

# FIRST GOLD EXTRACTION FOR EMA YIELDS 58.16g/t

## **Highlights:**

 An initial hydrometallurgical test conducted on 1kg of the Ema bulk sample, utilising a simple leach process yields 58.16g/t gold, 442.35 g/t silver, 0.22% copper and 103.40 g/t tin

Brazilian gold explorer, BBX Minerals (ASX: BBX or "the Company") is pleased to announce initial results of preliminary metallurgical testing from the Company's Ema Project.

The Company is currently focusing its activities on advancing its metallurgical extraction process at the Marcelo da Silva Pinto M.E. facility (Marcelo), using both hydrometallurgical and pyrometallurgical methods. An initial test conducted on the 150kg Ema bulk sample collected over an area of 100m x 40m (see ASX release of June 19) using a two-step hydrometallurgical process yielded two gold/silver-rich buttons also containing copper and tin from the same 1 kg sample (fig 1). The buttons were dissolved and analysed by AAS, yielding a combined gold result of 58.16g/t (see table 1).

	Au (g/t)	Ag (g/t)	Pd (g/t)	Pt (g/t)	Sn (g/t)	Cu (%)
Leach 1	40.00	326.08	0.42	0.18	103.40	0.13
Leach 2	18.16	116.27	0.55	0.25	0.00	0.09
Total	58.16	442.35	0.97	0.43	103.40	0.22

Table 1. Results of hydrometallurgical test on Ema bulk sample (back-calculated to original sample weight)

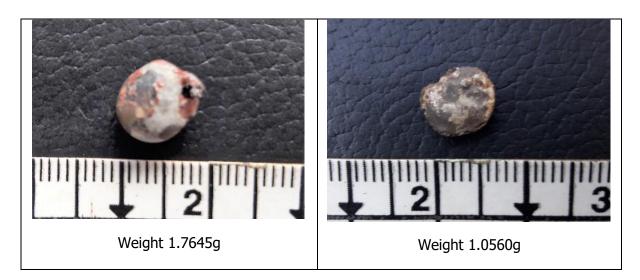


Fig. 1. Metallic buttons recovered from two-stage leach of 1kg Ema bulk sample

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In parallel, a hydrometallurgical test on the same bulk sample is being conducted by e-Reciclar in Belo Horizonte and pyrometallurgical testing will commence within the coming week at the Marcelo facility.

The unusual Cu-Sn-Au-Ag-PGM association confirms BBX's belief that it is dealing with a complex style of multi-element mineralisation where metals are present in an ionic form not amenable to routine analytical methods.

An additional 300kg surface bulk sample of fresh gabbro (see photos 2) in the appendix has been collected from the Tres Estados prospect from the same area as the previous bulk sample. Crushing, milling and homogenisation of the sample is in progress prior to commencement of ongoing hydrometallurgical and pyrometallurgical testwork.

### Juma East

On 28 June 2017, the DNPM (Mines Dept.) published a brief notification in the Government Gazette advising that the company would be required to take certain actions with respect to the Boia Velha and Guida tenements at Juma East. BBX then received a formal request by the DNPM on June 30, 2017 to relinquish the Boia Velha tenement and accept a significant reduction to the area of the Guida tenement due to the impact of the Acari National Park (see fig. 2), one of a number of National Parks created by Presidential decree by the former impeached president Dilma Roussef, on May 11, 2016, the former president 's last day in office. BBX has not previously been advised of the creation of this park which was apparently also unknown to the DNPM who renewed the above leases for a further 3-year term in September 2016 and charged annual tenement fees for 2017, paid by BBX on January 31, 2017.

BBX intends to appeal this decision and has also been made aware that the entire Amazonas State Federal parliamentary block, with the support of the Ministry of Mines will draft a parliamentary bill proposing the re-classification of a portion of the National Park, including the area occupied by the two BBX tenements to a lower level of conservation unit which permits mining activities.

Due to its current focus on the Três Estados and Ema prospects, where high grade mineralisation is exposed at surface, BBX currently has no plans to initiate exploration at Boia Velha or re-initiate exploration at Guida, where mineralisation was previously identified at depths of 200m to 300m in holes JED-004 and JED-006. Hole JED-001, where mineralisation was intersected at shallower depths is located outside the park boundary.

BBX is currently conducting a full review of its tenement portfolio including the two southern tenements at Juma East, where reconnaissance exploration has failed to identify potential for significant nearsurface mineralisation. In order to retain these tenements and the Boia Velha lease BBX would need to meet significant minimum work commitment requirements within the next 12 months which may not be justified.

