

29 July 2021

Jangada Mines plc

Mineral Resource Estimate Increased by 45%

Jangada Commencing Mine Development Stage and Feasibility Study Initiated

Jangada Mines plc ('Jangada' or the 'Company'), a natural resources company, is pleased to announce that it has concluded the current phase of its drilling programme at the Goela target and completed a consolidated updated National Instrument 43-101 ('NI 43-101') compliant resource estimate, comprising the results obtained to date from Pitombeiras North and South and Goela targets, at its 100%-owned Pitombeiras Ferrovanadium Project ('Pitombeiras' or the 'Project'), in Ceará State, Brazil.

Highlights:

- Total Mineral Resource Estimate ('MRE') of 8.26Mt, representing an increase of 45%, with 62% now classified at the higher confidence Measured & Indicated ('M&I') Mineral Resources category;
- The Mineral Resource classification resulted in Measured & Indicated Resources of 5.10Mt at 0.46% V₂O₅, 9.04 % TiO₂ and 46.06% of Fe₂O₃, and Inferred resource of 3.16Mt at 0.44% V₂O₅, 9.00% TiO₂ and 45.86% of Fe₂O₃.
- Vanadiferous Titanomagnetite (VTM) mineralisation continues to be open and drilling to date been conducted on only 3 of 8 known targets;
- Due to the significantly larger MRE with higher category confidence levels from that previously reported and extensive other work undertaken, Jangada will now be issuing a Definitive Feasibility Study ('FS') in Q3 2021, rather than an upgraded economic study;
- Capital expenditure requirements and major operating expenditure items are at an advanced stage;
- Jangada is fully funded for its existing work programme and intends to proceed to mine development, with first production as early as H1 2022;

Brian McMaster, Executive Chairman of Jangada, said: *"Today's announcement represents another very positive step forward for Jangada. As we have promised, the resource expansion supports our business case and importantly the elevation of the bulk of our resource to measured and indicated gives us the confidence to expedite our plans towards mine development. We still have a lot of exploration opportunities in front us; we know the targets we have drilled remain open and we have a further 5 known targets. Additionally, reconnaissance work is identifying other extremely interesting opportunities. At this stage however, our focus is shifting to building a mine based on the resources we have identified, and we will continue our exploration programme once the mine is operational."*

“The mine development process is a truly exciting advancement for Jangada. We intend to issue a Definitive Feasibility Study shortly which will outline Jangada’s compelling economic, geological and commercial story and will form the basis for our development plans. We have the funds in hand to do this work and we expect, to be a producing mine as early as H1 2022. I look forward to sharing further exciting news with shareholders as it unfolds in the coming months.”

Further Information:

The Mineral Resource Estimate (‘MRE’) update for Pitombeiras Ferrovanadium have been prepared in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Reserves: Definitions and Guidelines, May 10, 2014 (CIM, 2014), by Mauricio Prado, MSc. Geologist and Qualified Person, as defined by NI 43-101 guidelines, with effective date of July 20, 2021.

This MRE includes three exploration target areas, the Pitombeiras North, Pitombeiras South targets (as reported on 16 June 2021), and the newly completed Goela target resource update.

A total of 55 diamond drill holes have been completed for a total of 3,623.10 metres, including 2,759.60 metres at the Pitombeiras North target, 171.10 metres at the Pitombeiras South target and 692.40 metres at the Goela target. 44 drill holes intersected VTM mineralisation along the three main targets. In addition, 28 exploration pits were used in assessing the MRE for the Goela target.

The block models generated to estimate the mineral resource used a parental block size of 25 metres by 25 metres by 2 metres. These block dimensions were selected based on the distance between drill holes and the length selected for the composite samples.

The modelling for all the three targets was created based on geological description of the vanadium-bearing layer geology codes, and the grades of V_2O_5 , TiO_2 and Fe_2O_3 were estimated by ordinary kriging, using LeapFrog Geo+Edge software.

The Mineral Resource classification resulted in Measured & Indicated Resources of 5.10Mt at 0.46% V_2O_5 , 9.04 % TiO_2 and 46.06% of Fe_2O_3 , and Inferred resource of 3.16Mt at 0.44% V_2O_5 , 9.00% TiO_2 and 45.86% of Fe_2O_3 .

