

# **BBX Minerals Ltd**

# ASX: BBX

Level 1 35 Havelock Street West Perth WA 6005

Telephone +61 8 6955 2955 Fax +61 8 6210 1153

Av Jornalista Riccardo Marinho 360 Ed Cosmopolitan Sala Barra da Tijuca Rio de Janeiro

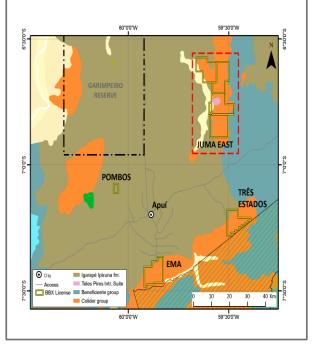
Telephone +55 21 2439 5700

Web: www.bbxminerals.com.au

Email: Jeff.Mckenzie@bbxminerals.com.au

# **Brazil Projects:**

Juma Eastgold- silver- copperEmagoldTres Estadosgold-copperEldorado Do Juma:gold



ASX MEDIA RELEASE 2ND SEPTEMBER, 2016

# EXPLORATION UPDATE, JUMA EAST

- Ongoing testwork reveals exceptional gold and PGM grades from the bottom 49.44m of JED 006 at Guida, Juma East
- Following pre-treatment, <u>24.76g/t</u> was obtained by fire assay over this 49.44m interval
- 10.62g/t recorded from a cyanide bulk leach from the same interval.
- Test work is continuing to further refine the pre-treatment method

BBX Minerals (ASX: BBX) is pleased to announce that ongoing test work has resulted in significantly higher grades from the bottom 49.44m (250.00 – 299.44m) of hole JED-006, where a composite grade of 1.03g/t from amalgamation had previously been obtained (see media release of April 11, 2016).

Following the success of pre-treatment test work undertaken on the 13.66m interval at the bottom of hole JED-004, which had returned **4.58g/t** and subsequently **3.70g/t Au and 0.16g/t Pd** by fire assay (see media release 23 May 2016).and **4.06g/t** by amalgamation a variant of this method termed oxi8B was eventually settled on by the Company and used to test a homogenised composite sample from the bottom 49.44m of JED 006.

A single 250g pulverised sample yielded a fire assay result of 24.76g/t Au (mean of five 50g fire assay results), whilst other lower, but nonetheless high grade results were obtained from repeat tests using the oxi8B

technique and minor variations thereof. Additional tests were conducted involving regrinding of the pre-prepared sample prior to fire assay and metallic screen (screen fire) analysis (table 1) to evaluate the possibility of coarse gold being precipitated in the pretreatment step. The latter test indicated that only 20% of the gold was in the coarser (+150 micron) fraction.

The Company conducted wide-ranging experimental work testing a variety of methods (see appendix, table 2) in an endeavour to resolve the issue of why the samples had previously failed to produce a result by fire assay. Research undertaken enabled BBX to initially settle on methods named Oxi1A and Oxi8A to undertake routine assay results. However, as further improvements were made to the methods the processes were renamed Oxi1B and Oxi8B with the most consistent of these being Oxi8B. The other experimental methods utilised are no longer used and have been discarded.

Under the specific Oxi8B method, a single homogenised bulk composite sample from the JED006 interval was subjected to treatment with acid and water at a variety of temperatures and time periods at the Nomos laboratory, Rio de Janeiro, followed by fire assay at the Intertek laboratory, Parauapebas. A total of 26 samples have been analysed using the Oxi1B and Oxi8B methods and variations thereof (see table 1 and appendix, table 2), with standards and blanks being submitted as a quality control check.

It should be noted that all quoted grades for oxi1B and oxi8B are as received from the Intertek laboratory, without correction for the dilution effect of approximately 22% resulting from the addition of reagents in the pre-treatment step. True grades of the original samples are therefore approximately 22% higher than those quoted in this announcement.

A highly significant result of **10.62g/t** was obtained from a cyanide bulk leach following oxi8B pre-treatment, indicating that the gold occurs in a form readily recoverable by conventional cyanidation.

A recently developed alternative irradiation pre-treatment method termed JMA has produced elevated PGM values of **9.71g/t** platinum and **9.91g/t** palladium, plus **15.27g/t** gold, all by fire assay (table 1).