It should be noted that the Três Estados and Ema properties are located approximately 60km south of the park boundary in a region of private land ownership, **not subject to the threat of any future creation of National Parks or high level conservation areas.** 

BBX and its legal advisors are continuing to develop a full understanding of the implications of the action taken by the former president and the Company will ensure that the market is fully informed of any developments.

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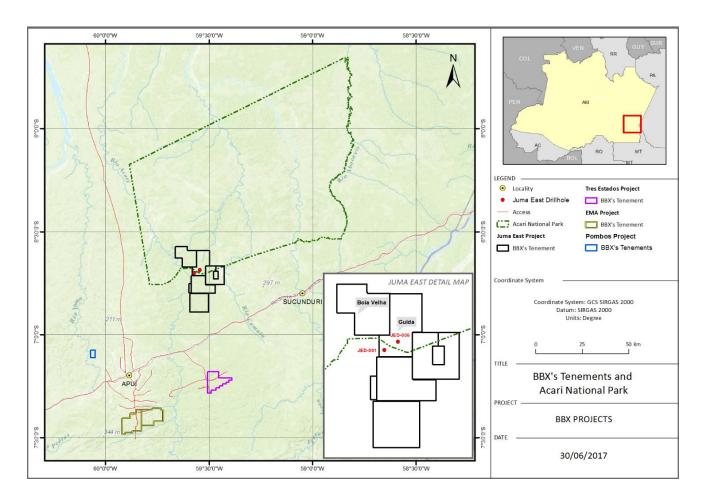


Fig. 2. BBX tenement holdings and the Acari National Park

## For more information:

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## Competent Person Statement

The information in this report that relates to copper and gold style mineralization for the Apui region in Brazil is based on information compiled by Mr. Antonio de Castro, BSc (Hons), MAusIMM, CREA, who is a Member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a competent person 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". Mr. Castro is BBX's Consulting Geologist and consents to the report being issued in the form and context in which it appears.

CREA/RJ:02526-6D AusIMM:230624

## About BBX Minerals Ltd

BBX Minerals Limited (ASX: BBX) is a mineral exploration and mining company listed on the Australian Securities Exchange. Its major focus is Brazil, mainly in the southern Amazon, a region BBX believes is vastly underexplored with high potential for the discovery of world class gold and copper deposits.

BBX's key assets are the Juma East, Três Estados and Ema Gold Projects in the Apuí region, Amazonas State. The company has 58.1km<sup>2</sup> of exploration tenements within the Colider Group, a prospective geological environment for epithermal gold and Cu-Au porphyry deposits. The region is under-explored and has the potential to provide BBX with a pipeline of highgrowth, greenfields gold discoveries.

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## Appendix

1. Photos of Ema gabbro sampled



2. Photos of Adelar superficial old gold workings at Três Estados within the bulk sample area, showing abundant fresh gabbro



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## The following Table and Sections are provided to ensure compliance with JORC Code (2012 Edition).

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> </ul>	The announcement refers to metallurgical testwork conducted on a bulk surface grab sample
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Drill results are not included in this announcement .
	<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 re relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g 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>	The bulk sample used for the test reported in this announcement was obtained by collecting surface grab samples over an area of approximately 100 by 40 metres
Criteria	JORC Code Explanation	Commentary
Drilling Techniques	<ul> <li>Drill types (e.g. core. reverse circulation, open hole hammer, rotary air blast, auger, Bangka, sonic etc ) and details (e.g. core diameter, triple or</li> </ul>	Drill results are not included in this announcement

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	standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so by what method etc).	
Drill Sample Recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assayed.</li> </ul>	<ul> <li>Drill results are not included in this announcement</li> </ul>
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul> <li>Drill results are not included in this announcement</li> <li>.</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>Drill results are not included in this announcement</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> </ul>	<ul> <li>Drill results are not included in this announcement</li> <li>.</li> </ul>
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul> <li>Drill results are not included in this announcement</li> </ul>
	The total length and percentages of the relevant intersections logged.	<ul> <li>Drill results are not included in this announcement</li> </ul>
Sub- Sampling Techniques and Sampling	<ul> <li>If core. whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	Drill results are not included in this announcement
Procedures	• If non-core, whether riffled. tube sampled, rotary split etc and whether sample wet or dry.	<ul> <li>Drill results are not included in this announcement</li> </ul>
	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>Sample preparation was conducted in the Nomos laboratory, Rio de Janeiro, Brazil, involving crushing of a 150kg bulk sample, riffle spiltting and pulverising in a ball mill.</li> </ul>
	<ul> <li>Quality control procedures adopted for all sub – sampling stages to maximise "representivity" of samples.</li> </ul>	<ul> <li>Results reported in this announcement refer to testwork on a crushed sample splits from a 150kg bulk sample</li> </ul>

