



ASX Announcement | 15 November 2021
Rafaella Resources Limited (ASX:RFR)

Santa Comba Tungsten Project – Resource Expansion Plans

Investment Highlights

- ① RFR is developing a 3D model for the high-grade veins at Santa Comba with the main objective of expanding the current JORC compliant Underground (UG) Inferred resources of 0.234Mt @ 0.95% WO₃ and 2,797ppm Sn for 2,221 tonnes of contained WO₃ and 655 tonnes of contained Sn (0.53% WO₃ cut-off) at Mina Carmen¹.
- ① UG development conducted by COPAREX in the 1980s at Mina Carmen extended for more than 1km southwards from the current open pit (OP) resources, **demonstrating significant upside potential for UG resource expansion both to the south and at depth.**
- ① Ongoing UG detailed geological mapping of the southernmost UG development at Carballeira area, located 1km south of the current OP resources, has demonstrated the presence of large endogranite intrusions including zones of disseminated ore, **confirming the upside potential for OP resource expansion to the south as a brownfield exploration target.**
- ① The previously announced near surface Exploration Target evaluated using JORC (2012) guidelines, stands at between 16.2Mt and 48.6Mt ranging between 0.15% and 0.22% WO₃ at a 0.05% WO₃ cut-off²
- ① An exploration programme with extensive soil geochemistry survey targeting non-outcropping disseminated ore is being planned with the target of increasing its global Mineral Resource Estimate (MRE) along the entire Santa Comba granitic massif of 8 km x 5 km falling inside the concessions.

Managing Director Steven Turner said: “Santa Comba offers tremendous upside as demonstrated by the Exploration Target identified in 2019. Work over the last 2 years has been focused on better defining the initial open pit project in order to confirm a sizable base case operation. With the resource definition work for the feasibility study now complete, the geology team is looking at advancing the underground resource definition as part of the previously announced underground development and also seeking to reconnaissance the wider known areas of mineralisation that are evident across the granitic massif.”

Rafaella Resources Limited (ASX:RFR) (“Rafaella” or “the “Company”) is pleased to announce that it is currently progressing on building a detailed 3D model of the high-grade veins based on the JORC compliant underground Inferred Resources of 0.234Mt @ 0.95% WO₃ and 2,797ppm Sn for 2,221 tonnes of contained WO₃ and 655 tonnes of contained Sn (0.53% WO₃ cut-off) .

¹ See ASX announcement dated 27 May 2019 “Rafaella Resources Signs Heads of Agreement To Acquire 100% Interest In Spanish Tungsten And Tin Project”

² See ASX announcement dated 13 June 2019 “Rafaella Resources Defines Exploration Target at Newly-Acquired Santa Comba Tungsten Project”

All vein data from recent drilling campaigns conducted by GTT, the geological data from the ongoing detailed UG mapping, the assay data from UG stockpiles, and all available historical data from the period when COPAREX operated the underground mine, is to be incorporated into the latest version of Leapfrog GEO software. Once the 3D vein model and the in-house underground Mineral Resource Estimate (UG MRE) are available, RFR will be in a position to design additional brownfield exploration drilling with the objective of increasing both the underground and open pit MRE at Santa Comba mine.

Prior to focusing on any of the known targets (figure 3), RFR will design an extensive soil geochemistry survey, which has proved to be an excellent tool in the Iberian Peninsula for discovering greenfield non-outcropping mineral deposits, with the main target of discovering non-outcropping endogranite cupolas hosting disseminated ore.

