

ASX ANNOUNCEMENT

8 February 2022

# JORC compliant Underground MRE increases by 24% at Mina Carmen, Santa Comba and substantial Exploration Target determined.

**Rafaella Resources Limited (ASX:RFR) ('Rafaella' or the 'Company')** is pleased to announce the results of the recently completed underground mineral resource estimation as carried out by Rafaella's Geology and Mineral Resources Department, for the Santa Comba tungsten and tin project ('Santa Comba' or the 'Project') held by Rafaella's wholly owned Spanish subsidiary, Galicia Tin and Tungsten SL ('GTT').

## Investment Highlights

- Total JORC compliant underground (UG) MRE at Mina Carmen of 291kt @ 0.95% WO<sub>3</sub> and 0.23% Sn (0.53% WO<sub>3</sub> cut-off), an increase of 24%,
  - Mina Carmen North (Quarry area) of 57kt @ 0.94% WO<sub>3</sub> and 0.01% Sn (0.53% WO<sub>3</sub> cut-off) based on GTT's drilling campaigns.
  - $\circ~$  Mina Carmen South remains unchanged from 2016 with 234kt @ 0.95% WO\_3 and 0.28% Sn (0.53% WO\_3 cut-off), based on historical data.
- Deeper drill intersections of the main vein "Restrevas North" demonstrate that WO<sub>3</sub> grade increases at depth, thus providing an exciting Exploration Target.
- The MRE shows strong increase of Sn (cassiterite) within the vein system towards Mina Carmen South, up to average grade of 0.42% Sn for Vein F5 in Mina Carmen South.
- Substantial Exploration Targets calculated for both Mina Carmen North and Mina Carmen South demonstrating further upside for underground operations.

Managing Director Steven Turner said: "The geology team at Santa Comba has spent considerable time reviewing and updating the underground data, correlating historical records, measuring the accessible underground veins and studying the results from recent drill campaigns to greatly enhance the Company's knowledge of the underground resource. Santa Comba was a historical operation until 1985 producing clean concentrate from high-grade veins. Work to reopen the permitted underground operations continues in parallel to the open pit study work. This mineral resource upgrade and importantly the exploration target is highly encouraging, as it demonstrates substantial upside for the underground operation."

Rafaella Resources Limited ABN: 49 623 130 987

ASX: RFR

Projects

- SPAIN
- Santa Comba W-Sn development
- San Finx
- W-Sn development

PORTUGAL<sup>1</sup>

- Borralha
- W development
- Vila Verde W exploration

#### CANADA

- Midrim/Laforce
- Ni-Cu-PGM exploration
- McCleery Au-Co-Cu-Ag exploration

<sup>1</sup> Pending Completion

Registered Address Level 8 175 Eagle Street Brisbane QLD 4000 AUSTRALIA

#### **Postal Address**

GPO Box 2517 Perth WA 6831 AUSTRALIA P: +61 8 9481 0389 F: +61 8 9463 6103 info@rafaellaresources.com.au www.rafaellaresources.com.au

For further information please contact: Rafaella Resources Steven Turner Managing Director +61 8 9481 0389 info@rafaellaresources.com.au



## Underground JORC Mineral Resource Estimate Upgrade

Table 1 shows the details of the underground mineral resource estimate ('UG MRE') for Santa Comba, including the Zone Mina Carmen North updated by Rafaella as of February 2022 and the unchanged UG MRE of Zone Mina Carmen South, dated August, 2016<sup>1</sup>.

UG M	lineral Resource E	stimate for I	Mina Carmen, Sa	anta Comba	- Februa	ry 2022		
Zone	Author (date)	Classification	Vein	Tonnes (kt)	WO₃ (%)	Sn (%)	WO₃ t	Sn t
			F16	12.0	0.67	0.01	80	1
UG Mina Carmen North	Rafaella (2022)	Inferred	Restrevas North	30.0	1.07	0.01	321	2
	Kalaella (2022)	merreu	Ramilla B	14.7	0.89	0.02	131	3
			Total	56.6	0.94	0.01	532	6
			F4	38.6	1.32	0.10	510	39
		Inferred	F5	51.5	1.04	0.42	536	217
UG Mina Carmen South	A. Wheeler (2016)		F8	41.1	0.80	0.26	329	109
			Restrevas South	103.1	0.82	0.28	845	291
			Total	234.3	0.95	0.28	2,219	655
TOTAL UG Mina Carmen				290.9	0.95	0.23	2,752	662

Table 1. UG Mineral Resource Estimate for Mina Carmen (Santa Comba) as of February 2022 UG Inferred: Cut-off = 0.53% WO<sub>3</sub>

Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, they are not considered material.

UG MRE for Zone Min	UG MRE for Zone Mina Carmen North at different cut-off grades - February 2022							
Cut-Off (WO₃%)	Tonnes	Grade		Metal Co (t)	ntent			
	(kt)	WO₃ (%)	Sn (%)	WO₃	Sn			
0.20%	121.8	0.60	0.02	737	21			
0.30%	80.9	0.78	0.01	633	8			
0.40%	71.0	0.84	0.01	599	7			
0.50%	56.6	0.94	0.01	532	6			

Table 2. UG Mineral Resource Estimate at different cut-off grades

## Maiden Underground Exploration Target

Rafaella has delineated substantial Exploration Targets for both Mina Carmen North and Mina Carmen South, which would require a drill program of between 3,000m to 4,000m for generating Inferred resources with the objective of 1Mt at 1.0% (WO<sub>3</sub> + Sn) combined (table 3).

UG Exploration Targets (ET) for Mina Carmen, Santa Comba - February 2022										
Zone	Range To	Range Tonnes (kt) F		Range WO <sub>3</sub> (%) Range Sn (%		Sn (%)	n (%) Range WO₃ t		Range Sn t	
	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower
UG ET Mina Carmen North <sup>#</sup>	585	351	0.87	0.66	0.02	0.02	5,063	2,316	114	70
UG ET Mina Carmen South <sup>#</sup>	766	460	0.96	0.81	0.27	0.27	7,331	3,725	2,072	1,242
TOTAL UG ET Mina Carmen <sup>#</sup>	1,351	811	0.92	0.75	0.16	0.16	12,394	6,041	2,187	1,312

Table 3. UG Exploration Targets for Mina Carmen North and South with expected ranges in tonnage and  $WO_3$  grade. # Potential quantity and grade are conceptual in nature. There has been insufficient exploration to estimate a mineral resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

<sup>1</sup> See ASX announcement dated 27 May 2019 "Rafaella Resources Signs Heads of Agreement to Acquire 100% Interest in Spanish Tungsten and Tin Project".



## **Mineral Resource Estimate Reporting Requirements**

The Company owns 100% of the Project located within a group of concessions covering 36.1km<sup>2</sup>. A significant amount of artisanal mining has occurred across the concessions exploiting quartz-wolframite veins and alluvial concentrations of wolframite. Underground mining occurred in the vicinity of Varilongo Hill, including the Mina Carmen and Santa Maria mines. The previous owners of Galicia Tin & Tungsten S.L. ('GTT') focused their activities in this area, including drilling, which resulted in the estimation of a maiden JORC 2012 near-surface Inferred MRE of 5.11Mt @ 0.20% WO3 and 138ppm Sn (0.05% WO3 cut-off) and underground Inferred Mineral Resource Estimate of 234kt @ 0.95% WO3 and 0.28% Sn (0.53% WO3 cut-off)<sup>2</sup>.

In August 2021, RFR announced JORC (2012) Open-Pit MRE of 9.97Mt @ 0.16% WO3 and 100ppm Sn (0.05% WO3 cut-off) and underground Inferred Mineral Resource Estimate of 234kt @ 0.95% WO3 and 0.28% Sn (0.53% WO3 cut-off)<sup>3</sup>.

The Santa Comba tungsten and tin project is located in the Varilongo granitic massif. The host mineralisation has dimensions of approximately 8km in the north-south direction and approximately 1.5km in the east-west direction. The elongated geometry of the massif trends 005-010° which is in concordance with the main regional structures. The intrusive body is hosted by metamorphic rocks corresponding to Santiago Unit, one of the Basal Units of Ordenes Allochthon Complex, which is part of Galicia-Trás-os-Montes Zone (GTMZ), included itself in the Iberian Massif of the Variscan Orogen (Figure 1). The metamorphic rocks are comprised of schists, paragneisses and felsic orthogneisses.

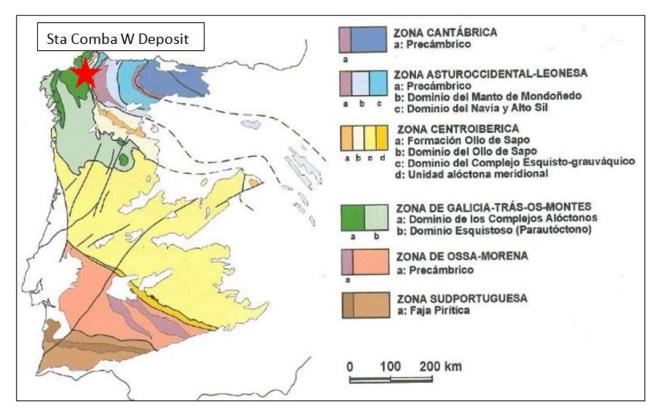


Figure 1. Location of the Santa Comba W deposit into the Iberian Massif Zonation map according to Farias et al. (1987).

<sup>&</sup>lt;sup>2</sup> See ASX announcement dated 27 May 2019 "Rafaella Resources Signs Heads of Agreement to Acquire 100% Interest In Spanish Tungsten And Tin Project".

<sup>&</sup>lt;sup>3</sup> See ASX announcement dated 17 August 2021 "Rafaella Resources announces 42% increase in open pit Measured & Indicated Resources"



The massif (Figure 2) is not homogeneous and is composed of at least three main, well defined granite types, known as two mica exogranite (EXG), biotitic exogranite (BEXG) and endogranite (ENG) in keeping with the terminology of previous explorers. These facies or lithologic types include some internal variations or subfacies and there are also some varieties with intermediate compositions. The endogranite lithology has been the focus of Rafaella's 2019-2020 and 2021 drilling activities and hosts widespread disseminated tungsten and tin mineralisation. The predominant tungsten mineral is wolframite with minor scheelite. The tin mineral is ubiquitously cassiterite.