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Quality of Assay Data and Laboratory Tests	<ul> <li>Measures taken to ensure that the sampling is representative of the in situ material collecte,. including for instance results for field duplicate/secondhalf sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> <li>The nature quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul> <li>The bulk sample was collected at random from all exposed outcrops, and was not subject to visible signs of mineralisation.</li> <li>The sample size is regarded as adequate for an indicative metallurgical test</li> <li>As the extraction methodology is still in the developmental phase it may represent only a partial recovery method for gold and other precious metals.</li> </ul>
	<ul> <li>For geophysical tools, spectrometers, hand held XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation etc.</li> </ul>	<ul> <li>No geophysical tools or electronic device was used in the generation of sample results</li> </ul>
	<ul> <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>	Not applicable for metallurgical testwork
Verification of Sampling and Assaying	• The verification of significant intersections by either independent or alternative company personnel.	Not applicable
	The use of twinned holes	Drill results are not included in this announcement
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>Results for this testwork were supplied digitally, directly to BBX's Exploration Manager by Marcelo da Silva Pinto ME and Nomos</li> </ul>
	<ul> <li>Discuss any adjustment to assays</li> </ul>	• No adjustments were made.
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 Mine Resource estimation</li> </ul>	Drill results are not included in this announcement

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	<ul> <li>Specification of grid system used</li> </ul>	• WSG84Z21.
	<ul> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Topographic control is achieved via the use of government topographic maps. in association with GPS and Digital Terrain Maps (DTM 's).</li> </ul>
Data Spacing and Distribution	Data spacing for reporting of Exploration results.	<ul> <li>The sample subject of the laboratory test results reporting in this announcement was collected over a surface area of approximately 4,000 square metres.</li> </ul>
	<ul> <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 classification applied.</li> </ul>	<ul> <li>No representations of extensions, extrapolations or otherwise continuity of grade are made in this announcement.</li> </ul>
	Whether sample compositing has been applied.	Drill results are not included in this announcement
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 is known, considering the deposit type.</li> </ul>	• The sample subject of this announcement was collected without bias from a series of surface outcrops.
	<ul> <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>	Drill results are not included in this announcement
Sample security	The measures taken to ensure sample security.	<ul> <li>The bulk sample was air freighted in sealed bags directly to the Nomos laboratory where the sample preparation was directly supervised by the Exploration Manager. The prepared samples were personally delivered to the Marcelo de Silva Pinto ME facility by the Exploration Manager.</li> </ul>
Audit or Reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits or external reviews of techniques have been conducted.</li> </ul>

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# **Section 2: Reporting of Exploration Results**

Criteria	JORC Code Explanation	Commentary
Mineral Tenement and Land Tenure Status	• 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.	• The Ema leases are 100% owned by BBX with no issues in respect to 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	The company is not aware of any impediment to obtain a licence to operate in the area
Exploration done by Other Parties	Acknowledgment and appraisal of exploration by other parties	<ul> <li>No exploration by other parties has been conducted in the region</li> </ul>
Geology	Deposit type. geological setting and style of mineralisation	<ul> <li>The geological setting of the area subject to drilling (and reported in this announcement) is that of Proterozoic volcanic and intrusive rocks with potential to host high sulphidation and/or low sulphidation gold mineralisation, Au- Cu porphyry mineralization and/or IOCG deposits.</li> </ul>

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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>Coordinates of the sample location were reported in a previous announcement</li> </ul>
	<ul> <li>If the exclusion of this information is justified on the basis that the information is not Material and that 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 exclusion of information has occurred.</li> </ul>
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	The results reported in this announcement refer to a bulk sample collected from surface outcrops
Data aggregation methods	<ul> <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 shown in detail.</li> </ul>	<ul> <li>Not applicable – results reported refer to a single bulk sample.</li> </ul>
Data aggregation methods	The assumptions used for any reporting of metal equivalent values should be clearly stated.	<ul> <li>Not applicable – no equivalents were used in this announcement.</li> </ul>

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Relationship between mineralization widths and intercepted lengths	<ul> <li>These relationships are particularly important in reporting of Exploration Results.</li> <li>If the geometry of the mineralization 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>Drill results are not included in this announcement</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 limited to plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>A map showing the sample location was included a previous announcement.</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>The Company believes the ASX announcement provides a balanced report of the results of laboratory tests conducted on the bulk sample</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>Airborne geophysical results and ground IP results were presented in previous announcements and are not referred to in this announcement.</li> </ul>
Further Work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large- scale step-out drilling)	Comments on the ongoing work programme are presented.
	<ul> <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>A map showing the extent of gold in soil anomalies was included in the previous announcement.</li> </ul>

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