The Mineral Resources are reported with only the blocks within a conceptual open pit shell optimized by NPV Scheduler, which uses the following assumptions: iron ore concentration (62%/65%Fe, +V2O5) price of US\$105.75/t, 80% of global mass recovery of Fe to the concentrate, US\$2.78/t of mining cost (ROM), processing costs of US\$6.00/t, mine dilution of 5%, mine recovery 95%, and final slope angle of 56° to the open pit.

**Table 1. Pitombeiras Project, 20 July 2021 MRE
(0.25% V₂O₅ cut-off) – by VTM domain**

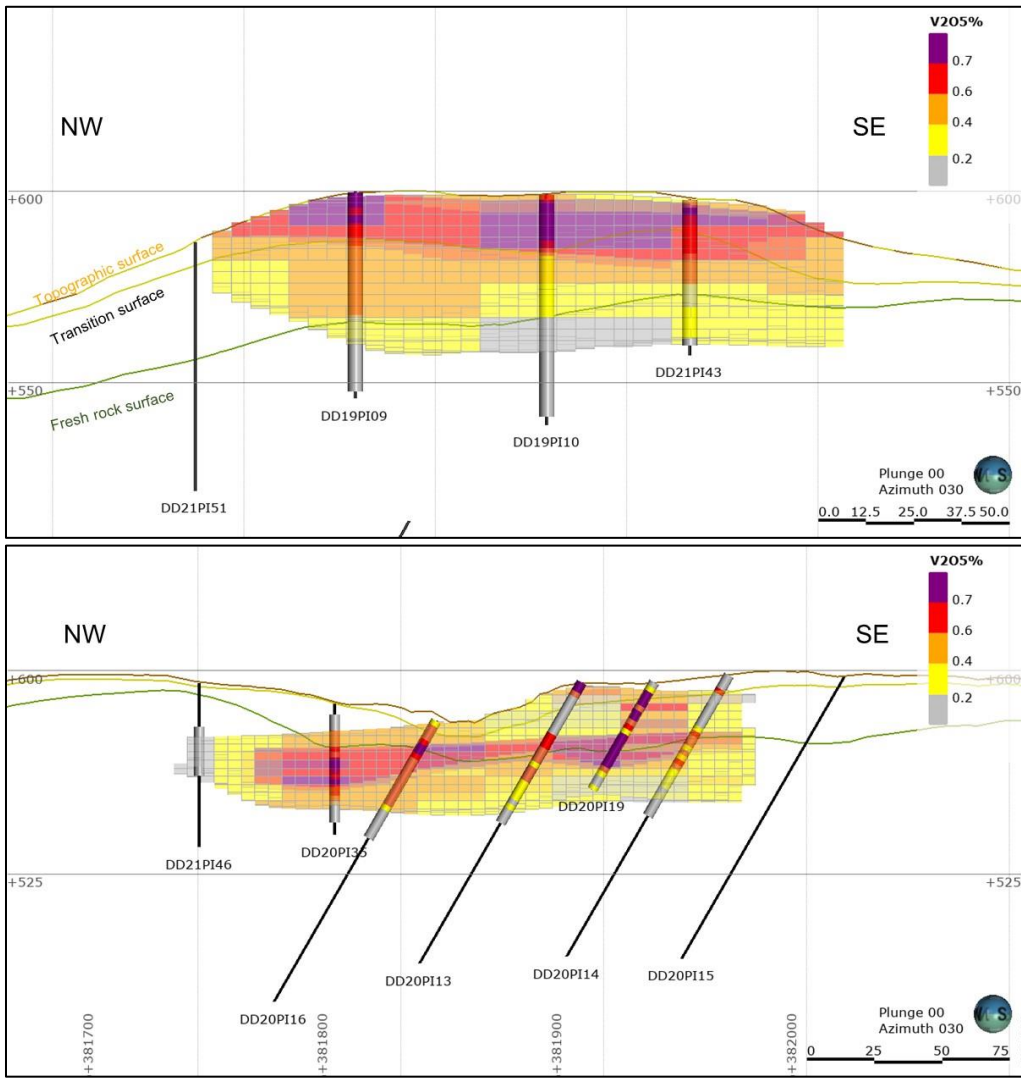
| Resource Classification | Mineralization Type | Tonnes | Average Grade % | | | Metal Content t | | |
|-----------------------------|---------------------|------------------|--------------------------------|-------------------------------|------------------|--------------------------------|-------------------------------|------------------|
| | | | Fe ₂ O ₃ | V ₂ O ₅ | TiO ₂ | Fe ₂ O ₃ | V ₂ O ₅ | TiO ₂ |
| Measured + Indicated | Oxide | 586,001 | 51.63 | 0.53 | 10.11 | 302,574 | 3,079 | 59,267 |
| | Transition | 1,588,061 | 45.99 | 0.45 | 8.97 | 730,311 | 7,223 | 142,441 |
| | VTM HG | 1,045,334 | 62.15 | 0.65 | 12.44 | 649,631 | 6,819 | 130,038 |
| | VTM+AMP | 1,880,908 | 35.45 | 0.34 | 6.88 | 666,716 | 6,318 | 129,464 |
| | Total | 5,100,303 | 46.06 | 0.46 | 9.04 | 2,349,232 | 23,439 | 461,210 |
| Inferred | Oxide | 1,314,820 | 49.40 | 0.48 | 9.97 | 649,586 | 6,261 | 131,141 |
| | Transition | 500,862 | 45.68 | 0.46 | 9.45 | 211,472 | 2,077 | 42,433 |
| | VTM HG | 404,446 | 60.91 | 0.62 | 11.71 | 246,342 | 2,527 | 47,346 |
| | VTM+AMP | 940,081 | 34.53 | 0.30 | 6.25 | 324,589 | 2,864 | 58,726 |
| | Total | 3,160,210 | 45.86 | 0.44 | 9.00 | 1,431,988 | 13,729 | 279,645 |

