production at Dundas in the near term in order to create a company capable of self-funding exploration on current projects and future acquisitions.

Bluejay holds two additional projects in Greenland – the 2,586 sq km Disko-Nuussuaq ('Disko') Magmatic Massive Sulphide ('MMS') nickel-copper-platinum-cobalt project ('Ni-Cu-PGM-Co'), which has shown its potential to host mineralisation similar to the world's largest nickel/copper sulphide mine Norilsk-Talnakh, and the 107sq km Kangerluarsuk Sed-Ex lead-zinc-silver project ('Kangerluarsuk'), where historical work has recovered grades of 41% zinc, 9.3% lead and 596 g/t silver and identified four large-scale drill ready targets.

The Company also has a 100% interest in a portfolio of copper, zinc and nickel projects in Finland. This multi-commodity portfolio has been restructured to be cost-sustainable whilst determining the best plan for future development.

The Dundas Mineral Resource Statement has been reported at a 0% cut-off grade using the terminology and guidelines set out in the JORC Code.



Classification	Location	Tonnes (Mt)	Density (T/m <sup>3</sup> )	>5mm (%)	>2mm (%)	<63µm (%)	In-Situ Total Heavy Minerals (%)	In-Situ TiO <sub>2</sub> (%)
Indicated	Moriusaq	81.0	2.12	27.8	36.6	4.6	23.8	2.9
	Moriusaq	7.0		15.4	23.3	5.7	34.1	4.4
Inferred	Ilerlak West	1.0	2.12	23.8	30.5	6	25.2	2.9
	Ilerlak East	7.0		14.6	23.1	5.6	39.4	5.8
	<i>Total Inferred</i>	<i>15.0</i>	<i>2.12</i>	<i>15.7</i>	<i>23.8</i>	<i>5.7</i>	<i>35.7</i>	<i>4.9</i>
<b>TOTAL RESOURCES</b>		<b>96.0</b>	<b>2.12</b>	<b>25.8</b>	<b>34.5</b>	<b>4.8</b>	<b>25.7</b>	<b>3.3</b>

- In situ TiO<sub>2</sub> conversion to in situ ilmenite is calculated by dividing the TiO<sub>2</sub> by 0.4765
- Heavy Minerals have been separated from a -2 mm +63 µm size fraction using heavy liquid separation at a density of 2.95 g/cm<sup>3</sup>
- Mineralogical assessments indicate that ilmenite is the only mineral of value in the assemblage. The remainder of the heavy minerals is dominated by pyroxene and amphibole.
- % TiO<sub>2</sub> in-situ assumes that all recoverable TiO<sub>2</sub> is in the heavy mineral component of the -2 mm +63 µm size fraction
- % Ilmenite In-situ assumes that all TiO<sub>2</sub> is within ilmenite and that the ilmenite contains 47.65% TiO<sub>2</sub>, based on historical exploration data

### Qualified Persons

The information in this press release that relates to Mineral Resources is based on information compiled under the direction of Dr Mike Armitage C Geol., C Eng., who is a Member of the Institute of Materials, Minerals and Mining which is a Recognised Overseas Professional Organisation ('ROPO') included in a list promulgated by JORC from time to time. Dr Armitage is a full-time employee of SRK Consulting (UK) Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code) and for the purposes of the AIM Rules. Dr Armitage has reviewed this press release and consents to the inclusion in the press release of the matters based on his information in the form and context in which this appears.

The information in this press release that relates to an Exploration Target is based on information compiled under the direction of Mr William Kellaway who is Member of The Australian Institute of Mining and Metallurgy (membership # 306203). Mr Kellaway is a full-time employee of SRK Exploration Services Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code) and for the purposes of the AIM Rules. Mr Kellaway has reviewed this press release and consents to the inclusion in the press release of the matters based on his information in the form and context in which this appears.

Technical Glossary	
"Indicated Mineral Resource"	A part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.
"Inferred Mineral Resource"	A part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability. mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.
"Exploration Target"	An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.
"JORC Code"	The code for reporting of the Australasian Joint Ore Reserves Committee, which is sponsored by the Australian mining industry and its professional organisations. The code is widely accepted as a standard for professional reporting purposes for reporting of mineral resources and ore reserves.
"m"	Metre, a unit of length as per the International System of Units.
"Mineral Resource"	A concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
"Mineralisation"	The process or processes by which a mineral is introduced into a rock, resulting in a valuable or potentially valuable deposit. It is a general term, incorporating various types; e.g., fissure filling, impregnation, and replacement.