All granite types are crosscut by abundant quartz veins parallel or subparallel to the regional foliation of the massif (005-010°). It is these veins that host the tungsten-tin mineralisation which was the primary focus of historical mining activities throughout the massif. The veins are more prevalent in the southernmost area of the massif and it is here where extensive underground mining activities occurred periodically between the 1940's and 1980's. Cutting the massif there is also an important set of fractures and faults. Highlighting among them there are some NW-SE faults which frequently induct variable kaolin alteration, sufficiently strong in some areas that they have been economically exploited in the past.



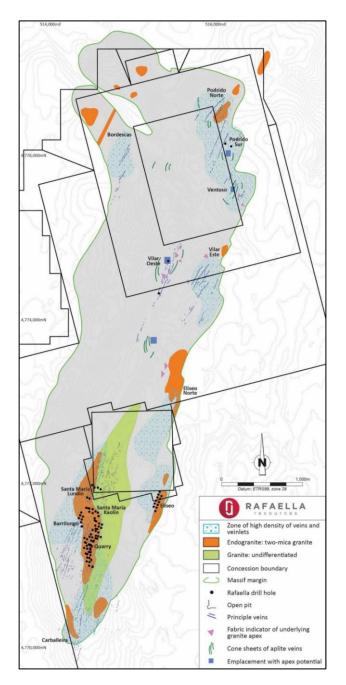


Figure 2. General map of the Varilongo granitic massif, highlighting the granite facies (after Coparex, 1985).

Following the acquisition of GTT in August 2019, Rafaella completed additional drilling at the project which resulted in a significant upgrade to the Open-Pit MRE<sup>4</sup>. The updated MRE was based on 64 diamond (ddh) drillholes (8,209m; 2,496 samples) and 24 reverse circulation (RC) drillholes (2,908m; 877 samples) which included the 2016 drilling.

In April 2021, RFR completed a diamond drill programme with 37 ddh for a total of 5,808.35m. Additionally, the geotechnical drillhole 20GTF003 drilled in 2020, has been included in the 2021 drilling campaign for resource modelling for a total of 38 ddh and 5,958.85m.

<sup>4</sup> See ASX announcement dated 01 July 2020 "Rafaella Resource announces significant Mineral Resource Estimate upgrade".



In August 2021, RFR announced an updated JORC (2012) Open-Pit MRE of 9.97Mt @ 0.16% WO3 and 100ppm Sn (0.05% WO3 cut-off) with a 42% increase in the Measured and Indicated categories with respect to the previous MRE<sup>5</sup>. The underground Inferred Mineral Resource Estimate of 234kt @ 0.95% WO3 and 0.28% Sn (0.53% WO3 cut-off) remained unchanged.

During the second half of 2021, the Geology and Mineral Resource department of RFR focused on the underground vein system of Mina Carmen developing detailed 3D models of the main veins.

The data available for UG MRE purposes at Mina Carmen covers 2 different logical zones or prospects, referred to as Zone Mina Carmen North and Zone Mina Carmen South.

Figure 3 is the orthoimage showing the modelled veins, GTT's DDH collar location and the fault that separates Zone Mina Carmen North from Zone Mina Carmen South.

<sup>5</sup> See ASX announcement dated 17 August 2021 "Rafaella Resources announces 42% increase in open pit Measured & Indicated Resources"



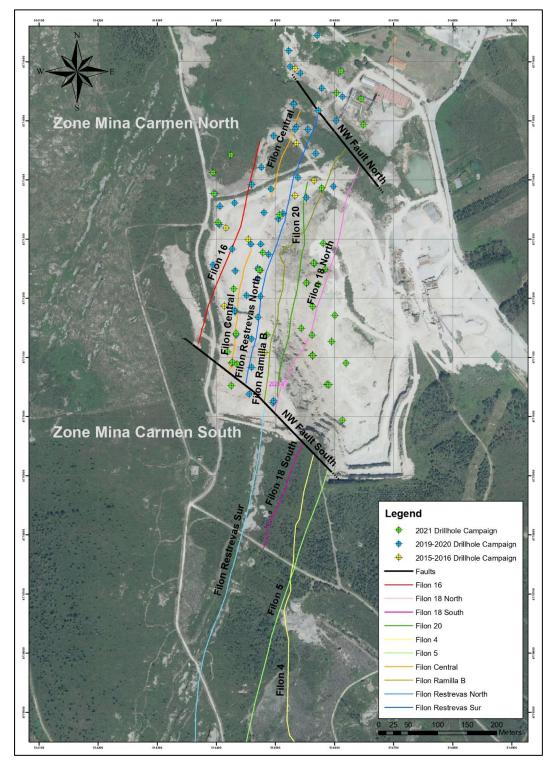


Figure 3. Orthoimage showing surface projection of Mina Carmen Vein System of the Santa Comba Project and Collar location of DDH used for the "In House" UG MRE at Zone Mina Carmen North. NW Fault South separates Zone Mina Carmen North from Zone Mina Carmen South with 50m offset.



Because no additional assay data has been produced from Zone Mina Carmen South since the previous JORC compliant Underground Inferred Mineral Resource Estimate of 234kt @ 0.95% WO3 and 0.28% Sn (0.53% WO3 cut-off)<sup>6</sup>, this UG MRE has been kept unchanged. However, with the purpose of delineating reasonable Exploration Targets at depth, the 3D models have been extended to +60m asl, similarly to the Zone Mina Carmen North.

This technical report refers to Zone Mina Carmen North, where GTT's drilling campaigns have been conducted.

Drillholes were completed on a nominal 40m spacing with sections spaced 40m apart. Diamond drilling consisted of PQ, HQ and NQ size and sampled predominantly as 3m lengths of ½ core for HQ and NQ and ¼ core for PQ. For UG MRE purposes, sample length of zones including high grade quartz vein type, 1.5m sample length has been collected. RC sampling was completed by making 3m composites from 1m samples.

For the 2015/2016 and 2019/2020 drill programmes assays were completed by ALS Global via Seville with analysis completed in Loughrea, Ireland. Primary assaying was done by using multi-element ICP (ALS code ME-MS81). For returned ICP assays greater than 10,000ppm W, fused disks were created and analysed with XRF (ME-XRF10 in 2016 and ME-XRF15b in 2020). Rafaella's QAQC procedures included the insertion of duplicates, blanks and commercial certified reference materials with all samples submitted. The QAQC procedures in both drilling programmes yielded acceptable results.

For the 2021 drill programme, the cut-core samples were sent to SGS Huelva preparation laboratory in south Spain. Primary assaying was done by using multi-element ICP with sodium peroxide fusion (SGS code GE\_IMS90A50). For returned ICP assays greater than 10,000ppm W, fused disks were created and analysed with XRF GE\_ICP90A50 (W). For returned XRF assays greater than 40,000ppm W, additional pulp was analysed by XRF coded XRF72 (W). The pulps for assay were sent from SGS Huelva to SGS Burnaby, Canada. In 2021 drill programme a total of 1,655 samples were submitted which included 1,334 drill samples and 321 control samples for QA/QC yielding acceptable results.

In the opinion of the author of this report, the geological data collated in the course of the 2015-2016, 2019-2020 and 2021 drilling campaigns have been collected in line with good industry practice, allowing the results associated with these data to be reported in accordance with the guidelines of the JORC Code (2012).

The UG MRE evaluation work was carried out and prepared in accordance with the JORC Code (2012) by using a 3D block modelling approach in Leapfrog GEO and Leapfrog EDGE.

The 3D models at Zone Mina Carmen North have been based mainly on GTT's drilling campaigns but also considered the UG development from historical maps digitised from Coparex which, in turn, required minor adjustments of coordinates (minus 14m in X, plus 1m in Y and Z remained the same) supported by a technical report from a registered professional topographer, to accurately reconcile the dxf files with ETRS89 reference system.

The process for building accurate 3D model with Leapfrog GEO for each vein, required detailed work of grouping drill intersections according to the structural geology controlling the vein system and the Underground development. Drill "VOIDS" corresponding to old workings have been included as indicator of the vein. Subsequently, all drill intersections into the 3D model have been validated by geologists. A new field for each vein was generated by including "NIL" for those intersections into the 3D model that failed to intersect "VOID" or "QV" (quartz Vein). "NIL" coding is key for contouring the limits of the vein wireframe along strike. All 3D models have been extended to a depth of +60 asl elevation except for those subsidiary veins intersected by mother veins at depth. Figure 7 corresponds to the 3D model longitudinal projection of "Restrevas North" vein including all drill intersections ("VOID", "QV" and "NIL"). Extension of the 3D model at depth is reasonable for Exploration Target.

<sup>&</sup>lt;sup>6</sup> See ASX announcement dated 27 May 2019 "Rafaella Resources Signs Heads of Agreement to Acquire 100% Interest In Spanish Tungsten And Tin Project".



A total of 6 veins have been modelled for Zone Mina Carmen North as follows, from West to East:

- 1. F16
- 2. Central
- 3. Restrevas North
- 4. Ramilla B
- 5. F 20
- 6. F 18 North

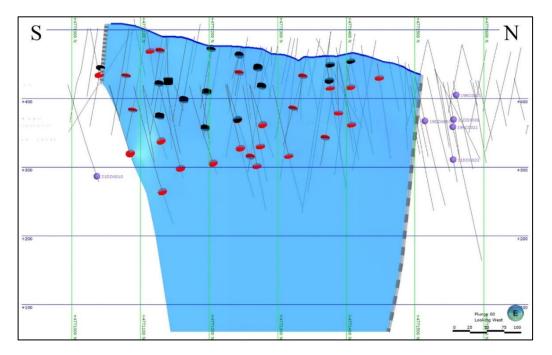


Figure 4. Longitudinal projection of "Restrevas North" vein 3D model in blue, showing drill intersections corresponding to "VOIDS" in black, "QV" in red and "NIL" in blue. The solid is limited by NW subvertical fault system, to the North and to the South.

Additionally, based on "VOID" drill intersections, a 3D "VOID" model (figure 5) has been generated for Zone Mina Carmen North. The intersection of each 3D Vein model with the 3D "VOID" model is showing the portion of the vein system that has been partially mined out. The "QV" intersected inside the 3D Vein models within the 3D "VOID" model represent the pillars of the underground operation. These "Pillars" should be excluded of any UG MRE but, they might well be included in the Open-Pit MRE. The ratio "Pillars"/"Pilars"+"VOIDS", factoring rock density of 2.70t/m3 for the vein models within the 3D "VOID" model would be a reasonable procedure as to determine the average tonnage of the vein, only for Open Pit MRE purposes.



