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Jangada Mines plc ('Jangada' or the 'Company')
Preliminary Economic Assessment Confirms Economic Potential of
The Pedra Branca PGM Project

Jangada Mines plc, a natural resources company developing South America's largest and most advanced platinum group metals ('PGM') project, is very pleased to announce the results of the Preliminary Economic Assessment ('PEA') for its Pedra Branca PGM project in north-eastern Brazil (the 'Project'). The PEA confirmed the findings of the 2017 Scoping Study (as announced on 31 October 2017) that the Project has the potential to become a robust, low CAPEX and OPEX, shallow, open pit operation yielding attractive financial returns and a very short payback period.

Overview

- Robust project economics with a net present value ('NPV') of US\$192 million, Internal Rate of Return ('IRR') of 67% and 1.6-year payback
- Potential life-of-mine ('LOM') of 13 years at a 1.2 strip ratio from a Mineral Inventory of 27 million tonnes of run-of-mine ('ROM')
- Multi-commodity ore suite mined at an average grade of 1.36 g/t PGM+Au with additional credits from nickel, copper and cobalt
- 100% increase in production scale to 2.2Mt per year following recent 53% uplift in JORC resources
- Estimated average annual production of 64,000 ounces of PGM+Au, 2.2 Mlb of nickel, 1.2Mlb of copper, 44,000 lb of cobalt and 30,000 t of chrome
- Conventional sulphide flotation plant producing two concentrates: a saleable multi-element sulphide concentrate and a chrome concentrate
- Low CAPEX requirement of US\$64.4 million and low OPEX of US\$17.31/t of ROM
- Project located in a mining friendly jurisdiction with a supportive regional government and good access to infrastructure
- Recent resource upgrade and positive metallurgical test results positively impact Project economics

Brian McMaster, Executive Chairman of Jangada said, "Pedra Branca is a truly exciting polymetallic project. With an estimated NPV of US\$192 million, an IRR of 67% and a payback of just 1.6 years, the PEA underlines the significant upside and economic potential of the asset. The scope is for an average production of 64,000 ounces per annum of PGM+Au, with significant credits from technology metals including 2.2 Mlbs of nickel, 1.2Mlbs of copper, 44,000 lb of cobalt and 30,000 t of chrome. Having a project demonstrating such excellent potential for returns in an established mining jurisdiction that has strong legislative stability makes this an extremely compelling proposition."

Preliminary Economic Analysis

The Board elected to produce a PEA to update the market on the Project's scope and economic potential given the improving Project metrics generated from recently completed and ongoing work. This work included adding 11Mt of mineable resource and 500,000 oz to the PGM+Au JORC resource and a successful metallurgical test programme, which demonstrated that the inclusion of magnetic separation would significantly increase recoveries of PGM and yield high gold and chrome grades in pre-concentrate.

The Board believes that a Pre-Feasibility Study ('PFS') would be premature without due consideration for these newly discovered aspects, which have not yet been incorporated into the current designs and would result in an underrepresentation of the Project's potential. The PEA, therefore, outlines the main factors relating to the potential development of the Project and gives the Board comfort to proceed expeditiously with further work.

Economic Evaluation

The PEA considered key input parameters in evaluating the Project's potential financial returns. Considerations included mine capital and operational expenditure, plant capital and operational expenditure, metallurgical recoveries, commodity prices, taxes, product payability and general resource modifying factors.

Estimated Key Economic Data	
Mining inventory	27.01Mt of ROM
Production rate	2.2 Mtpa / 61,000ozpa
Average strip-ratio	1.2
Average grade	1.36 g/t PGM+Au (2,4 g/t Pd Eq)
LOM	13 years
NPV	US\$192 million (@ 7% discount)
Mine CAPEX	US\$630,000
Processing plant CAPEX	US\$54.2 million
Additional provisions CAPEX & working capital	US\$9.6 million
Total CAPEX	US\$64.4 million ¹
OPEX	US\$17.31/t of ROM ²

Table 1: Estimated key economic data

¹ - Based on similar operations and the Mining Capital Cost Estimation Handbook (CAPCOST - CIM Especial Volume 47)

² - Based on GE21's database of projects with similar scale and characteristics (average operating costs include mining: US\$6.61/t; processing: US\$10.5/t; and general/admin: US\$0.20/lb)

Geology and Resource

The Pedra Branca Project is the largest and most advanced PGM project in South America with a JORC compliant resource of approximately 1.45 million ounces of PGM+Au at a grade of 1.36 g/t, 140 Mlb of Ni, 26 Mlb of Cu, and 9,7 Mlb of Co. The Project is located 280 km from the port city of Fortaleza in the northeast of Brazil and holds three mining licences and 43 exploration licenses over

and area of 50,000 ha. Previous operators have spent more than US\$35 million on exploration and development activities, which include 30,000 metres of diamond core drilling, geophysical surveys and metallurgical tests.

The Pedra Branca Project mineralisation is hosted in ultramafic bodies originated from one large layered intrusion. The ultramafic bodies can be subdivided into two distinct rock packages that occur separated by a relatively thick chromitite marker horizon (reefs), this subdivision is likely to be a primary magmatic feature that is related to the PGM emplacement. The PGM mineralisation is associated disseminated chromite and base metal sulphides within the host rock packages.