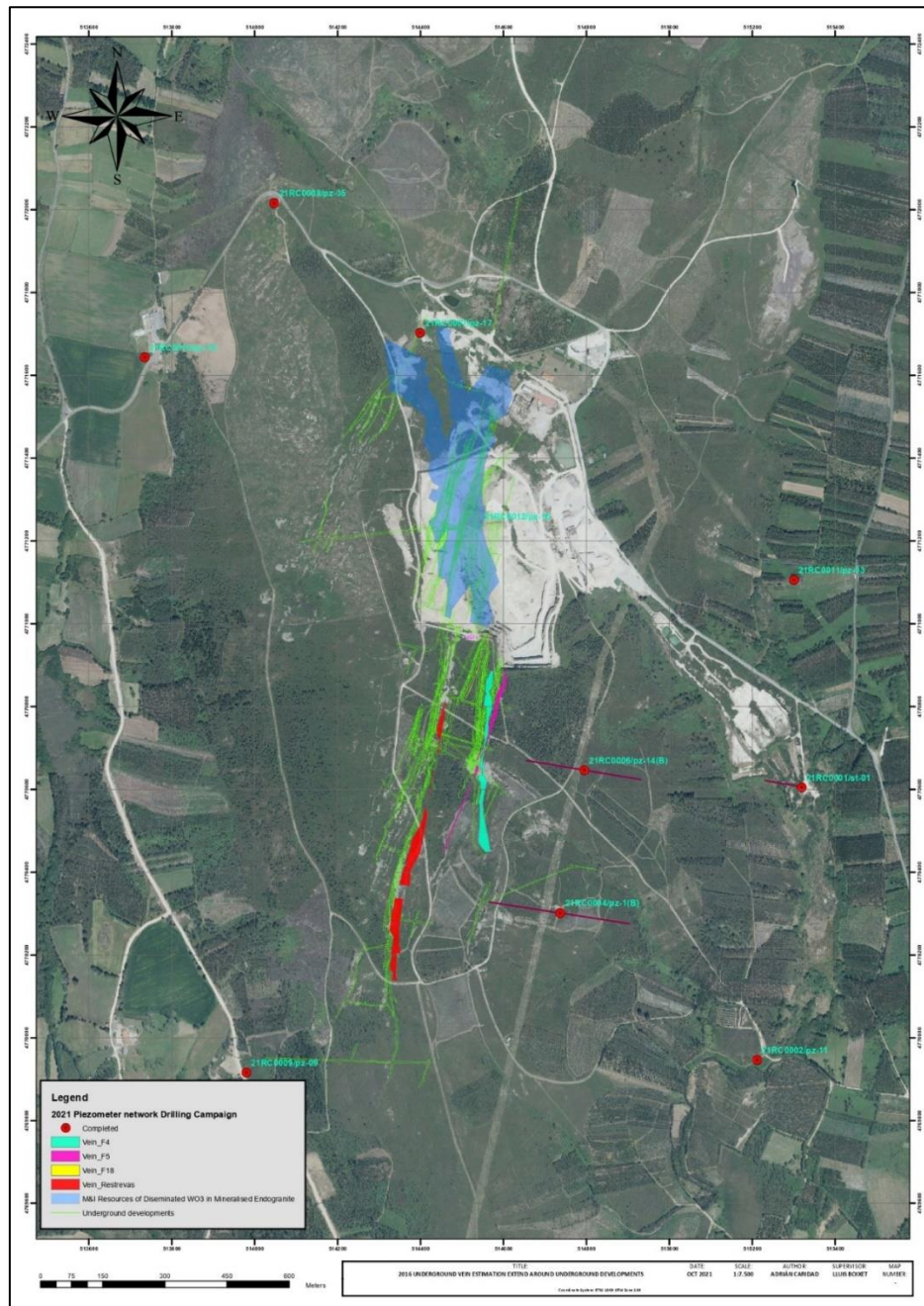


Figure 1. Image of Santa Comba project showing OP resources in pale blue, with the historic UG development in green extending by 1 Km southwards. The red dots show the location of recently emplaced piezometers.

The current JORC compliant UG MRE was conducted by an external consultant in 2016. Figure 2 is a 3D image showing the underground development by COPAREX in the 1980's, and the panels of the vein model from which were estimated the current JORC compliant UG MRE of 0.234Mt @ 0.95% WO₃ and 2,797ppm Sn for 2,221 tonnes of contained WO₃ and 655 tonnes of contained Sn (0.53% WO₃ cut-off)³.