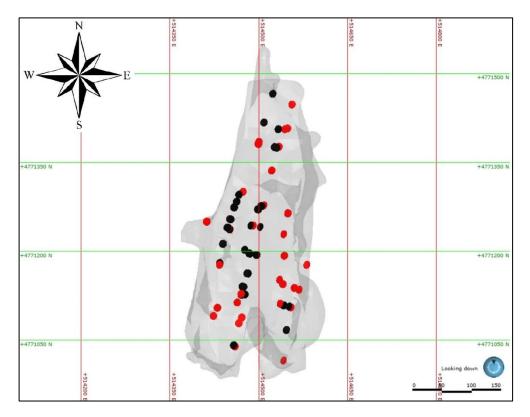


Figure 5. 3D "VOID" model showing "VOID" drill intersections in black and "QV" drill intersections in red, within the 3D vein models.

A total of 77 "QV" (quartz vein) drill intersections, 40 "VOID" drill intersections and 21 "NIL" intersections have been used for the 3D modelling process of Zone Mina Carmen North.

For Zone Mina Carmen South the 3D vein models have been built considering the UG development from digitised maps and longitudinal sections of Coparex. No drilling data was available for 3D modelling since GTT's drilling campaigns were constrained to Zone Mina Carmen North, not reaching Zone Mina Carmen South. The 3D models are coincident with those modelled by Adam Wheeler for the UG MRE 2016 purposes except for the coordinate adjustments made for reconciling with ETRS89 system. The 3D models have been extended to a depth of +60m asl similarly to Zone Mina Carmen North, with the purpose of delineating reasonable Exploration Target.

A total of 4 veins have been modelled for Mina Carmen South as follows, from West to East:

- 1. Restrevas South
- 2. F 18 South
- 3. F 5
- 4. F4

Rock density for previous Open Pit MRE purposes of disseminated ore hosted in endogranite of  $2.65t/m^3$  had been derived from 117 endogranite lithologies and an average of  $2.63 t/m^3$  had been derived from 49 measurements from the exogranite lithologies.

For UG MRE purposes, additional rock density measurements have been collected including the whole length of the sample of 1.5m (table 4). Rock density for high grade quartz veins is very much dependant on wolframite grade. Historical data available from Coparex files suggested  $2.70t/m^3$  as an average rock density for the vein systems.



Hole_ID	Rock Density	Rock Type	Vein_ID
21DD0029	2.71	TENG. QV (13cm) with high W+Apy	Restrevas North
21DD0012	2.96	ENG. QV (30cm) with high W+Apy+Py	Ramilla B
21DD0019	2.70	ENG. QV (6cm) with high W+Apy	Ramilla B
21DD0001	2.72	ENG. QV (5cm) with high W	F 20
21DD0021	2.78	ENG. QV (8cm) with high W+Apy+Helv	Restrevas North
21DD0014	2.68	ENG. QV (20cm) with weak W+Apy+Py	Ramilla B
21DD0022	2.79	ENG. QV (20cm) with high W+Apy+Py	Restrevas North
21DD0028	2.66	ENG. QV (4cm) with weak W+Apy+Py	Ramilla B
21DD0012	2.66	ENG. QV (4cm) with weak W+Apy+Py	Ramilla B
21DD0011	2.64	EXG. QV (3cm) with weak W	F19B
21DD0011	2.65	EXG. QV (2cm) with medium W	F 20
21DD0014	2.65	ENG. QV (10cm) with weak W Restrevas No	

Table 4. Rock vein density measurements of 1.5m drillhole intervals including mineralized veins.

For consistency, RFR has used  $2.70t/m^3$  in this UG MRE. The author of this report recommends additional rock density measurements for the vein system in future exploration programmes.

Parent block model of 5m x 5m x 5m for the entire deposit was generated with minimum sub-blocking allowed of 0.3125m in X, 0.625m in Y and 1.25m in Z.

Grade estimation of WO<sub>3</sub> and Sn grades into the block model was completed independently for each vein using indicator inverse distance weighting (ID) and nearest neighbour estimation (NN) for validation purposes. Only assay data from "QV" within each vein wireframe have been included for grade interpolation, even if it was low grade. "NIL" drill intersections have been used only for the 3D modelling process by contouring the borders of the vein but have kept external to the 3D models for interpolation process. "VOID" drill intersections have also been used for 3D modelling but have been excluded of the interpolation process since no assay data was available.

Quantity of drill intersections for each quartz vein resulted too low for building robust variograms. However, historical channel sampling data in Zone Mina Carmen South was sufficient for geostatistics purposes. The variograms of vein "Restrevas South" has proved no directional anisotropy for orientation of estimation searching ellipsoid with range distances of about 50m for both, major axis and for semi-major axis.

Estimated grades were validated against the input composite data. A visual comparison of the sample grades and the estimated block grade was conducted in longitudinal section. Figure 6 is an example of longitudinal projection of "Restrevas North" vein comparing drillhole sample WO<sub>3</sub> grades and block model WO<sub>3</sub> grades. Visually, the model is considered to reflect the input sample data.



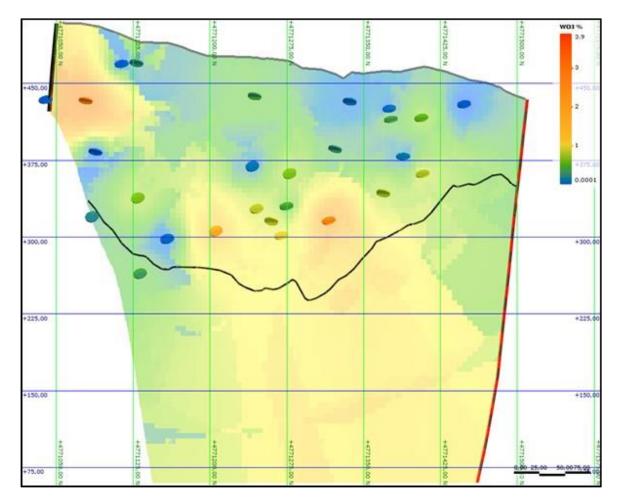


Figure 6. Longitudinal projection of "Restrevas North" vein showing BLK model grade and original sample grade

The deepest drillhole samples show the highest grades of the "Restrevas North" vein, with subsequent positive impact to the Exploration Target at depth.

Validation of the block model grade was also carried out by statistical comparisons between original sample WO3 grades and BLK model WO<sub>3</sub> grades, for each vein. Figure 10 shows the statistics comparison for "Restrevas North" vein showing higher mean grade of the block model with respect to the mean grade of original samples due to the positive effect of the highest grade samples of the deepest drillholes in the interpolation of the deep resources.

Globally no indications of significant over or under estimation are apparent in the model, nor were any obvious interpolation issues identified for inferred resources. From the perspective of conformance of the average model grade to the input data, the author considers the model to be a satisfactory representation of the sample data used and an indication that the grade interpolation has performed as expected.

It is recommended underground channel sampling to be carried out in accordance with the best practices of JORC code, for geostatistical purposes and additional drilling of the deepest portion of the deposit as there are good indications for the  $WO_3$  grade of the veins to increase at depth.



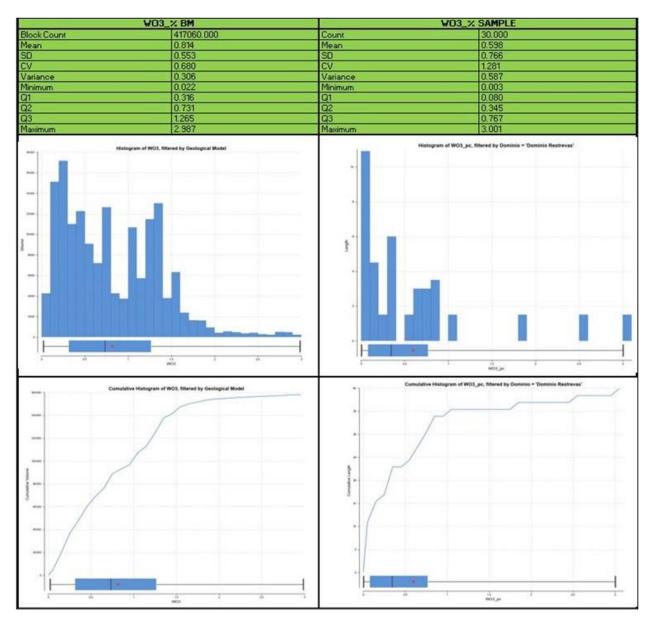


Figure 10. Statistics comparison of WO<sub>3</sub> grade of original samples and BLK model.

Resource classification followed the guidelines of the JORC Code (2012). The main principles governing the operation and application of the JORC Code (2012) are transparency, materiality and competence.

It is considered that the high-grade quartz veins at Santa Comba deposit require additional exploration to assign Measured and Indicated resources. However, there is sufficient information to delineate Underground Inferred Mineral Resources as defined by the JORC Code (2012).

The key drillhole spacings for the allocation of resources can be summarised as follows:

• Inferred Resources - Limited to a maximum extrapolation distance of 100m.

The current Underground Mineral Resource Estimate excludes the Open Pit MRE of Wardell Armstrong of August 2021 avoiding any duplicity of resources. The only resources reported fall underneath the Optimized Pit for WAI MRE of August 2021.



UG Mineral Resources were further limited based on an expectation of eventual economic underground extraction using cut-off grade of 0.53% WO<sub>3</sub> with 0.70m mining width.

The Mineral Resource Estimate for the Mina Carmen Underground project is classified in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves [JORC Code (2012)]. The stated Mineral Resources are not materially affected by any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues, to the best knowledge of the author. There are no known mining, metallurgical, infrastructure, or other factors that materially affect this Mineral Resource Estimate, at this time.

Table 5 details the Underground Mineral Resource Estimates of Zone Mina Carmen North of 2022 (Rafaella) including the unchanged UG MRE of 2016.