A series of tests was then undertaken using the oxi8B pre-treatment method on 4m composite samples over the interval 142 – 299.44m and the JMA method over the interval 250 – 299.44m, returning only trace levels of gold. These tests were carried out using larger-scale equipment generating conditions which differed from those used in the original test work, due to the scale up effect from single-sample experimental work to batch-scale testing. These tests are currently being repeated in an effort to precisely replicate the conditions used in the single-sample tests. The research team assembled by BBX in conjunction with laboratories in Brazil, Australia and Canada continues to develop a technique to consistently unlock the precious metals in the complex Juma East mineralisation, where gold is understood to occur in an ionic state.

Pre- treatment method	Summary description	Au (g/t) (50g FA)			Mean (g/t Au)	Pt (g/t)	Pd (g/t)		
Oxi 01A	Acid, moderate temp	1.59						0.00	0.00
Oxi 05	Acid, higher temp	3.70						0.16	0.00
Oxi 08	Acid, moderate temp	1.10						0.00	0.00
Oxi 01A	Acid, higher temp	1.59						0.00	0.00
Oxi 08A	Acid, higer temp	0.87						0.00	0.00
Oxi 11	Ammonia leach + ppt.	3.36						0.00	0.01
Oxi 01B	Acid, high temp	20.11	15.01	11.17	12.61	14.37	14.65	0.00	0.00
Oxi 08B	Acid, high temp	34.43	28.6	23.51	16.86	20.41	24.76	0.00	0.00
N,R	Low temp + carbon	1.99	1.93	1.97			1.96	0.00	0.05
N,R	High temp + carbon	2.34	2.3	2.23			2.29	0.00	0.08
N,R,C	High temp + carbon	1.54	1.42	1.47			1.48	0.00	0.04
Oxi 8B	Re-pulverized	13.10	11.56	14.3	13.33	14.23	13.30	NA	NA
Oxi 8B	Metallic screen	11.68						NA	NA
Oxi 8B	Cyanide leach	10.62*						NA	NA
Oxi 8B	Coarse-grained reagent	4.82						NA	NA
Oxi 8B	Fine-grained reagent	19.97						NA	NA
Oxi 8B	Very fine reagent	17.53						NA	NA
Oxi 8B	Coarse-grained reagent	5.45						NA	NA
Oxi 8B	Natural reagent	3.45						NA	NA
Oxi 8B	Closed vessel	5.24						0.10	0.02
JMA	Longer time-frame	15.27						9.71	9.91
JMA	Shorter time-frame	5.59						NA	NA
*analysed by ato NA: not analyse	*analysed by atomic absorption spectrometry								

Table 1. Significant results for JED-006, 250m - 299.44m (49.44m)

#### **Guida target**

The Guida target occurs within the 10km-long Guida-Boia Velha structural trend containing extensive old gold workings where gold nuggets were reportedly recovered from the saprolite/fresh rock interface. The trend is defined by a low magnetic corridor interpreted as a magnetite-destructive zone and by a strong alkalic soil geochemical signature. Extensive silica textures typical of low sulphidation epithermal systems have been mapped and described in drill core.

#### **Ema and Tres Estados Prospects**

The BBX team has completed initial soil sampling and reconnaissance geological mapping programmes over the Ema and Tres Estados prospects, located 30km and 60km SE of Apui, respectively.

At Ema, results have been received for a 200m x 40m soil sampling programme covering an area of 600 ha (6% of the lease) where old gold workings had been previously documented. Three distinct gold anomalies were defined, two of which are open along strike (see figure 1). The third, western anomaly, containing individual gold values of 0.5 and 0.7g/t is approximately 1km x 0.5km in extent, with old workings identified along a strike length of almost 800m.

The gold in soil anomalies and old workings are closely associated with a suite of altered mafic/ultramafic rocks intrusive into the rhyolite sequence, and to friable quartz veins within the rhyolite.

A 200m x 40m soil sampling programme has been completed at Tres Estados covering an area of 480 ha (5.8% of the lease). Samples have been submitted to the ALS laboratory, Belo Horizonte.

Geological mapping outlined a 1.6 km by 0.8 km mafic body intruded into the rhyolite sequence, associated with three areas of old artisanal gold workings. The Daniel and Cutia workings are located on the mafic/rhyolite contact and the Adelar workings within the mafic body.