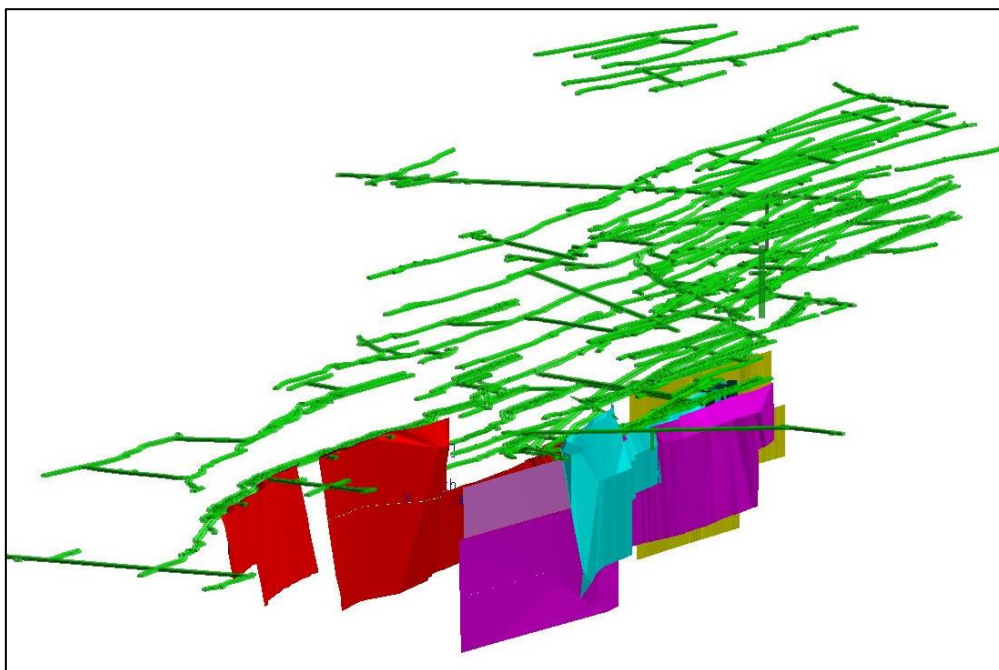


Figure 2. Underground development from COPAREX at Mina Carmen (Santa Comba Project) and underground vein supporting the current JORC compliant UG MRE.

In June 2019, RFR announced a near surface Exploration Target of between 16.2Mt and 48.6Mt ranging between 0.15% and 0.22% WO₃ at a 0.05% WO₃ cut-off⁴. This Exploration Target was based on the distribution of prospective rock type, historic bulk sampling, historic trial mining and the Mineral Resource Estimate (MRE) of 2016, evaluated using JORC (2012) guidelines.

The current MRE of the Santa Comba deposit of 10.2Mt grading 0.18% WO₃ and 162ppm Sn for 18,284t of WO₃ metal content and 1,649t of Sn metal content, announced by RFR in August, 2021⁵ is separate from the Exploration Target.

Additional Brownfield Exploration Targets

The ongoing underground detailed geological mapping conducted by GTT's geologist at the Carballeira underground development, located 1 km southwards from the current open pit MRE of Santa Comba, has demonstrated the presence of endogranite intrusion into schists for more than 80m in strike length (figure 3). This endogranite includes zones of disseminated ore which extends the potential for endogranite hosted disseminated ore by as much as a kilometer. Therefore, the exploration potential immediately south of the current open pit MRE is significant for both underground narrow high-grade quartz veins and for additional open pit resources of disseminated ore.

³ See ASX announcement dated 27 May 2019 "Rafaela Resources Signs Heads Of Agreement To Acquire 100% Interest In Spanish Tungsten And Tin Project"

⁴ See ASX announcement dated 13 June 2019 "Rafaela Resources Defines Exploration Target at Newly-Acquired Santa Comba Tungsten Project"

⁵ See ASX announcement dated 17 August 2021 "Rafaela Resources announces 42% increase in open pit Measured & Indicated Resources"

Once underground detailed geological mapping is completed for the accessible underground development, a channel sampling program will be carried out targeting both, the zones of endogranite and the high-grade quartz veins.