UG M	UG Mineral Resource Estimate for Mina Carmen, Santa Comba - February 2022								
Zone	Author (date)	Classification	Vein	Tonnes (kt)	WO₃ (%)	Sn (%)	WO₃ t	Sn t	
			F16	12.0	0.67	0.01	80	1	
UG Mina Carmen North	Pofoello (2022)	Inferred	Restrevas North	30.0	1.07	0.01	321	2	
OG Milla Carmen North	Rafaella (2022)	merreu	Ramilla B	14.7	0.89	0.02	131	3	
			Total	56.6	0.94	0.01	532	6	
			F4	38.6	1.32	0.10	510	39	
			F5	51.5	1.04	0.42	536	217	
UG Mina Carmen South	A. Wheeler (2016)	Inferred	F8	41.1	0.80	0.26	329	109	
			Restrevas South	103.1	0.82	0.28	845	291	
			Total	234.3	0.95	0.28	2,219	655	
TOTAL UG Mina Carmen				290.9	0.95	0.23	2,752	662	

Table 5. UG Mineral Resource Estimate for Mina Carmen (Santa Comba) as of February 2022 UG Inferred: Cut-off = 0.53% WO<sub>3</sub>

Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, they are not considered material.

UG MRE for Zone Mina	UG MRE for Zone Mina Carmen North at different cut-off grades - February 2022							
Cut-Off (WO₃%)	Tonnes	Grade		Metal Co (t)	ntent			
	(kt)	WO₃ (%)	Sn (%)	WO₃	Sn			
0.20%	121.8	0.60	0.02	737	21			
0.30%	80.9	0.78	0.01	633	8			
0.40%	71.0	0.84	0.01	599	7			
0.50%	56.6	0.94	0.01	532	6			

Table 6. UG Mineral Resource Estimate at different cut-off grades

The UG MRE of Rafaella has delineated Exploration Targets for both, Mina Carmen North and Mina Carmen South which would require a drill program between 3,000m to 4,000m for generating Inferred resources (table 7).

UG Exploration Targets (ET) for Mina Carmen, Santa Comba - February 2022												
Zone		Range Tonnes (kt)		Range		Range	Range Sn (%)		Range WO₃ t		Range Sn t	
	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher	Lower		
UG ET Mina Carmen North <sup>#</sup>	585	351	0.87	0.66	0.02	0.02	5,063	2,316	114	70		
UG ET Mina Carmen South <sup>#</sup>	766	460	0.96	0.81	0.27	0.27	7,331	3,725	2,072	1,242		
TOTAL UG ET Mina Carmen <sup>#</sup>	1,351	811	0.92	0.75	0.16	0.16	12,394	6,041	2,187	1,312		

Table 7. UG Exploration Targets for Mina Carmen North and South with expected ranges in tonnage and  $WO_3$  grade.



# Potential quantity and grade are conceptual in nature. There has been insufficient exploration to estimate a mineral resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

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

#### Ends

For further information, please contact:

Rafaella Resources	Media Enquiries	Investor Enquiries
Steven Turner Managing Director P: +61 (08) 9481 0389 E: <u>info@rafaellaresources.com.au</u>	Giles Rafferty FIRST Advisers P: +61 481 467 903	Victoria Geddes FIRST Advisers P: +61 (02) 8011 0351

#### **About Rafaella Resources**

Rafaella Resources Limited (ASX:RFR) is an explorer and developer of world-class mineral deposits. Rafaella owns the Santa Comba and San Finx tungsten and tin development projects in Spain, as well as having agreed the acquisition of the Borralha and Vila Verde tungsten projects in northern Portugal. The recently acquired San Finx project lies 50km south from the Company's flagship Santa Comba tungsten and tin mine in Galicia, NW Spain. The Portuguese projects to the south are highly complementary to the Spanish projects, all within the same geological belt, strengthening the Company's strategic position in the Iberian Peninsula and its long-term goal of being a significant supplier of the critically listed metals of tungsten and tin.

Rafaella also holds an exploration portfolio in Canada, comprising the Midrim and Laforce high-grade nickelcopper-PGE sulphide projects in Quebec and the McCleery cobalt-copper project in the Yukon. 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**

Competent Person from RFR who supervised the Underground Mineral Resource Estimate and undertook the production of this report is Mr LLuís Boixet, BSc, EurGeol, Consultant to RFR, manager of the Geology and Mineral Resources department. The Competent Person is not considered independent to RFR. He led GTT's drilling programmes of 2019-2020 and of 2021 on site, at Santa Comba.

The information in this announcement that relates to Exploration Results is based on, and fairly represents, information and supporting documentation compiled under the supervision of Lluis Boixet, a consultant to the Company. Lluis 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. Lluis 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.

The underground inferred MRE that remains unchanged from 2016, was undertaken by Mr Adam Wheeler who is a professional fellow (FIMMM), Institute of Materials, Minerals and Mining. Mr Wheeler is an independent mining consultant with sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Wheeler consents to the inclusion of this information related to the underground mineralisation in the form and context in which it appears in this report.



## 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.



# JORC Code, 2012 Edition - Table 1 report

# Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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>Principal samples in the 2015-2016 and 2019 drill programs were derived from diamond drill core. Other sample used in the resource estimation included RC drill chips (RFR &amp; GTT). Other samples used for reference purposes were surface rock chips (GTT &amp; Incremento Grupo Inversor (IGI)), underground channel sampling along adits (GTT) and historic underground channel sampling completed by Coparex during sublevel drive development and gallery (stope) exploitation.</li> <li>Samples from 2021 drill program are derived from diamond drill core (½ of HQ core or ¼ of PQ core with approximate weight of 4-5 Kg per</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>Drilling was oriented as far as possible, according to local geography and access, to be perpendicular to the mineralised structures.</li> <li>For the 2015-2016 drilling programme, drill collars were located using a GPS accurate to +/-3m. For the 2019 drilling programme, collars were located using a Geomax Zenith 35 GPS accurate to +/-3mm. For the 2021 drill programme, all drill collars have been located by means of GPS LEICA GS-16 accurate to +/-5mm.</li> </ul>
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g 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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Mineralisation was determined using lithological changes, assaying, as well as UV light picking up any occurrences of scheelite. Disseminated mineralisation is associated with a two-mica endogranite and vein mineralisation predominantly associated with quartz veins or as pure wolframite veins.</li> <li>In the Coparex era of underground mining (in the 1980's), the principal method of sampling was by channel sampling of development or stope faces. Channels were cut by hand across the mineralised width, approximately 5cm in height, 1cm in depth, giving typically 2kg samples.</li> </ul>



Drilling	• Drill type (eg core, reverse circulation, open-hole hammer,	• Diamond drilling contractors for the 2015-2016 drill programme: SPI
techniques	rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond	(Sondeos y Perforaciones Industriales del Bierzo (León)). Drill rig SPI DRILL 160-D (made by SPI); 24 holes for 2,481m.
	tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Diamond drilling contractors for the 2019 drill programme: Geonor (La Coruña).</li> <li>Drill rig Atlas Copco CS-14C.</li> </ul>
		• Diamond drilling contractors for the 2021 drill programme: SPI (Sondeos y Perforaciones Industriales del Bierzo (León)). Drill rig SPI DRILL 160-D (made by
		<ul> <li>SPI).</li> <li>Reverse Circulation (RC) contractors for the 2015-2016 drill programme: EDASU (Madrid). Drill rig: EDASU RCG 2500 (made by EDASU); 3 drill holes for 255m.</li> </ul>
		<ul> <li>Reverse Circulation (RC) contractors for the 2019 drill programme: SPI (Sondeos y Perforaciones Industriales del Bierzo (León)). Drill rig SPI DRILL 260 (made by SPI).</li> </ul>
		<ul> <li>The primary sample database for the 2015-2016 drill programme contains data from 27 surface drill holes. 23 of these drill holes were used in the 2016 JORC MRE (3 RC drill holes for 255m; 20 diamond drill holes for 2,020m).</li> </ul>
		<ul> <li>The primary sample database for the 2019 drill programme contains data from surface drill holes ((21 RC drill holes for 2,650m; 44 diamond drilling for 6,176m).</li> </ul>
		• For both drill programmes, diamond core was mostly HQ size. Holes were collared using PQ size. Only NQ was used when no voids were encountered.
		• A similar approach has been carried out for 2021 programme with diamond core size of PQ and HQ.
		• The primary sample database for the 2021 program contains data from surface drill holes (38 DDH and 5,958.85m).
		• For the 2015-2016 drill programme, diamond core was oriented with spear marks every 9m. No core was oriented during the 2019/2020 drill programme, except for 3 geotechnical drillholes 20GTF001, 20GTF002 and 20GTF003, that had been oriented with DEVI CORE BTT. DDH 20GTF003 has been sampled and
		included in 2021 drill programme.
		<ul> <li>No core was oriented during the 2021 resource drill programme. 1 geotechnical drillhole 21GTF001, which has not been included in the resource model was oriented with GC2-GyroCore from SPT.</li> </ul>
		<ul> <li>In the Coparex era of underground mining, no information is known about the drilling techniques.</li> </ul>



Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <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>Core recovery measured directly from drilled length by a geologist.</li> <li>Core recovery was very high, generally greater than 98%.</li> <li>For the 2019 RC drill programme, sample recovery was greater than 90%. RC sample recovery was calculated by weighing the whole sample bag at the rig site before primary splitting.</li> <li>Sample collection was supervised by a site geologist who ensured samples were representative and recovery was acceptable for resource estimation.</li> <li>There was no evidence of sample bias or any relationship between sample recovery and grade.</li> <li>For the 2021 drill programme the same methodology has been applied with very high recoveries greater than 98%.</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> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>The whole core was logged to a level of detail to support an MRE.</li> <li>For the 2015-2016 drill programme all core was orientated with a spear mark at intervals of 9m. Orientation lines were marked on the core.</li> <li>Logging was completed recording lithology, mineralogy, veining, textures and alteration features. A coded logging procedure was implemented. UV light was run over all core in order provide an indication of scheelite.</li> <li>Logging was both qualitative and quantitative.</li> <li>All drill core and RC drill chips were photographed.</li> <li>In both drill hole databases, 99% of the core &amp; RC chips from the drilling has been logged.</li> <li>For the 2021 drill programme the same logging techniques have been applied with same templates as previously.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.</li> <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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Selected core samples were sawn longitudinally such that one ½ of HQ core and ¼ of PQ core was sent to the laboratory. The 2015-2016 drill core was oriented so that the same side taken for sampling down each hole. ¼ core was only taken from PQ core. Sample length maximum is 3m, then smaller for lithological changes. The majority of samples were 3m in length. 3m length samples of ½ HQ core weighed approximately 15kg.</li> <li>In the 2015-2016 drill programme, limited reverse circulation drilling was undertaken at Eliseo and Santa Maria prospects. In the 2019 drill programme, limited RC drilling, 1m samples were passed through a standard splitter and the sub-samples combined into 3m composites.</li> <li>Samples were sent to ALS in Seville for sample preparation (DRY-21, CRU-31, SPL-22Y, PUL-32). Pulps were sent to ALS's Canadian facilities for analysis.</li> <li>Surface rock chip and underground channel sampling completed by GTT were collected using either pick and shovel or a portable air-driven jackhammer. Samples were crushed on site with a jaw crusher to <i>ca</i>10mm and then passed through a standard splitter. Approximately 2kg sub-samples were collected for analysis.</li> </ul>



- Coarse duplicates, produced by ALS using a Boyd rotary splitter, show a good correlation between original and duplicate samples.
- It is considered that the sample sizes used are appropriate for the mineralisation at Santa Comba.
- For the 2021 drill programme, similar sampling procedure was applied with maximum sample length of 3.0m for samples in disseminated ore and 1.5m for samples including wolframite bearing quartz veins. All samples have been sent to SGS Huelva for preparation (PRP95) and pulps are sent to SGS's Canadian facilities.