One rock package is characterised by massive black dunite and the other by heterogeneous peridotites. The massive dunite is generally coarse grained and is homogenous with minor regions grading into olivine rich peridotites. Locally, it can have thin tremolised units commonly associated with disseminated chromite and chromitites. The peridotite dominated rock package is characterized by mixed pegmatodial, equigranular olivine crystals and cyclic layering. The cyclic units consist of thin chromitite layers followed by equigranular dunite and olivine peridotites grading into pegmatodial peridotites.

Design and Pit Optimisation

The PEA envisages a conventional, shallow, truck and shovel operation, operated by a mining contractor. A pit optimisation analysis was conducted to determine the most profitable open pit design, given the Project's mineral resource and set of economic and metallurgical parameters; in this case it was based on the definition of an economic function, legal and proprietary restrictions, and a determination of the nested optimal pit using Geovia Whittle 4.7.1 software.

Potential Viability of Mineral Resources																					
Target	Mineralization										Waste	Total Mined	Strip Ratio	Product							
	Mass	Au	Pd	Pt	Au Equiv	Co	Cr2O3	Cu	Ni	Au				Pd	Pt	Cu	Ni	Cr2O3	Co		
	Mt	ppm					%							Mt	t/t	Oz troy x 1000			kt		t
Esbarro	9.44	0.025	0.782	0.406	0.928	125.6	0.74	0.05	0.22	6.81	16.25	0.7	2.983	161.3	82.5	3.4	5.5	111.7	83		
Curiu	1.26	0.084	1.132	0.955	1.463	122.6	1.59	0.03	0.20	1.52	2.79	1.2	1.374	31.3	26.0	0.3	0.7	32.1	11		
Cedro	2.93	0.016	1.026	0.583	1.250	109.2	1.16	0.04	0.19	4.71	7.64	1.6	0.617	65.8	36.8	0.9	1.4	54.5	22		
Trapia	3.64	0.056	0.746	0.546	1.069	123.7	1.08	0.05	0.21	7.14	10.78	2.0	2.640	59.4	42.8	1.3	2.0	62.7	32		
Sto Amaro	9.77	0.015	0.638	0.675	1.079	102.0	0.69	0.01	0.12	11.43	21.20	1.2	1.899	136.2	141.9	0.7	3.0	107.1	70		
Total	27.04	0.027	0.768	0.567	1.062	114.9	0.85	0.03	0.18	31.61	58.66	1.2	9.513	454.0	330.1	6.6	12.6	368.1	217		

Table 2: Mineral Resources considered for economic mine scheduling purposes

The determination of the geometry of the optimal pit was executed through the generation of an optimal sequence of *pushbacks*. To determine the evolution of pits over time, an annual production scale of 2.2Mtpa of Mill Feed was established, based on Taylor rule. The optimal pit for the LOM was selected at an Annual Discount Rate of 7% based on the stabilisation of NPV.

Mining Schedule and Fleet

The production scheduling was generated in GEOVIA Minesched™ 9.1.0 and the Mine Scheduling assumptions used were:

- Production rate of 2.2 Mtpa
- Minimising the Strip Ratio in the early years

The mining targets were sequenced to stabilise the grade as follows:

- Esbarro and Curiu
- Esbarro and Cedro
- Cedro and Trapia
- Trapia and Santo Amaro

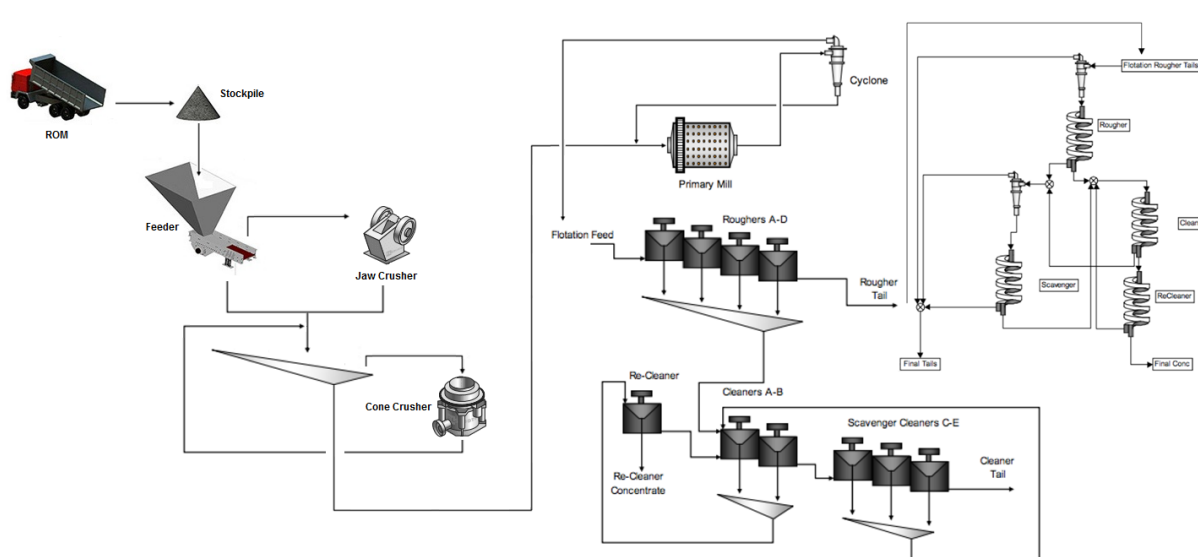
The main mine fleet would consist of CAT 345 hydraulic excavators equipped with a 2.5 m³ bucket or similar and Scania G480 8x4 - 35 tonne capacity trucks or similar. A fleet of ancillary equipment would also be available for mine maintenance and eventual plant services.