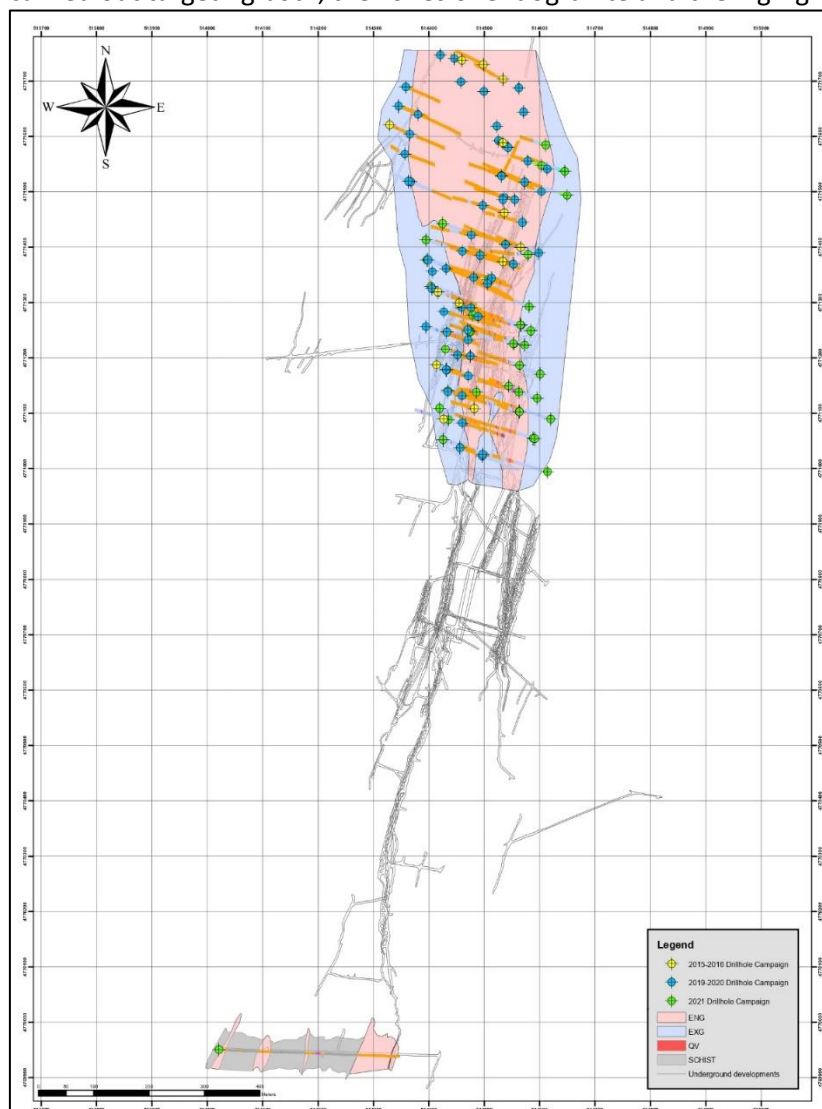


Figure 3. Geological map at +370m a.s.l. elevation. To the north, the geology has been projected from the 3D geological model based on drilling data. To the south, the geology has been projected after recent UG mapping of the entire traverse of the main vein.

Greenfield Exploration Program

In addition to the underground programme, RFR is planning to conduct a soil geochemistry survey targeting both the open pit (disseminated) and underground (high-grade quartz veins). There are many known trenches and underground works dating relating to previous artisanal mining for high-grade quartz veins trending NNE covering extensively the mining concessions (figure 4). Soil geochemistry surveying has proved to be an excellent tool for metal discoveries in the Iberian Peninsula.