Criteria	JORC Code explanation	Commentary
Quality of assay data and aboratory sests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld 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> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Primary assaying was completed by multi-element ICP (ALS code ME_MS81). For returned ICP assays greater than 10,000 ppm W, fused disks were creat and analysed with XRF (ME_XRF10 in 2015-2016 and ME_XRF15b in 2019). Ti analytical methods are considered appropriate for the style of mineralisatic (predominantly wolframite).</li> <li>The historical samples produced by the Coparex underground channel sampling were subsequently analysed gravimetrically in an on-site laborato as wt% W03. These grade values were used with the mineralised width to determine an accumulation value for W03 in term of kg/m<sup>2</sup>. Tin grades were also determined in the same way. The kg/m<sup>2</sup> grades were theng generally plotted on long section for subsequent stope planning purposes. Geologists also made detailed face maps. As Coparex geologists gained more experien with mine production, they also estimated grades directly in kg/m<sup>2</sup>, based the observed veins and wolframite crystals. These were also recorded with position and used for estimation purposes. In addition to channel samples a estimated grades, the contents of complete rounds would also be mined separately and treated at a small pilot plant facility on-site. This also enab a check grade estimate at these positions.</li> <li>No geophysical tools were used.</li> <li>Control samples were submitted (1 control sample for every 5 samples or 21 of total analyses), in the form of standard samples (GW-02, GW-03), blanks and coarse duplicates. ALS and SGS also submitted their own internal contr samples, in the form of standards, pulp duplicates and wet chemical blanks for assay.</li> <li>For the standards, no two standards in any batch varied by more than 2 of r the analysed mean implying a good level of analytical precision. Certified blanks were used and analysis at acceptable levels. Course duplicates show good correlation between original and duplicate samples.</li> <li>For the 2021 drill programme primary assaying has been completed at SGS's Canadian faciliti</li></ul>



#### Verification of sampling and assaving

- The verification of significant intersections by either independent or alternative company personnel.
- The use of twinned holes.
- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.

- No external verification done.
- No specific twinholes were drilled
- All the QC data from 2015-2016 and 2019-2020 was reviewed by Dr Lachlan Rutherford (Project Manager, GTT; GM Exploration, RFR) who is a Competent Person under the JORC Code (2012) and was a consultant to both companies.
- For the 2021 drill campaign, all QC data was verified by Senior geologist Lluis Boixet Martí (EurGeol) as a professional title awarded by European federation of Geologists (EFG). EFG is a "Recognised Professional Organisation" (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 Code (2012). All drilling data for the 2021 drilling campaign has been validated by internal geologists of the company and confirmed by Lluis Boixet before forwarding any data to Wardell Armstrong for 2021 Open-Pit MRE purposes.
- Primary data for the 2015-2016, 2019-2020 and 2021 drilling campaigns was entered and maintained in an Excel database. Data is imported to Leapfrog GEO for verification. Any problems encountered during the hole data import, combination and surveying process were resolved internally with company geologists. No top-cuts were applied.



Criteria	JORC Code explanation	Commentary
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 Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>For the 2015-2016 drill programme, hole collar locations were determined by GPS accurate to +/-3m. For the 2019 drill programme, collar locations were determined by Geomax Zenith 35 GPS accurate to +/-3mm.</li> <li>For the 2021 drill programme, all drill collars have been surveyed by means of GPS LEICA GS-16 accurate to +/-5mm.</li> <li>For the 2015-2016 drill programme downhole surveys taken using REFLEX EZ- SHOT nominally every 40m and at end of hole. For the 2019 drill programme, downhole surveys taken using a SPT MagCruiser MM013 survey tool.</li> <li>For the 2021 drill programme down hole survey is determined after completion of each drill hole, with Reflex GYRE E755 or SPT Mag Cruiser.</li> <li>Grid: ETRS89 UTM Zone 29.</li> <li>No procedural documentation on surveying data points exists from the Coparex era, hence the precise location of data points cannot be accurately determined.</li> <li>Topography established from Lidar satellite data (2014), Updated Digital Terrain Model (DTM) by means of UAV aerial LIDAR survey, flown in February, the 10th, 2021 which enabled to penetrate vegetation and produce a highly accurate Digital Terrain Model over the quarry area and from digitised historical Coparex plans.</li> <li>For 2022 "In House" UG MRE purposes, a Technical Report on coordinates system adjustment of the digitised historical Coparex plans.</li> <li>For 2022 "In House" UG MRE purposes, a Technical Report on coordinates system adjustment of the digitised historical Coparex plans.</li> <li>For 2022 "In House" UG MRE purposes, a Technical Report on coordinates system adjustment of the digitised historical College of Engineers Topographers) resulting in minor adjustment to reconcile UG digitalised historical data with ETRS89 system. Adjustment has been of minus 14m in X and plus 1m in Y. Z coordinate has kept the same as previous.</li> <li>In the opinion of the Competent Person, the quality of the topographic data is adequate for the current study being described.</li> </ul>



Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <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 classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Nominally 40m parallel section lines, restricted by quarry access.</li> <li>It is considered that the spacing of samples used is sufficient for defining Mineral Resource Estimates.</li> <li>During resource estimation, approximately 3m composites were generated.</li> <li>For Underground 3D modelling and MRE purposes, mineralized Quartz Veins (QV) had been included in 1.5m core samples and subsequently, during MRE, 1.5m composites were generated for the veins.</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 this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have</li> <li>introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Holes generally oriented at approximately 110° or 300° directions, typically dipping at 60° to get as near perpendicular to the lode orientation as possible and collect meaningful structural data.</li> <li>It is not considered that the sampling orientations have introduced any sampling bias.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Sample security was managed by the Company. Each composite sample was double-bagged, cable-tied and then inserted into a polyweave bag and cable tied again. Each batch of samples was sent directly to Seville by courier with appropriate chain of custody information.</li> <li>For 2021 drill campaign, the same procedure has been applied, although the samples have been sent to SGS prep lab at Huelva.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	On September 27 <sup>th</sup> to 29 <sup>th</sup> , 2021, Cath Pitman visited RFR's facilities at Santa Comba with the purpose of auditing logging and sampling procedures, equipment, comparison of paper and electronic logs to original coreto assess for accuracy, core and chip security, QA/QC procedures and Resource modelling methodology. Cath Pitman is the principal Geologist at Adiuvare Geology and Engineering and is a Qualified Person under NI 43-101



# Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

riteria	JORC Code explanation	Commentary				
ineral enement nd land	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties,</li> </ul>	Comba Pro	ing table lists the concessions ject. The licences were fully t artment in November 2015. Th	ransferre	ed into the es have an e	name of GTT by
enure status	native title interests, historical sites, wilderness or national park and environmental settings.	Туре	Name	Number	Expiration date	Area (m²)
		Concession	San Antonio	1789	24/02/2068	1,500,000
	<ul> <li>The security of the tenure held at the time of reporting</li> </ul>	Concession	Santa María	1790	24/02/2068	959,400
	along with any known impediments to obtaining a licence	Concession	Oportuna	1792	24/02/2068	4,000,000
	to operate in the area.	Concession	Carballeira	1801	24/02/2068	3,000,000
		Concession	Santa Bárbara	1802	24/02/2068	6,380,000
		Concession	Carmen Fraccion 1*	1807	24/02/2068	14,890,000
		Concession	Ampliación a Oportuna	2912	24/02/2068	180,000
		Excesses	Demasía a Santa María		24/02/2068	249,600
		Excesses	Primera Demasia a Oportuna		24/02/2068	471,210
		Excesses	Segunda Demasía a Oportuna		24/02/2068	226,450
		Excesses	Demasia a Carballeira		24/02/2068	2,004,912
		Excesses	Demasía a Santa Bárbara		24/02/2068	654,852
		Excesses	Primera Demasia a Carmen Fraccion 1*		24/02/2068	1,238,810
		Excesses	Segunda Demasía a Carmen Fraccion 1*		24/02/2068	239,298
		Excesses	Demasía Ampliación a Oportuna		24/02/2068	94,795
						36,089,327



Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Santa Comba was mined intermittently between 1940 - 1985 with considerable underground infrastructure developed (<i>ca.</i> 7,000m). Much of the understanding about deposit and vein geometry was developed between 1980 - 1985 by French company Coparex.</li> <li>There is a list from the Coparex era of 230 diamond drillholes. For these holes, 79 vein intersections have recorded WO<sub>3</sub> and Sn assays. However, this database does not contain any collar coordinates or survey data, and so cannot be processed or included in the mineral resource estimate. The working long sections of each vein used by the mine in the Coparex era do show drillhole intersections, with intersected thicknesses and grades. They are also shown in plan projections, but there are no complete sets of sections showing the drillhole data. The log section intersection data have been used in historic resource calculations.</li> <li>There is no proper database of historical drillhole data. Discussions with a Coparex geologist confirmed that during the period of underground production, the</li> </ul>
		geologist confirmed that during the period of underground production, the drillholes were logged and mineralised zone intersections were assayed gravimetrically using the on-site laboratory. However, the principal use of drillholes was using quartz intersections to help with vein interpretation and subsequent underground development and exploration.
		<ul> <li>In 2012, IGI assessed the open pit potential of Santa Comba using rock chip sampling. Channel sampling and single site sampling showed elevated tungsten concentrations. Channel sampling in the quarry area assayed 14m @ 0.11% WO<sub>3</sub> and highlighted the near-surface tungsten potential. It is considered that the sample methods and analytical methods utilised by IGI were appropriate for the mineralisation at Santa Comba.</li> </ul>