Ongoing work will focus on extending the Ema and Tres Estados soil grids and defining targets for drill testing within the next 2-3 months. At Guida, infill soil sampling will be conducted to assist in designing an ongoing drill programme to fully test the highly prospective Guida-Boia Velha trend.

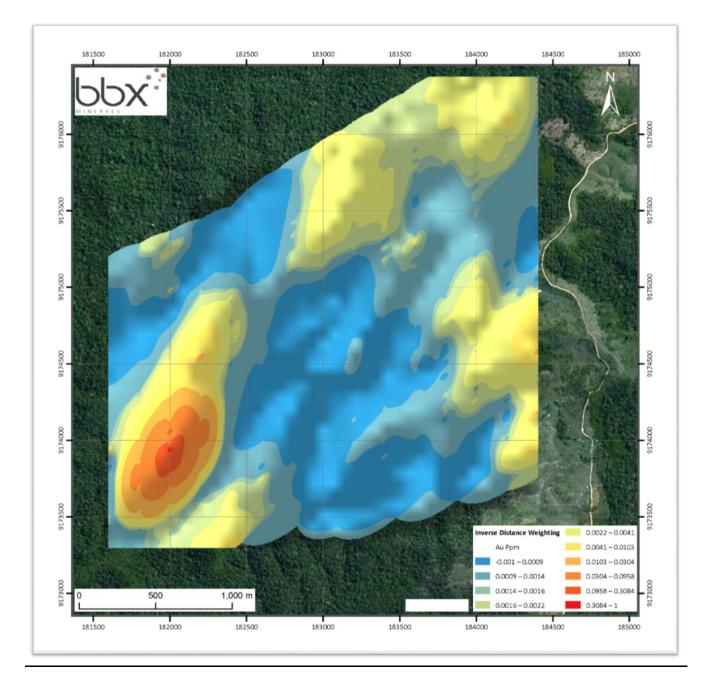


Fig. 1. Ema gold in soil grid (inverse distance weighting)

## Jeff McKenzie

<u>CEO</u> <u>BBX Minerals Ltd</u> +64 22 3421271

#### 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 mineralization 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 a 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

#### <u>Disclaimer</u>

The geological setting and chemistry of the Juma East mineralisation are complex, resulting in inconsistent results from alternative metallurgical test methods. The Company continues to undertake further metallurgical testing to better understand the chemical association. In the meantime, and whilst there is a reasonable basis for the statements made in this announcement, investors are cautioned not to place undue reliance on the results set out in this announcement. In particular and until the Company is able to fully understand the geology and chemistry of the Juma East mineralisation there is a risk that further refinement of pre-treatment methods may not replicate the grades set out in this announcement.

#### 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 asset is the Juma East Gold Project in the Apuí region, Amazonas State. . The company has 58.1 km<sup>2</sup> of exploration tenements within the Colider Group, a prospective geological environment for epithermal gold and Cu-Au porphyry deposits. The region, located adjacent to the prolific Tapajos Mineral Province which has produced around 30 million ounces of gold from near-surface workings, is underexplored and could provide BBX with a pipeline of high growth, greenfields gold discoveries.