Table 2. Pitombeiras Project Total Resources (0.25% V₂O₅ cut-off)

| Resource Classification | Tonnes | Average Grade % | | | Metal Content t | | |
|-----------------------------|------------------|--------------------------------|-------------------------------|------------------|--------------------------------|-------------------------------|------------------|
| | | Fe ₂ O ₃ | V ₂ O ₅ | TiO ₂ | Fe ₂ O ₃ | V ₂ O ₅ | TiO ₂ |
| Measured | 1,750,336 | 47.79 | 0.48 | 9.47 | 836,455 | 8,339 | 165,751 |
| Indicated | 3,349,967 | 45.16 | 0.45 | 8.82 | 1,512,776 | 15,100 | 295,459 |
| Measured + Indicated | 5,100,303 | 46.06 | 0.46 | 9.04 | 2,349,232 | 23,439 | 461,210 |
| Inferred | 3,160,210 | 45.86 | 0.44 | 9.00 | 1,431,988 | 13,729 | 279,645 |

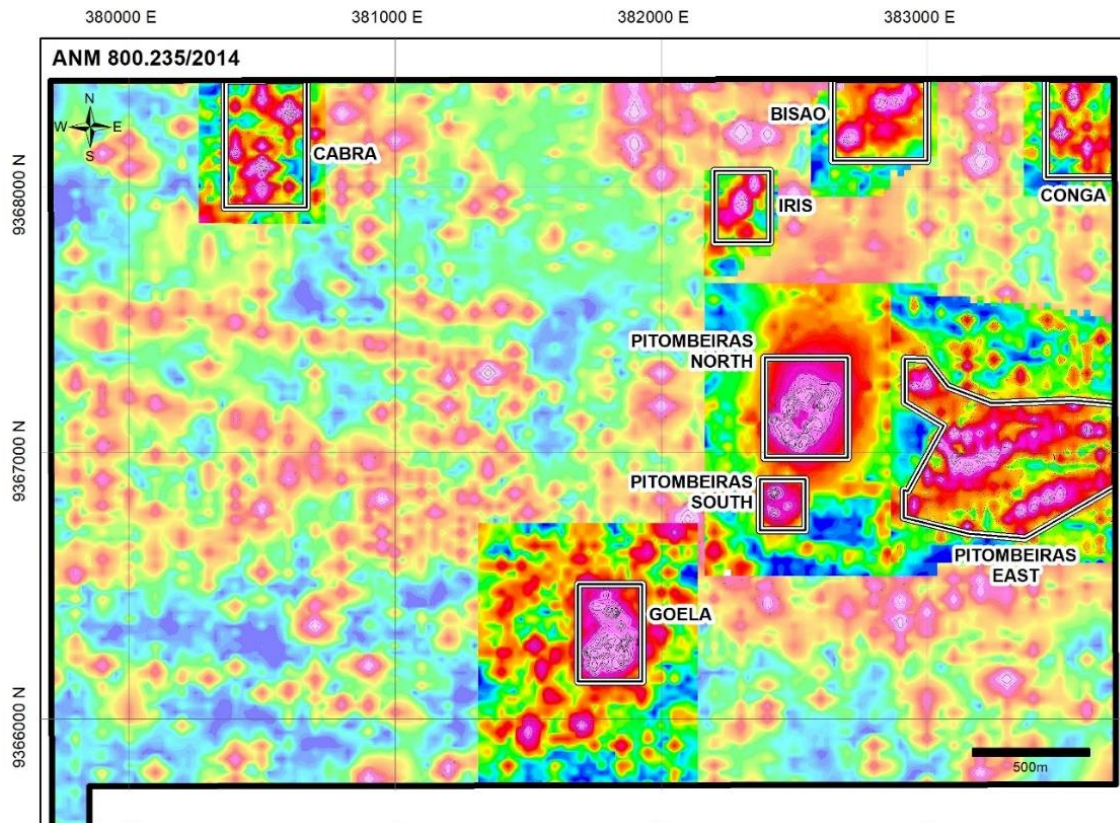
Notes to accompany Mineral Resource table for the Pitombeiras Project: The Mineral Resource is limited to within the tenement boundaries. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There has been insufficient exploration to define the Inferred Resources tabulated above as an Indicated or Measured Mineral Resource. There is no guarantee that any part of the mineral resources discussed herein will be converted into a mineral reserve in the future. The mineral resource estimate follows current CIM definitions and guidelines for mineral resources. Mineral Resources are reported within a conceptual open pit shell optimized by NPV Scheduler that uses the following assumptions: iron ore concentration (62%/65%Fe, +V₂O₅) price of US\$105.75/t, 80% of global mass recovery of Fe to the concentrate, US\$2.78/t of mining cost (ROM), processing costs of US\$6.00/t, mine dilution of 5%, mine recovery 95%, and final slope angle of 56° to the open pit. Mineral Resources have been reported on a dry tonnage basis. Discrepancies may occur due to rounding. Mineral Resources are reported with an effective date of July 20, 2021. The Qualified Person for the estimate, as defined by NI43-101, was Mauricio Prado, Msc. Geo. MAIG.