Criteria	JORC Code explanation	Comment	tary						
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>([Fe,<i>N</i> granitution of the granitution of the granitution of the granitution of the grane of the gr</li></ul>	An]WO4) mi e (endogra ghout the ar eology is th rn Variscan sented by ar Mineralisat osed of syn- ten-tin mine osted and c most preval alisation is bjective of n of Mina (	neralisation nite). Quar ea and was ne Galicia-T Orogen. Th n allochthor tion is host to post-tec eralisation a disseminated lent, occurr as the main hosted excl the current Carmen, wh	contain rtz-vein the main ras-Os-M ne Galicia ious crush tonic Var tonic Var t Santa C d in the ing throu focus o usively w c UG MRE nich is ph	ed within hosted m focus of ontes Zor a-Tras-Os- cal block t in a 7.5k iscan gran comba occ endograni ghout the f historic ithin the is the N hysically s	i, and ac nineralisa historic r ne in the Montes 2 chrusted o mitoids. curs in tw te. The c majority mining. endograr -S to N30 separated	NW Iberian Zone is a com over the Cent by 1-2km wi ro primary for quartz vein-ho of the massif Disseminated	two-mi prevale peninsul nplex zo ral Iberia ide mas ms: quar osted sty f. The ve I tungst uartz Ve ones (Min
Drill hole	• A summary of all information material to the			or the 2022	2 "In Ho	use"UG	MRE are	listed out in	1
Information	understanding of the exploration results including a	follow	ing table:						
	tabulation of the following information for all Material drill holes:	Hole ID	Easting	Northing		Azimuth	Dip	Hole depth	
	<ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level - elevation above sea</li> </ul>	15DD0007	514416.0	4771318.8	488.9	108	-60	80.0	
		16DD0001 16DD0002	514454.2 514565.5	4771299.5 4771399.1	476.5 455.1	108 288	-60 -60	88.2 85.3	
	level in metres) of the drill hole collar	16DD0002	514533.0	4771374.1	460.6	288	-60	80.3	
	$\circ$ dip and azimuth of the hole	16DD0004	514413.4	4771187.0	509.0	108	-60	85.1	
	<ul> <li>o down hole length and interception depth</li> </ul>	16DD0005	514481.5	4771108.7	501.0	288	-60	85.0	
	<ul> <li>hole length.</li> </ul>	16DD0006	514425.9	4771090.2	515.8	288	-60	100.2	
	<ul> <li>If the exclusion of this information is justified on the basis</li> </ul>	16DD0010	514533.1	4771588.1	426.7	295	-60	24.9	
	• If the exclusion of this information is fustined on the basis	10000010			-				
		16DD0011	515423.2	4774765.7	466.3	113	-60	115.3	
	that the information is not Material and this exclusion does	16DD0011 16DD0012	515423.2 515307.8	4774765.7 4774370.6	466.3 478.0	113	-60	115.3	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the	16DD0011 16DD0012 16DD0013	515423.2 515307.8 516121.0	4774765.7 4774370.6 4776202.0	466.3 478.0 425.3	113 298	-60 -60	115.3 115.1	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the	16DD0011 16DD0012 16DD0013 16DD0014	515423.2 515307.8 516121.0 516193.6	4774765.7 4774370.6 4776202.0 4776169.1	466.3 478.0 425.3 432.6	113 298 118	-60 -60 -60	115.3 115.1 115.1	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the	16DD0011 16DD0012 16DD0013 16DD0014 16DD0017	515423.2 515307.8 516121.0 516193.6 514535.5	4774765.7 4774370.6 4776202.0 4776169.1 4771461.9	466.3 478.0 425.3 432.6 455.2	113 298 118 288	-60 -60 -60 -60	115.3 115.1 115.1 85.1	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the	16DD0011 16DD0012 16DD0013 16DD0014 16DD0017 19DD0001	515423.2           515307.8           516121.0           516193.6           514535.5           514602.4	4774765.7 4774370.6 4776202.0 4776169.1 4771461.9 4771500.2	466.3 478.0 425.3 432.6 455.2 431.0	113 298 118 288 293	-60 -60 -60 -60 -60	115.3 115.1 115.1 85.1 213.9	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the	16DD0011 16DD0012 16DD0013 16DD0014 16DD0017 19DD0001 19DD0002	515423.2           515307.8           516121.0           516193.6           514535.5           514602.4           514430.9	4774765.7 4774370.6 4776202.0 4776169.1 4771461.9 4771500.2 4771361.2	466.3 478.0 425.3 432.6 455.2 431.0 487.0	113 298 118 288 293 111	-60 -60 -60 -60 -60 -60	115.3 115.1 115.1 85.1 213.9 96.2	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the	16DD0011           16DD0012           16DD0013           16DD0014           16DD0017           19DD0001           19DD0002           19DD0003	515423.2           515307.8           516121.0           516193.6           514535.5           514602.4           514430.9           514572.5	4774765.7 4774370.6 4776202.0 4776169.1 4771461.9 4771500.2 4771361.2 4771517.6	466.3 478.0 425.3 432.6 455.2 431.0 487.0 431.3	113 298 118 288 293 111 294	-60 -60 -60 -60 -60 -60 -60	115.3 115.1 115.1 85.1 213.9 96.2 160.8	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the	16DD0011           16DD0012           16DD0013           16DD0014           16DD0017           19DD0001           19DD0002           19DD0003           19DD0004	515423.2           515307.8           516121.0           516193.6           514535.5           514602.4           514430.9           514572.5           514475.1	4774765.7 4774370.6 4776202.0 4776169.1 4771461.9 4771500.2 4771361.2 4771517.6 4771291.1	466.3 478.0 425.3 432.6 455.2 431.0 487.0 431.3 475.6	113 298 118 288 293 111 294 115	-60 -60 -60 -60 -60 -60 -60 -60	115.3           115.1           85.1           213.9           96.2           160.8           68.2	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the	16DD0011           16DD0012           16DD0013           16DD0014           16DD0017           19DD0001           19DD0002           19DD0003           19DD0004           19DD0005	515423.2           515307.8           516121.0           516193.6           514535.5           514602.4           514430.9           514572.5           514475.1           514480.4	4774765.7 4774370.6 4776202.0 4776169.1 4771461.9 4771500.2 4771361.2 4771517.6 4771291.1 4771344.9	466.3 478.0 425.3 432.6 455.2 431.0 487.0 431.3 475.6 471.9	113           298           118           288           293           111           294           115           115	-60 -60 -60 -60 -60 -60 -60 -60 -60	115.3           115.1           115.1           85.1           213.9           96.2           160.8           68.2           161.5	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the	16DD0011           16DD0012           16DD0013           16DD0014           16DD0017           19DD0001           19DD0002           19DD0003           19DD0004           19DD0005           19DD0006	515423.2           515307.8           516121.0           516193.6           514535.5           514602.4           514430.9           5144572.5           514475.1           514480.4           514432.1	4774765.7 4774370.6 4776202.0 4776169.1 4771461.9 4771500.2 4771361.2 4771517.6 4771291.1 4771344.9 4771246.4	466.3 478.0 425.3 432.6 455.2 431.0 487.0 431.3 475.6 471.9 476.9	113           298           118           288           293           111           294           115           115           114	-60 -60 -60 -60 -60 -60 -60 -60 -60	115.3           115.1           115.1           85.1           213.9           96.2           160.8           68.2           161.5           110.5	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the	16DD0011           16DD0012           16DD0013           16DD0014           16DD0017           19DD0001           19DD0002           19DD0003           19DD0004           19DD0005           19DD0006	515423.2           515307.8           516121.0           516193.6           514430.9           514475.1           514480.4           514432.1           514470.0	4774765.7 4774370.6 4776202.0 4776169.1 4771461.9 4771500.2 4771361.2 4771517.6 4771291.1 4771294.1 4771246.4 4771233.0	466.3 478.0 425.3 432.6 455.2 431.0 487.0 431.3 475.6 471.9 476.9 474.8	113           298           118           288           293           111           294           115           115           114           109	-60 -60 -60 -60 -60 -60 -60 -60 -60 -60	115.3           115.1           115.1           85.1           213.9           96.2           160.8           68.2           161.5           110.5           18.5	
	that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the	16DD0011           16DD0012           16DD0013           16DD0014           16DD0017           19DD0001           19DD0002           19DD0003           19DD0004           19DD0005           19DD0006	515423.2           515307.8           516121.0           516193.6           514535.5           514602.4           514430.9           5144572.5           514475.1           514480.4           514432.1	4774765.7 4774370.6 4776202.0 4776169.1 4771461.9 4771500.2 4771361.2 4771517.6 4771291.1 4771344.9 4771246.4	466.3 478.0 425.3 432.6 455.2 431.0 487.0 431.3 475.6 471.9 476.9	113           298           118           288           293           111           294           115           115           114	-60 -60 -60 -60 -60 -60 -60 -60 -60	115.3           115.1           115.1           85.1           213.9           96.2           160.8           68.2           161.5           110.5	