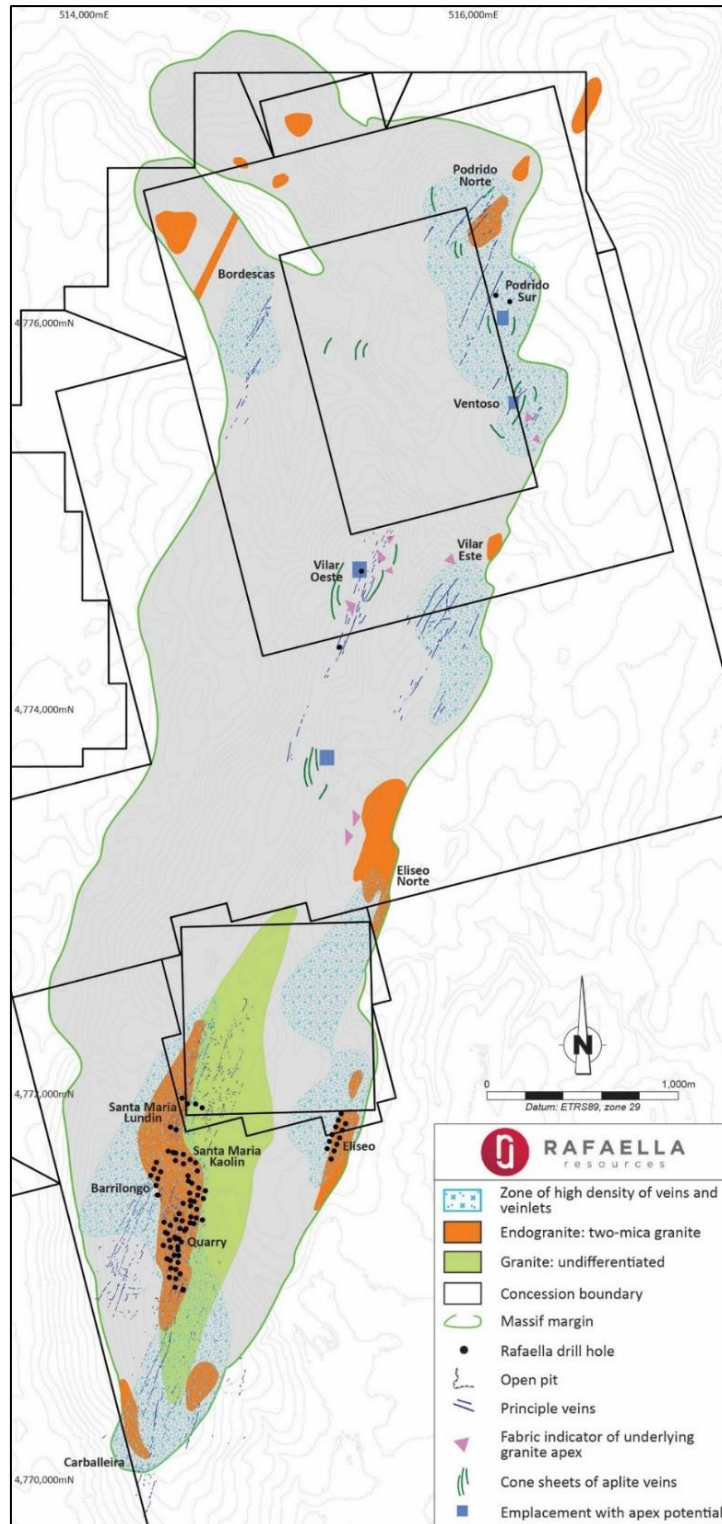


Figure 4. Regional schematic geological map showing the trace of the Santa Comba granitic massif in grey, with the main prospects of known endogranite in orange and the principal mineralized vein systems in blue.

This announcement has been authorised by the Board of Directors of the Company.

Ends

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Rafaella Resources Limited (ASX:RFR) is an explorer and developer of world-class mineral deposits. Rafaella owns the Santa Comba tungsten and tin development project in Spain, as well as the McCleery cobalt-copper project and the Midrim and Laforce high-grade nickel-copper-PGE sulphide projects in Canada. Santa Comba is located in a productive tungsten and tin province adjacent to critical infrastructure. The McCleery project was previously under-explored and holds significant potential. The Midrim and Laforce projects have had extensive drilling with some exciting intersections and offer significant upside for the Company.

To learn more please visit: www.rafaellaresources.com.au

Competent Person Statement

The information in this announcement that relates to Exploration Results and Historical Estimates is based on, and fairly represents, information and supporting documentation compiled under the supervision of Lluís Boixet Martí, a consultant to the Company. Lluís Boixet Martí holds the title of European Geologist (EurGeol), a professional title awarded by the European Federation of Geologists (EFG). EFG is a 'Recognised Professional Organisations' (ROPO) by the ASX, an accredited organisation to which Competent Persons must belong for the purpose of preparing reports on Exploration Results, Mineral Resources and Ore Reserves under the JORC (2012) Code. Lluís Boixet Martí consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Forward Looking Statements Disclaimer

This announcement contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.