

13 June 2023

# Sandfire Portugal Exploration Update

Drilling identifies a high-grade polymetallic zone at the Sesmarias Prospect, Portugal

## Highlights

- High grade polymetallic mineralisation intersected at the Sesmarias prospect, part of the Alvalade Project Joint Venture.
- Drillhole **SES23-047** intersected 43.40m at 1.51% Cu, 4.78% Zn, 2.15% Pb and 64.1ppm Ag from 392.80 – 436.20m downhole.
  - Includes a higher-grade zone of 26.95m at 2.18% Cu, 5.60% Zn, 2.58% Pb and 88.2g/t Ag from 393.80 - 420.75m.
- Target stratigraphic zone is interpreted to be >1km in strike length.
- Step out drilling located 150m to the southwest currently underway.
- Six-hole program designed to test potential.

Sandfire Resources Limited (**Sandfire** or **the Company**) notes a new assay result released by its joint venture partner, TSX-listed Avrupa Minerals Limited (**Avrupa**), from diamond drilling at the Sesmarias massive sulphide target within the Alvalade Project Joint Venture in Portugal (**Alvalade JV**).

Avrupa is the current operator of the Alvalade JV. Sandfire holds an indirect 51% interest in PorMining Lda. (the Alvalade JV company) and can increase its interest to 85% under Phase II. The interest in the Alvalade JV was acquired by Sandfire through the acquisition of the MATSA Copper Operations in 2022.

Avrupa is undertaking a drill program to follow up Sesmarias discovery hole SES002 which was drilled in 2014 and intersected 7.95 metres grading 2.21% copper, 3.05% lead, 4.82% zinc, and 89.8g/t silver from approximately 150 metres depth.

A deeper follow-up hole SES23-047 has now intersected:

- 26.95 metres of 2.18% copper; 2.58% lead; 5.60% zinc; and 88.2g/t silver from 393.80 metres depth, within a wider interval of 43.40 metres of 1.51% copper; 2.15% lead; 4.78% zinc; and 64.1g/t silver from 392.80 metres depth.

Drilling remains at an early stage. Only one hole has intersected the new zone of mineralisation at depth and the true thickness and orientation of the mineralisation is not known at this stage. Further drilling by Avrupa is planned to test the extents of the new zone of mineralisation. Results from this drilling will continue to inform Sandfire and allow it to better assess the materiality of the results.

Full details of the exploration results are contained in the Avrupa TSX announcement which is available on the Avrupa website.

A JORC Table 1 for the reporting of the new exploration result is included at the back of this announcement.

**Management Comment**

Sandfire CEO and Managing Director, Brendan Harris, said: 'While we are very encouraged by the recent drilling results at the Sesmarias JV, it is important to note that further drilling is required to get a better understanding of the deeper zone of high-grade mineralisation that has been identified. Sandfire has a substantial portfolio of exploration tenure throughout the Iberian Pyrite Belt in both Portugal and Spain. The belt has been a prolific producer of metal and Sandfire believes that it remains highly prospective for new discoveries.'

- ENDS -

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**This announcement is authorised for release by Sandfire's Managing Director and Chief Executive Officer, Brendan Harris.**