19DD0011	514431.5	4771178.5	489.7	108	-60	103.0
19DD0012	514535.1	4771490.2	450.6	293	-61	156.2
19DD0013	514430.6	4771178.5	489.9	108	-59	150.3
19DD0014	514568.1	4771444.7	451.3	285	-60	160.0
19DD0015	514496.8	4771474.8	461.5	285	-60	113.3
19DD0016	514551.9	4771370.0	457.5	283	-55	104.2
19DD0017	514470.6	4771167.8	489.3	109	-60	141.2
19DD0018	514554.9	4771485.5	447.7	285	-60	150.4
19DD0020	514552.3	4771370.0	457.6	290	-66	206.5
19DD0021	514451.1	4771204.6	475.1	110	-60	128.7
19DD0022	514394.3	4771256.2	489.8	109	-60	202.1
19DD0023	514405.1	4771324.3	488.0	109	-59	171.0
19DD0024	514459.6	4771131.6	489.9	109	-60	113.3
19RC0001	514577.9	4771555.2	425.7	293	-60	150.0
19RC0002	514542.3	4771580.4	426.9	299	-60	44.0
19RC0003	514525.1	4771591.9	425.8	298	-61	102.0
19RC0004	514570.6	4771644.4	429.8	295	-60	72.0
19RC0017	514513.0	4771343.4	460.0	289	-60	91.0
19RC0018	514505.1	4771333.9	460.8	3	-90	90.0
19RC0019	514458.5	4771291.1	474.3	3	-90	26.5
19RC0020	514522.3	4771618.4	426.8	293	-59	78.0
19RC0021	514613.3	4771540.9	423.6	292	-60	300.0
20DD0001	514537.8	4771404.4	463.3	289	-60	166.5
20DD0003	514492.1	4771385.0	474.4	289	-60	176.3
20DD0004	514433.5	4771138.1	490.2	109	-60	164.3
20DD0006	514597.8	4771389.1	452.5	291	-60	164.5
20DD0007	514459.7	4771083.3	502.6	108	-60	176.6
20DD0009	514495.9	4771023.3	502.1	108	-60	155.3
20DD0011	514474.2	4771203.2	475.8	108	-60	104.5
20DD0011	514426.6	4771283.3	474.6	108	-60	211.0
20DD0013	514455.7	4771037.8	502.8	100	-60	115.0
20DD0011	514475.9	4771421.7	477.4	282	-60	149.0
20DD0016	514496.9	4771026.7	502.2	289	-60	95.7
20DD0010 20DD0017	514397.9	4771377.1	497.0	106	-60	302.0
20DD0017	514460.1	4771392.3	484.1	100	-60	212.5
20000015 20GTF001	514405.8	4771355.8	487.4	332	-60	151.0
20GTF001	514533.1	4771485.5	452.5	266	-60	148.0
20GTF002	514530.8	4771528.0	442.7	200	-60	148.0
21DD0001	5145565.9	4771259.0	442.7	288	-60	163.7
21DD0001 21DD0002	514562.3	4771103.3	419.7	288	-45	157.8
21DD0002 21DD0003	514563.1	4771103.3	419.5	285	-45	125.1
21DD0003 21DD0004	514563.1	4771259.3	418.9	285	-65	125.1
21DD0004 21DD0005	514564.7	4771259.3	419.7	288	-45	54.5
21DD0005 21DD0006			420.3	288	-45	54.5 117.4
	514562.0	4771137.7	420.2			
21DD0007	514552.8	4771225.6		288	-60	40.6
21DD0008	514580.6	4771292.6	419.3	293	-60	206.8
21DD0009	514552.2	4771225.7	420.9	288	-45	180.0
21DD0010	514613.5	4770993.7	420.0	288	-45	210.1



21DD0011	514563.0	4771186.3	419.7	288	-60	98.1
21DD0012	514572.7	4771223.6	420.2	288	-55	206.7
21DD0013	514587.7	4771054.4	419.6	288	-45	63.2
21DD0014	514583.6	4771248.8	419.5	288	-60	214.5
21DD0015	514590.7	4771053.5	419.5	288	-45	175.8
21DD0016	514506.7	4771341.2	460.7	108	-60	92.3
21DD0017	514478.6	4771277.2	474.7	108	-55	74.0
21DD0018	514474.5	4771247.4	475.3	108	-45	67.6
21DD0019	514429.5	4771215.9	475.5	108	-60	152.9
21DD0020	514472.4	4771247.8	475.5	288	-70	114.6
21DD0021	514435.0	4771088.9	503.7	108	-65	150.7
21DD0022	514433.5	4771140.9	490.6	108	-70	127.0
21DD0023	514644.8	4771536.5	419.8	288	-60	160.3
21DD0024	514419.0	4771109.0	503.2	111	-65	182.0
21DD0025	514485.5	4771138.0	489.8	280	-80	166.1
21DD0026	514603.0	4771547.1	423.8	288	-60	125.0
21DD0027	514425.3	4771052.0	503.9	108	-60	168.4
21DD0028	514619.7	4771089.9	418.0	288	-50	272.0
21DD0029	514600.6	4771171.1	418.5	288	-50	175.9
21DD0030	514424.4	4771442.7	484.3	108	-60	221.0
21DD0031	514595.0	4771127.0	418.5	288	-50	179.0
21DD0032	514649.0	4771493.4	419.6	288	-60	212.1
21DD0033	514610.8	4771584.4	423.3	288	-60	134.0
21DD0034	514403.3	4771328.8	488.4	108	-70	219.1
21DD0035	514394.2	4771412.4	494.1	108	-60	239.0
21DD0036	514396.0	4771376.9	498.0	108	-70	249.8
21DD0037	514578.3	4771386.4	454.3	273	-65	159.6
21GTF001	514427.6	4771092.0	504.5	221	-50	200.4

(Datum: ETRS89 UTM Zone 29)

• No information has been excluded.

Data aggregation methods  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.

- 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 should be shown in detail.
- The assumptions used for any reporting of metal equivalent values should be clearly stated.

- Length-weighted average grades were calculated for intervals >0.05% WO3. A
  maximum of 6m of internal dilution allowed. No top-cuts were used.
- For Underground "MRE" purposes, cut-off grade of 0.53% WO<sub>3</sub> based on 0.70m mining width, was used in previous JORC compliant MRE of Adam Wheeler, 2016. Same cut-off grade is being used for current "In House" MRE.
- Any aggregation of drillhole data was done using length-weighting.
- Metal equivalents not used.



Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation 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 (eg 'downhole length, true width not known').</li> </ul>	<ul> <li>Drill holes inclined so as to get as near to perpendicular intersections as possible.</li> <li>Downhole lengths reported.</li> <li>For 2015-2016 and 2019-2020 drill campaigns, true widths estimated to be 50-60% of downhole widths based on interpreted orientation of mineralisation.</li> <li>For the 2021 programme true mineralisation widths have been estimated individually for each intercept due to the various inclination angles for the drill holes. True thickness factor has been estimated based on geology cross sections.</li> <li>For "In House" UG MRE purposes, all "VOIDS" intersected in ddh corresponding to old mining workings and all discrete "Mineralized Quartz Veins" intersections were 3D modelled with Leapfrog GEO to interpret the spatial nature and distribution of the different veins. Each of the modelled veins has been considered as an independent domain. All Quartz Vein intersections have been identified with the corresponding vein code.</li> </ul>
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• A plan of the main mineralized veins is included in this report, showing the drillholes used for the current "In House" UG MRE. There has been considered 2 separate Underground prospects: Zone Mina Carmen North and Zone Mina Carmen South, which are physically separated by a NW trending fault.
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>Interim drilling results were reported at a cut-off of 0.05%WO3, with intersection lengths varying from 1.50m - 76m.</li> <li>Sufficient data is available to report a Mineral Resource herein, as such the inclusion of further detail in this Section is not required.</li> </ul>
Other substantive exploration data	• 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.	<ul> <li>No meaningful and material exploration data, apart from the drillhole database, surface rock chip sampling and underground channel sampling completed by GTT (2015-2016), and historical underground channel sampling by IGI (2012) have been included in the report.</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> <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>UG mapping and sampling is being planned to the south of the current Open Pit MRE</li> <li>Additional surface drilling campaign of 3,000m to 4,000m would be required for Exploration Targets of Mina Carmen North and Mina Carmen South, at depth.</li> </ul>
--------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



Section 3 Estimation and Reporting of Mineral Resources (Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Primary data for the 2015-2016, 2019, and 2021 drilling campaigns was entered and maintained in an Excel database. The data is validated by company geologists before acceptance into the final database.</li> <li>The sample database was finally supplied to RFR's "Resource Geologist" as CSV format Microsoft Excel spreadsheets. RFR's "Resource Geologist" validates the database.</li> <li>Data validation procedures:         <ul> <li>Comparison of geological cross sections with the drillhole database; Verification that collar coordinates coincide with topographical surfaces; Verification that downhole survey azimuth and inclination values display consistency;</li> <li>Evaluation of minimum and maximum grade values;</li> <li>Evaluation of minimum and maximum sample lengths;</li> <li>Assessing for inconsistencies in spelling or coding (typographic and case sensitive errors); and</li> <li>Ensuring full data entry and that a specific data type (collar, survey, lithology and assay) is not missing and assessing for sample gaps or overlaps.</li> </ul> </li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	• The Competent Person for Section 3 of this report, Lluis Boixet, consultant to Rafaella Resources, leaded the 2019-2020 and 2021 drilling campaigns, on site.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> </ul>	<ul> <li>The 3D models at Zone Mina Carmen North have been based mostly on GTT's drilling campaigns but also considered the UG development from historical maps digitised from Coparex which, in turn, required minor adjustment of coordinates (minus 14m in X, plus 1m in Y and Z remained the same) supported by a technical report from a registered professional topographer, to exactly reconcile the dxf files with ETRS89 reference system.</li> <li>The disseminated material previously modelled by WAI, is hosted within the endogranite. Higher grade material is associated with vein type mineralisation and was the target of historic underground mining. The overall geological interpretation is well understand and is based on bistoric products and a printer in the distance of the same of the</li></ul>
	<ul> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>	<ul> <li>interpretation is well understood and is based on historic underground mining, outcrops and exploration.</li> <li>Clear structural control for the N-S to N30E trending mineralized quartz veins which are following longitudinal foliation affecting, both the endogranite and the exogranite.</li> <li>The process for building accurate 3D model of the vein system with Leapfrog</li> </ul>