Figure 1 and 2. Typical cross sections at Pitombeiras North showing the block model with grades and the drill holes intersections and the vanadium-bearing layer geological codes.



It should be noted that the three targets which comprises the MRE are part of eight known targets, selected based on ground magnetic survey, with VTM signatures over a total area of 1,958 hectares.

Figure 3. Selected Targets Based on Ground Magnetic Survey



Quality Assurance & Quality Control

All drill samples have been prepared and analysed by SGS-Geosol Laboratórios Ltda ('SGS-Geosol') based in Belo Horizonte, Brazil. SGS-Geosol is ISO14001:2004 and ISO 9001:2008 accredited and is independent of Jangada. The samples were analysed by fusion with lithium tetraborate-XRF for Al₂O₃, CaO, Co, Fe₂O₃, K₂O, MgO, MnO, Na₂O, P₂O₅, SiO₂, TiO₂, V₂O₅ and retained moisture (LOI) by multi-temperature.

QA/QC procedures include the submission by Jangada of systematic duplicates, blanks and standard samples within every sample batch submitted to SGS. In addition, SGS-Geosol inserts its own standards, blanks and duplicate samples. The results from these control samples indicate acceptable consistency of analysis.

Qualified/Competent Person Review

The technical information in this announcement has been reviewed by Mr. Paulo Ilidio de Brito, who is a member of the Australian Institute of Geoscientists (MAIG #5173) and a member of AusIMM - The Australasian Institute of Mining and Metallurgy (MAusIMM #223453). Mr. Brito is a senior professional geologist with +35 years of experience in the mining industry, 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 JORC Code. Mr. Brito also meets the requirements of a competent person under the AIM Note for Mining, Oil and Gas Companies. Mr. Brito has no economic, financial or pecuniary interest in the Company and he consents to the inclusion in this document of the matters based on his technical information in the form and context in which it appears.

The 20 July 2021 updated Mineral Resource Estimate of the Pitombeiras Project is the responsibility of Mr. Mauricio Prado. MSc. Geo. MAIG, Qualified Person as defined by NI 43-101 guidelines, independent geological consultant contracted by Jangada Mines Plc. Mr. Prado is partner and principal consultant with BS Geo e Min Ltda., a Brazilian geology consulting company based on Goiânia, Brazil.

This announcement contains inside information for the purposes of Article 7 of EU Regulation 596/2014 (withdrawal). Upon the publication of this announcement, this inside information is now considered to be in the public domain.

****ENDS****

For further information please visit www.jangadamines.com or contact:

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