### <u>Appendix</u>

Hole	Pre-assay method	Broad description	Au (ppm) FA50_AAS	Pd (ppm) FA50_AAS	Pt (ppm) FA50_AAS
JED004	Oxi 01	Weak acid, high temp	4.56/4.59		
JED004	Oxi 02	Oxi1, lower temp	0.00		
JED004	Oxi 03	Oxi 1, medium acid, low temp	0.23		
JED004	Oxi 04	Oxi1, medium acid, high temp	0.02		
JED004	Oxi 05	Oxi 1, medium acid, high temp	3.70	0.16	0.00
JED004	Oxi 06	Acid B, low temp	0.06	0.00	0.00
JED004	Oxi 07	Acid C, high temp	0.04	0.00	0.00
JED004	Oxi 08	Oxi 01, increased acid conc.	1.10	0.00	0.00
JED004	Oxi 09	Acid B, low temp	0.06	0.00	0.00
JED006	Oxi 01 A	Higher temperature	1.59	0.00	0.00
JED006	Oxi 08 A	Higher temperature	0.87	0.00	0.00
JED006	Oxi 10	Ammonia leaching of residues	0.00	0.00	0.00
JED006	Oxi 11	Ammonia leaching + precipitate	3.36	0.01	0.00
JED006	Oxi 01 B	Acid, high temp	20.11/15.01/11.17/1 2.61/14.37	0.00	0.00
JED006	Oxi 08 B	Acid, high temp	34.43/28.60/23.51/1 6.86/20.41	0.00	0.00
JED006	Oxi 12	Acid B, high temp	0.36/0.33/0.34/0.33	0.02	0.00
JED006	Oxi 13	Acid leaching	0.55/0.56/0.48/0.66	0.00	0.00
JED006	Oxi-org	Organic acid leaching	0.03/0.02/0.03	0.00	0.00
JED006	Oxi-tart	Tartaric acid leaching	0.02	0.00	0.00
JED006	Oxi-C,B	Carbon introduced	0.02	0.00	0.00
JED006	N.R	Low temp + carbon	1.99/1.93/1.97	0.05	0.00
JED006	N.R	High temp + carbon	2.34/2.30/2.23	0.08	0.00
JED006	N.R.C.	High temp.+ carbon	1.54/1.42/1.47	0.04	0.00
JED006	W.R. low temp	Carbon	0.02/0.07/0.02	0.00	0.00
JED006	W.R. high tem	Carbon introduced	0.04/0.04/0.04	0.00	0.00
JED006	As above w/ppt	Carbon introduced	0.04/0.04/0.40	0.00	0.00
JED006	Oxi8B	Cyanide bottle roll	10.62		
JED006	Oxi8B	Ceramic pulverize	13.10/11.56/14.30/1 3.33/14.23		
JED006	Oxi8B	Metallic screen	11.68		
JED006	Oxi 14	Ammonia leaching	0.33/0.32		
JED006	Oxi 15	Ammonia leaching + electrolisis	0.00	0.00	0.00
JED006	Oxi 16	Oxidation + ammonia leaching + electrolisis	0.00	0.00	0.00
JED006	Oxi 17	Oxidation + ammonia leaching	0.13/0.16	0.00	0.00
JED006	Oxi 18	Oxi8B w/carbon 3 hours	0.14		

JED006	Oxi 19	Oxi8B for 3 hours	0.00		
JED006	Oxi 20	Oxi8B for 6 hours	0.00		
JED006	Oxi 21	Oxi8B w/carbon 6 hours	0.10		
JED006	Oxi 22	Oxi8B w/natural reagent1	0.04	0.00	0.00
JED006	Oxi 23	Oxi8B w/natural reagent 2	0.11	0,01	0.54
JED006	Oxi 24	Oxi8B w/natural reagent 3	3.45	0.00	0.00
JED006	Oxi 25	Oxi8B w/natural reagent 4	0.22	0.00	0.00
JED006	Oxi 26	Untreated sample in sealed	0.02	0.02	0.10
		apparatus			
JED006	Oxi 27	Oxi8B in sealed apparatus	5.24	0.02	0.10
JED006	Oxi 8B	Oxi8B coarse-grained reagent	4.82		
JED006	Oxi 8B	Oxi8B med-grained reagent	0.29		
JED006	Oxi 8B	Oxi8B fine reagent	19.97		
JED006	Oxi 8B	Oxi8B very fine reagent	17.53		
JED006	Oxi 8B	Oxi8B coarse reagent	5.45		
JED006	Oxi 8B	Oxi8B coarse reagent	0.80		
JED006	Oxi 28	Oxi8B w/carbon cover 3h	0.56		
JED006	Oxi 29	Oxi8B w/carbon cover 6h	1.38		
JED006	JMA1	Irradiation 15+15 min	15.27	9.71	9.91
JED006	JMA2	Irradiation 5 + 10 min	5.59		
JED006	Oxi 30	Oxi8B, 100C	0.00		
JED006	JMA3	15 min irradiation	0.00	0.00	0.00
JED006	JMA4	5% activated carbon 15min	0.00	0.00	0.00
		irradiation			
JED006	JMA5	15 min + 2h furnace	0.00	0.00	0.00
JED006	JMA6	30 min	0.00	0.00	0.00
JED006	JMA7	15 min	0.00	0.00	0.00
JED006	JMA8	30 min	0.00	0.00	0.00
JED006	JMA9	High temp irradiation	0.00	0.00	0.00
JED006	JMA10	High temp irradiation	0.00	0.00	0.00
JED006	JMA11	Temp 4 irradiation	0.00	0.00	0.00
JED006	JMA12	Temp 7 irradiation	0.00	0.00	0.00
JED006	JMA13	Temp 11 irradiation	0.00	0.00	0.00
JED006	JMA14	Temp 12 irradiation	0.00	0.00	0.00
JED006	Oxi 8B	Oxi8b (100gr)	0.00	0.00	0.00

Table 2. Summary of test work results on composite samples, JED 004 and JED 006 (blank field indicates not assayed).