Criteria	JORC Code explanation	Commentary
	• The factors affecting continuity both of grade and geology.	<ul> <li>GEO for each vein, required detailed work of grouping drill intersections according to the structural geology controlling the vein system and the Underground development. Drill "VOIDS" corresponding to old workings have been included as indicator of the vein. Subsequently, all drill intersections into the 3D model have been validated by geologists. A new field for each vein was generated by including "NIL" for those intersections into the 3D model that failed to intersect "VOID" or "QV" (quartz Vein). "NIL" coding is key for contouring the limits of the vein wireframe along strike. All 3D models have been extended to a depth of +60 asl elevation except for those subsidiary veins intersected by mother veins at depth. Figure 7 corresponds to the 3D model longitudinal projection of "Restrevas North" vein including all drill intersections ("VOID", "QV" and "NIL"). Extension of the 3D model at depth is reasonable for Exploration Target.</li> <li>Effects of alternative geologic models were not tested.</li> </ul>
Dimensions	<ul> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul> <li>The extent of the mineralised vein system, based on the 3D wireframes, is as follows: (based on the mineralised wireframes) has been defined as:         <ul> <li>Zone Mia Carmen North: 450m along strike. The 3D models of the veins have been extended to a depth of +60m asl which resulted in a maximum depth below surface of 440m for delineating Exploration Targets. Thickness of the 3D models are based on drillhole samples of "QV"and "VOIDS". Because "VOIDS" corresponding to old mining works, might have had too much dilution, a maximum true width of 1.50m and a minimum of 0.70m based on minimum width of the mining method, has been allowed during the implicit modelling for the veins. The veins are striking from N-S to N30E and dip from 70° to 90° to the east-southeast;</li> <li>Zone Mina Carmen South: 1,000m along strike (N-S to N30E) and dip from 70° to 90° to the east-southeast;</li> <li>Maximum true thickness allowed of 0.70m based on minimum mining method. No additional UG MRE are reported from Mina Carmen South, in respect to the JORC compliant UG MRE of 2016.</li> </ul> </li> </ul>
		The location of the mineralised zones and exploration areas is shown in the figure below:



Criteria	JORC Code explanation	Commentary
		Tone Mina Carmen North Cone Mina Carmen North Cone Mina Carmen South Cone M



Criteria	JORC Code explanation	Comme	entary	y					
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	<ul> <li>Resource estimation has been conducted in Zone Mina Carmen North. Carmen South remains unchanged from 2016 with JORC compliant infor 234kt @ 0.95% WO<sub>3</sub> and 0.28% Sn (0.53% WO<sub>3</sub> cut-off), based on historical</li> <li>Resource estimation has been conducted based on a conventional 3D model, developed using the Leapfrog EDGE mining software system. primary group of samples within the mineralised zone structures converted into approximately 1.5 m composites, which was by far the prevalent sample length for assaying of the "QV" (quartz veins).</li> <li>Interpolation has been produced for each vein independently.</li> <li>Grade estimation of WO<sub>3</sub> and Sn grades was completed using inverse disting weighting estimation method and nearest neighbour for validation purp No directional anisotropy was used to control the orientation of estim search ellipses. The main estimation parameters are shown in the below.</li> <li>There appears to be no particular correlation between Sn and WO3 grade</li> </ul>							
			Summary of Grade Estimation Parameters						
		Searc	D	istanc	e	Sam	nples	(	Quadrant
		h	Х	Y	Z	Mi	Ma	Max. per	Max. Quad. with no
			(m)	(m)	(m)	n.	х.	Quadrant	sample
		1 <sup>st</sup>	50	50	15	2	4	2	2
		2 <sup>nd</sup>	100		15	2	4	2	2
		3 <sup>rd</sup>	200	200	15	2	4	No applied	No applied
		4 <sup>th</sup>	400			1	4	No applied	No applied
	• The availability of check estimates, previous estimates	Search Ellipsoid orientation according to vein							
	and/or mine production records and whether the Mineral	ID2 Interpolation method applied							unha Draigat which incl
	Resource estimate takes appropriate account of such data.		WAI produced an Open Pit MRE for the Santa Comba Project which incl Zone Mina Carmen North. Only resources reported by WAI were those inclu						
		<ul> <li>in an Optimized pit-shell.</li> <li>RFR only reported UG MRE below WAI's Optimized pit-shell to environmentation overlapping.</li> </ul>							
	<b>-</b>								
	• The assumptions made regarding recovery of by-products.								
	• Estimation of deleterious elements or other non-grade	<ul> <li>The Deposit has been mined as UG mining by artisanal miners and by Cop</li> <li>a modern mine, in the 1020s</li> </ul>							
		<ul><li>as a modern mine, in the 1980s.</li><li>RFR build a 3D wireframe of the portion including all UG workings, base</li></ul>							
	variables of economic significance (eg sulphur for acid mine drainage characterisation).	PFI	R huil	d 2 3 L	) wire	fram	e of t	he portion includin	g all LIG workings base

• RFR build a 3D wireframe of the portion including all UG workings, based on drillhole intersections and on UG digitised development of Coparex. This solid has fully been excluded from current UG MRE.



Criteria	JORC Code explanation	Commentary							
	<ul> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> </ul>	<ul> <li>It is considered that tungsten is the principal product, with tin as a product. There are no other by-products.</li> <li>No estimation of deleterious elements was undertaken in the resou</li> <li>The volumetric block model was generated using parent block siz 5m x 5m blocks in X, Y and Z. During extrapolation, minimum allowed has been 0.3125m, 0.625m and 1.25m respectively. The spacing was generally 40m along-strike and between 20m-40m acrimeted set of the statement of</li></ul>							
	<ul> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	• Quantity of drill intersections for each quartz vein resulted too low f building robust variograms. However, historical channel sampling data in Zo Mina Carmen South was sufficient for geostatistics purposes.							
	<ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul>	ori 50i • No	ientation of estir m for both, majo capping was app	ein "Restrevas South" proved no directional anisotropy nation searching ellipsoid with range distances of ab r axis and for semi-major axis. lied for UG MRE of Zone Mina Carmen North due to lac					
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• On ade	<ul> <li>sample number.</li> <li>Only veins "F 16", "Restrevas North" and "Ramilla B" resulted e additional Inferred resources.</li> <li>Total drillhole samples used for the interpolation are shown in ta</li> </ul>						
			Zona Mina (	Carmen North					
			Vein	Samples per vein					
			F 16	12					
			Central	15					
			Restrevas North	31					
			Ramilla B	5					
			F 20	6	]				
			F 18 North	6					
			-		inst the input composite data. A vis and the estimated block grade v				

- conducted in longitudinal section.
  Validation of the block model grade was also carried out by statistical comparisons between original sample WO<sub>3</sub> grades and BLK model WO<sub>3</sub> grades, for each vein.
- Overall, a close relationship was observed between composite and block grade across the model. Globally no indications of significant over or under estimation are apparent in the model nor were any obvious interpolation issues identified. From the perspective of conformance of the average model



Criteria	JORC Code explanation	Commentary
		<ul> <li>grade to the input data, the Competent Person considers the model to be a satisfactory representation of the sample data used and an indication that the grade interpolation has performed as expected.</li> <li>No reconciliation data is available for the Project.</li> </ul>
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages were estimated on a dry basis
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>A cut-off grade of 0.53%WO<sub>3</sub> was used for the current UG MRE, as for 2016 UG MRE.</li> <li>For reporting of mineral resources, a cut-off grade of 0.53%WO<sub>3</sub> was used.</li> </ul>
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Minimum mining width of 0.70m has been considered for UG mining.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>RFR has implemented a number of metallurgical testing regimes for the economic extraction of tungsten and tin minerals from potential ores at its Santa Comba project. The programme consists of two areas of development, X-ray sorting and gravity concentration.</li> <li>Phase 1 testing carried out on vein and disseminated ores showed good recoveries at a coarse sizing of 90% and 85%, respectively.</li> <li>Concentrates produced showed +62.5% WO<sub>3</sub> and low arsenic values after a sulphide flotation cleaning step.</li> <li>In June 2020, TOMRA Sorting Solutions conducted performance test work on a series of samples from the Santa Comba to demonstrate that TOMRA Sorting systems are capable of separating tungsten-bearing ore from barren material. For the feed material, X-Ray Transmission (XRT) sensor was considered the</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>best choice because of the expected large differences in atomic density of the ore-bearing particles and host rock material.</li> <li>Two samples of different grain sizes (8-20mm "Sample 40") and 20-40mm ("Sample 41") were submitted to TOMRA for analysis. Significant upgrades of the targeted element as well as high recoveries were achieved in the test runs for Sample "40" using XRT, while leaving rather low grades for WO<sub>3</sub> in the waste fraction. By removing between 51% and 70% of the mass, recoveries between 78.17% to 89.54% were achieved. The objective in the sorting test with the Sample "41" was to show the possibility to upgrade this low-grade 'ore'. These results show a good amenability to fulfil the targets by using TOMRA's XRT sorting unit.</li> </ul>
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	<ul> <li>In 2011, the previous owners IGI received the resolution of authorisation for the exploitation of Mina Carmen underground mine, restoration of the site and environmental impact study from Xunta de Galicia. In October 2012, IGI subsequently received the resolution of authorisation for the construction of the processing plant. In December 2015, by resolution of the General Direction of Industry, Energy and Mines of the Xunta de Galicia, the change of domain of the mining rights to GTT was authorised. These permits are consolidated and valid for a 90-year period.</li> <li>A dual use agreement with the operators of the aggregate quarry is in effect and allows open pit mining within the permitted quarry area. RFR is in discussions with the quarry owners about delivering waste material for use as aggregate material. Multiple locations for an additional waste repository have been identified. Tailings will be filter pressed and dry stacked within the waste dump design. Baseline environmental studies have commenced and a conceptual mining plan is in preparation for expansion beyond the limits of current permits, including waste and tailings disposal.</li> </ul>
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Density measurements from the 2021 drilling campaign for 1.5m sample intervals containing "QV" returned average density of 2.70t/m3 which are coincident to historical values.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> </ul>	<ul> <li>The Competent Person considers that the Santa Comba deposit has been sufficiently explored to assign Inferred Mineral Resources as defined by the JORC Code (2012). The key drillhole spacings for the allocation of resources</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>can be summarised as follows:</li> <li>Inferred Resources - Limited to a maximum extrapolation of 100m. Constrained within the 3D vein models.</li> <li>The Competent Person is of the opinion that more geological investigation is required for conversion of inferred into "Measured" and "Indicated" categories. For Underground mining purposes.</li> </ul>
	• Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the	<ul> <li>The resource classification criteria have taken into account all relevant factors.</li> </ul>
	<ul> <li>data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	• The resource estimation results reflect the Competent Person's view of the deposit.
Audits or reviews	<ul> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	• No audits or reviews of the "In House" UG Mineral Resource estimate.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> </ul>	<ul> <li>This relative accuracy and confidence in the Mineral Resource Estimate is reflected in the reporting of the Mineral Resource as detailed in the JORC Code (2012).</li> <li>Validation procedures carried out on the final block model against input sample data show good correlation.</li> <li>The Mineral Resource relates to global tonnage and grade estimates.</li> <li>No mining has taken place since 1985.</li> <li>The Competent Person is of the opinion that the Exploration Targets delineated are reasonable for this deposit type in this geological setting.</li> </ul>
	<ul> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	