Processing

GE21 used a basic conceptual circuit for the concentrate plant of the Project with material flow as follows:

1. ROM material crushed in-pit, loaded and transported to processing plant
2. Crushed material fed to conventional ball mills at 2.2Mtpa
3. Mill product to be size-classified by cyclone, producing required flotation feed
4. Feed subjected to standard sulphide flotation through a rougher bank, a cleaner bank and scavengers
5. Rougher tailings to spiral feed to produce chrome concentrate
6. Sulphide concentrate filtering and thickening to produce final concentrate

Figure 1: Conceptual flowsheet for the Pedra Branca PGM Project



Source: GE21 Database and R L Bowers and D S Smit

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”, “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.

In this report, the term “mining/mineral inventory” is used to report that part of the Mineral Resource that has been considered in the assessment. The mining inventory does not meet the requirements of an Ore Reserve as defined under the 2012 edition of the JORC Code and should not be considered an Ore Reserve. There is no certainty that all or any part of the mining inventory will be converted into Ore Reserves.

SCOPING STUDY PARAMETERS – CAUTIONARY STATEMENT

The PEA referred to in this report is based on low-level technical and economic assessments and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the assessment will be realized.

Unless otherwise stated, all cash flows are in US dollars, are undiscounted and are not subject to inflation/escalation factors and all years are calendar years. The preliminary financial analysis excludes the cost of pre-feasibility and bankable feasibility studies.

The Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement. The detailed reasons for that conclusion are outlined throughout this announcement and in particular in the disclaimer entitled “Forward Looking and Cautionary Statements”.

COMPETENT PERSON

GE21 is a specialist, independent mineral consulting company headquartered in Belo Horizonte, Minas Gerais, Brazil. The mineral resource estimate was developed by GE21 staff members, who are accredited by the Australian Institute of Geoscientists (‘AIG’) as “Competent Persons”.

Mining Engineer, Porfirio Cabaleiro Rodriguez, acted as the chief supervisor for this report. He is a mining engineer with 39 years’ experience in the field of mineral resource and reserve estimation. He has significant experience with various commodities, which include phosphate ore, iron ore,

uranium, gold and nickel and rare earth elements, among others. Mr. Rodriguez is a member of the Australian Institute of Geoscientists ('MAIG').

Geologist, Bernardo de Cerqueira Viana, provided Mr. Rodriguez with a peer review of this project was the principal competent person responsible for the development of the resource part in this report. Mr. Viana is a member of the MAIG and has more than 16 years' experience in mining projects, specifically in the areas of geological modelling, mineral resource estimation and the economic evaluation of projects.

Dr Ana Maria Tonani Pereira has an undergraduate degree in Chemical Engineering with a Master's degree and a Ph.D. in Mining, Metallurgy and Mineral Technology, Ana has 15 years' experience in many ore beneficiation projects routes development for iron, gold, silver, copper and PGM ores. She was the process specialist responsible for conceptual, basic and detailed engineering projects development, working for Vale and Ferrous Resources. She was the process metallurgist responsible for many ore asset evaluations and business risk analysis support for Ausenco, ECM, Miner and Hatch amongst others. Dr Tonani is a certified Metallurgist Chartered Professional by AUSIMM since 2012 and member #308899 since 2011.

This announcement contains inside information as defined in Article 7 of the Market Abuse Regulation No 596/2014.

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Notes

Jangada Mines plc is developing the Pedra Branca PGM Project, one of the largest undeveloped PGM projects outside of Africa, with the potential to supply a market in long-term deficit. The Company is aiming to establish a low cost, low capex open pit mine from three existing mining licences with mineralisation commencing at surface. The Project has a JORC compliant resource of approximately 1.45 million ounces of PGM+Au at a grade of 1.3 g/t, 140 Mlbs of Ni, 26 Mlbs of Cu, and 9,7 Mlbs of Co. Previous operators have spent more than US\$35 million on exploration and development activities, which include 30,000 metres of diamond core drilling, geophysical surveys and metallurgical tests. Additionally, the Company owns a further 43 exploration licences spanning

50,000 hectares, which have significant upside potential for PGM, nickel, copper, chrome, rhodium, gold, and vanadium. The team has a wealth of experience, not only of the Project but of mining in South America across a range of commodities.