# 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>	<ul> <li>The announcement refers to metallurgical testwork conducted on bulk sample rejects and drill core samples</li> </ul>
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul> <li>The drill hole locations were determined by hand-held GPS, core lengths were verified against core recovery and measured with hand held metric tape. Drill core was logged noting lithology, alteration, mineralization, structure.</li> <li>Sampling protocols and QA/QC are as per industry best-practice.</li> </ul>
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where "industry standard " work has been done this would 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>	<ul> <li>The drill core was cut longitudinally and sampled only the right side of the half core, "blind sampling", disregarding any visual mineralisation and bagged as 1 to 2 metre samples.</li> </ul>
Criteria	JORC Code Explanation	Commentary
Drilling Techniques	<ul> <li>Drill types (e.g. core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka,</li> </ul>	<ul> <li>Wireline diamond core drilling with a standard tube was used. Core diameter is NTW</li> </ul>

 TABLE 1 – Section 1: Sampling Techniques and Data

Drill Sample	<ul> <li>sonic etc ) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so by what method etc).</li> <li>Method of recording and</li> </ul>	<ul> <li>(57.1 mm diameter). The hole angle was oriented as per industry best practice and core was not oriented.</li> <li>Core barrel length was</li> </ul>
Recovery	assessing core and chip sample recoveries and results assayed.	compared with the core length for each individual drilling run. No significant core loss was experienced.
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul> <li>No significant core loss was experienced.</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 /course material.</li> </ul>	<ul> <li>Not applicable – refer above. With no sample loss no bias, based on sample loss, would occur.</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>On-site geologist(s) logs lithology, alteration, mineralisation and structure, including RQD.</li> <li>Core recoveries are noted.</li> </ul>
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core ( or costean, channel, etc) photography.</li> </ul>	<ul> <li>Core logging is both qualitative and quantitative.</li> <li>Each box with 3 m of core is photographed dry and wet.</li> </ul>
	<ul> <li>The total length and percentages of the relevant intersections logged.</li> </ul>	• 100% of the core was logged.
Sub- Sampling Techniques and Sampling Procedures	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	<ul> <li>Core was sawn in half. The right side was bagged and labelled, the remaining half was returned to the core tray.</li> </ul>
	<ul> <li>If non-core, whether riffled, tube sampled, rotary split etc and whether sample wet or dry.</li> </ul>	<ul> <li>Not applicable – all samples subject of this announcement were core samples.</li> </ul>
	<ul> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	<ul> <li>Core sampling followed industry best practice.</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 composite</li> </ul>

	<ul> <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> </ul>	<ul> <li>pulverised drill core samples, without sub-sampling</li> <li>The core sawing orientation was such that (apparent) mineralization was equally represented in both halves of the core. Sample intervals are fixed to whole-number down- hole intervals and collected at a minimum of 1 metre and a maximum of 2 metre intervals. Sampling is not subject to visible signs of</li> </ul>
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>mineralisation.</li> <li>The sample sizes are considered adequate in terms of the nature and distribution of apparent mineralisation in the core.</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> </ul>	<ul> <li>Due to difficulties experienced with conventional analytical techniques a pre-treatment prior to fire assay is considered appropriate for this type of mineralisation.</li> <li>As this methodology is still in the development 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, calibrations 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>	<ul> <li>Standards (both pre-treated and untreated), blanks and duplicates were included in the testwork batches and the soil sampling referred to in the announcement. Acceptable levels of accuracy were obtained, including the dilution effect resulting from pre-treatment.</li> </ul>
	<ul> <li>The verification of significant intersections by either</li> </ul>	<ul> <li>No significant intersections were calculated</li> </ul>