**Competent Person's Statement****Exploration Results**

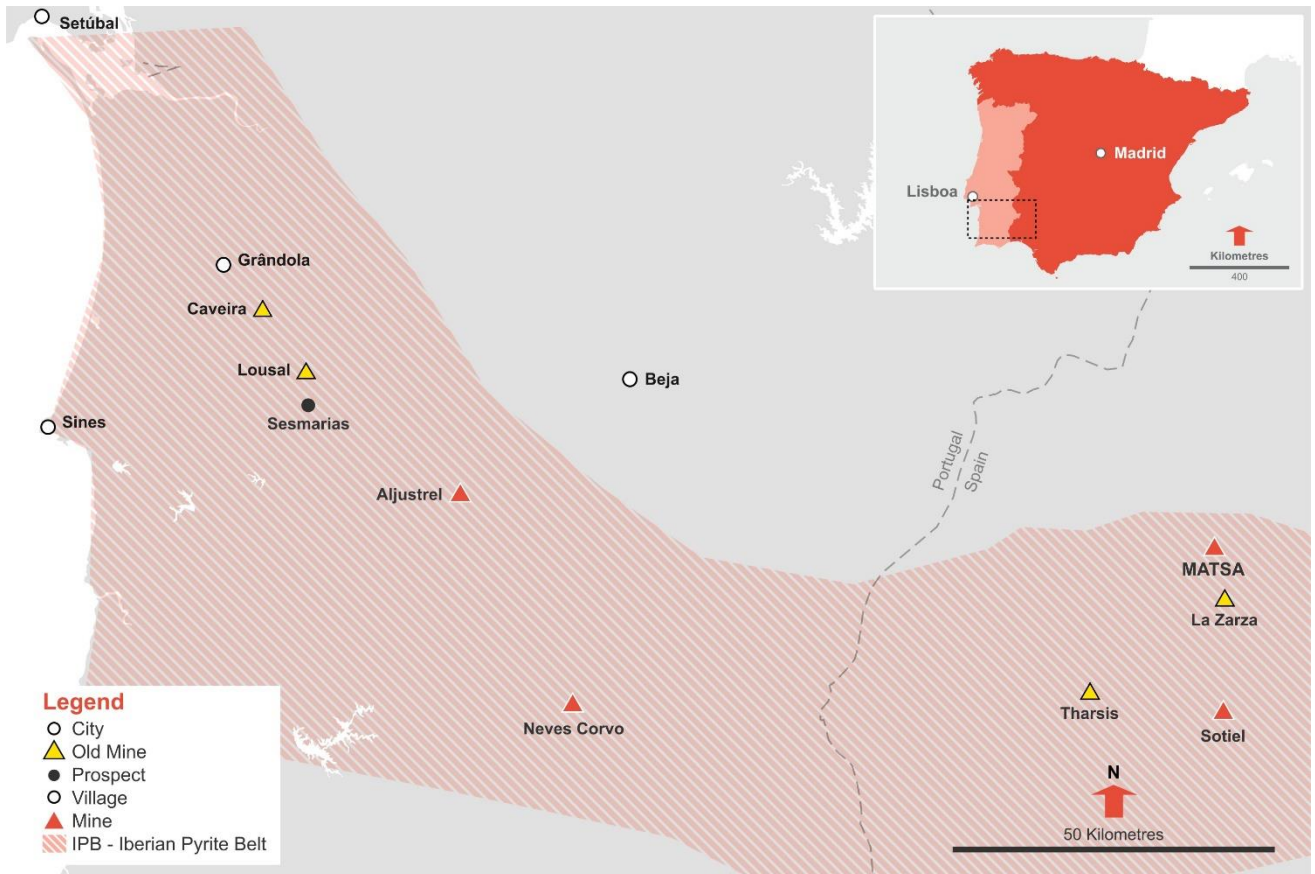
The information in this report that relates to Exploration Results at the Sesmarias Prospect, is based on information compiled by Mr Richard Holmes who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Holmes is a permanent employee of Sandfire and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Holmes consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Forward-Looking Statements**

Certain statements made during or in connection with this release contain or comprise certain forward-looking statements regarding Sandfire's Mineral Resources and Reserves, exploration and project development operations, production rates, life of mine, projected cash flow, capital expenditure, operating costs and other economic performance and financial condition as well as general market outlook. Although Sandfire believes that the expectations reflected in such forward-looking statements are reasonable, such expectations are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward-looking statements and no assurance can be given that such expectations will prove to have been correct.

## Introduction

The Sesmarías prospect is in the western part of the Iberian Pyrite Belt (**IPB**), within a License covering about 115km<sup>2</sup> held under the Alvalade JV, about 6km and 16km SE of the historical Lousal and Caveira mines respectively, and about 80km southeast of Setúbal (Figure 1). Sandfire's wholly owned subsidiary, Sandfire Mineira Portugal (formerly Emisurmin), entered an option deal with Avrupa in 2019, whereby an interest of up to 85% can be earned in the project in a staged process. Sandfire currently holds an indirect 51% interest in PorMining Lda. (the Alvalade JV company).