Verification of Sampling and	independent or alternative company personnel.	
Assaying	• The use of twinned holes	<ul> <li>No twinning of holes has been conducted</li> </ul>
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	Primary assay data is supplied to the company from the laboratory in two forms: Microsoft Excel spreadsheet and PDF form (the latter serving as a certificate of authenticity). Both formats are captured on company desktops/laptops which are backed up from time to time. Only after critical assessment and public release of data (if appropriate), is the data entered directly into the BBX Microsoft Access database by company GIS personnel.
	Discuss any adjustment to assays	<ul> <li>No adjustments were made.</li> </ul>
Location of Data Points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down hole surveys), trenches, mine workings and other locations used in Mine Resource estimation</li> </ul>	<ul> <li>Drill hole location has been determined using a hand-held GPS (Garmin).</li> </ul>
	• Specification of grid system used	• 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), the latter generated during an earlier detailed airborne geophysical survey.</li> </ul>
Data Spacing and Distribution	<ul> <li>Data spacing for reporting of Exploration results.</li> </ul>	<ul> <li>The holes subject of laboratory test result reporting in this announcement were logged on a continual basis (sub- 10cm data capture). Samples were collected in 1 to 2 metre intervals. Spacing (distance) between data sets with respect to geology and assays is in line with industry best practise.</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</li> </ul>	<ul> <li>No representations of extensions, extrapolations or otherwise continuity of grade are made in this announcement.</li> </ul>

	Reserve estimation procedure(s) and classification applied.	
	<ul> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Sample compositing was not applied.</li> </ul>
Orientation of Data in relation to Geological Structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which is known, considering the deposit type.</li> </ul>	<ul> <li>Sample orientation of the core is linear and thus directly related to hole orientation. Therefore, refer to the sub- section immediately below.</li> </ul>
	<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>	<ul> <li>The geometry of mineralised zones is currently unknown; the relationship between down-hole lengths and true thicknesses is therefore uncertain.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>All samples were sealed with a numbered cable tie in strong high density plastic bags by the on-site geologist and transported in a company vehicle from Apui-AM to Intertek's preparation laboratory in Paraopebas-PA. Upon receipt at the laboratory, samples were checked in and the list of received samples immediately sent back to the company's database administrator. Sealed prepared samples were subsequently airfreighted to the company's office in Rio de Janeiro and personally delivered by the company's Exploration Manager. to the Nomos laboratory for pre-treatment. The samples were then sealed and return couriered to the Intertek laboratory for fireassay.</li> </ul>
Audit or Reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No audits or external reviews of techniques have been conducted.</li> </ul>

# Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral Tenement and Land Tenure Status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>	<ul> <li>Juma East Exploration leases are 100% owned by BBX, agreement details were presented in previous press releases, all four leases have no issues in respect to native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>
	<ul> <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>The company is not aware of any impediment to obtain a licence to operate in the area</li> </ul>
Exploration done by Other Parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties</li> </ul>	<ul> <li>No exploration by other parties has been conducted in the region</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation</li> </ul>	<ul> <li>The geological setting of the area subject to drilling (and reported in this announcement) is that of Proterozoic volcanic rocks, with potential to host high sulphidation and/or low sulphidation gold mineralisation, Au-Cu porphyry mineralization and/or IOCG deposits.</li> </ul>

Drill Hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes         <ul> <li>Easting and northing of the drill hole collar</li> <li>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar.</li> <li>Dip and azimuth of the hole</li> <li>Down hole length and interception depth</li> <li>Hole length</li> </ul> </li> </ul>	<ul> <li>Coordinates and hole orientation of JED-004 has been reported in previous media reports.</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	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually material and should be stated</li> </ul>	<ul> <li>The result reported in this announcement refers to a single bulk sample generated by combining pulverised drill core samples on a weighted average basis.</li> </ul>
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. Follow-up testwork is being conducted to establish grades of shorther intervals within this broad intercept.</li> </ul>
Data aggregation methods	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Not applicable – no equivalents were used in this announcement.</li> </ul>

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>Wherever mineralisation is reported in this announcement, clear reference is made to down-hole length. At this stage, the relationship between the geometry of potential mineralisation and the drill hole is not known.</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 plan and cross-section showing hole locations with coordinates and have been provided in previous media releases.</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 hole JED-006.</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	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large- scale step-out drilling)</li> </ul>	<ul> <li>Comments on the ongoing exploration programme are presented.</li> </ul>
	<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>The geological map with the drill hole programme has been presented in previous announcements</li> </ul>