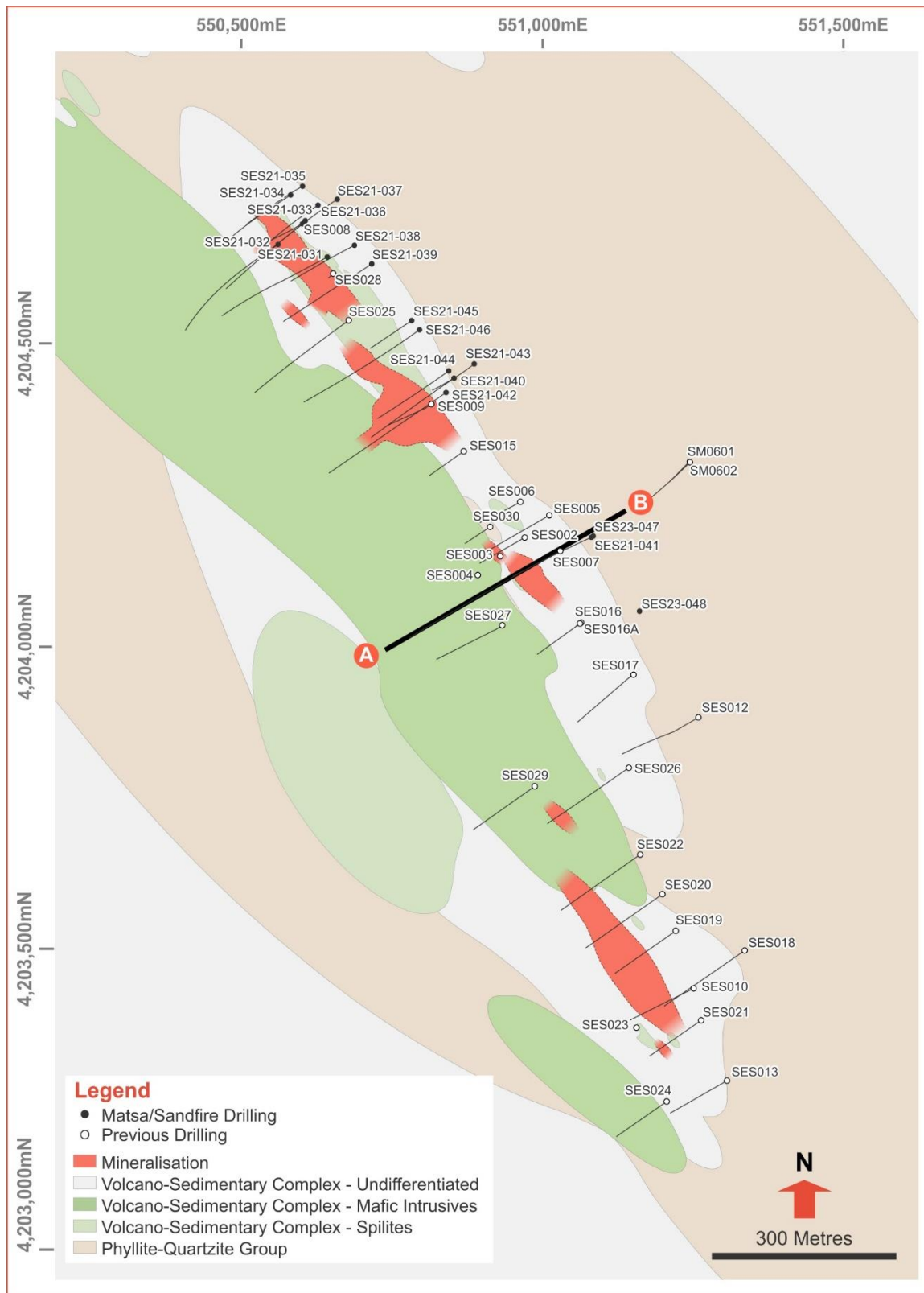
**Figure 1: Location of the Sesmarías prospect within the IPB in the south of Portugal and Spain.**

Drilling to date has showed that the Volcanogenic Massive Sulphide (**VMS**) mineralisation at Sesmarías exists discontinuously over a strike extent of at least 1,500m. Exploration at Sesmarías by others prior to Emisurmin had outlined mineralisation in areas termed the northern, central, and southern zones. Further drilling between the currently outlined sections is required to test if the mineralisation is continuous along the trend between the interpreted zones.

Drill hole SES23-047 was planned to investigate the position about 200m down-dip of the mineralisation intersected in drill hole SES002 and about 350m laterally to the south-east of the mineralisation intersected in drill holes SES21-040 and SES21-044 in the central zone of Sesmarías (Figure 2).

The drill hole intersected 43.40m at 1.51% Cu, 4.78% Zn, 2.15% Pb and 64.1ppm Ag from 392.80 – 436.20m downhole,

Including a higher-grade zone of 26.95m at 2.18% Cu, 5.60% Zn, 2.58%Pb and 88.2g/t Ag from 393.80 - 420.75m.



**Figure 2: Drill Location plan at -130m of the Sesmarias Prospect area over simplified interpreted basement geology. Historical drill collars in white; drill holes from the current Emisurmin - Avrupa work are shown in black. Plan outlines of the mineralisation intersected to date are also shown.**

All assay results are reported as downhole thickness.

Significant results prior to Sandfire Mineira Portugal work include:

- **SES002:** 12.35m @ 1.61% Cu, 3.97% Zn, 2.28% Pb and 66.8ppm Ag from 151.65m
- **SES003:** 19.3m @ 1.49% Cu, 1.76% Zn, 0.86% Pb and 29.9ppm Ag from 132.05m
- **SES019:** 50.5m @ 0.44% Cu, 2.68% Zn, 0.77% Pb and 17.5ppm Ag from 263.5m

Significant results from Emisurmin and Sandfire Mineira Portugal work in partnership with Avrupa include:

- **SES23-047:** 43.40m at 1.51% Cu, 4.78% Zn, 2.15% Pb and 64.1ppm Ag from 392.80m
  - including 26.95m at 2.18% Cu, 5.60% Zn, 2.58% Pb and 88.2g/t Ag from 393.80m
- **SES21-039:** 37.8m @ 0.44% Cu, 2.12% Zn, 0.80% Pb and 27.8ppm Ag from 349.4m
- **SES21-040:** 36.45m @ 0.73% Cu, 0.14% Zn, 0.82% Pb and 21.0ppm Ag from 479.4m
- **SES21-044:** 57.8m @ 0.41% Cu, 2.37% Zn, 0.96% Pb and 37.6ppm Ag from 417.2m

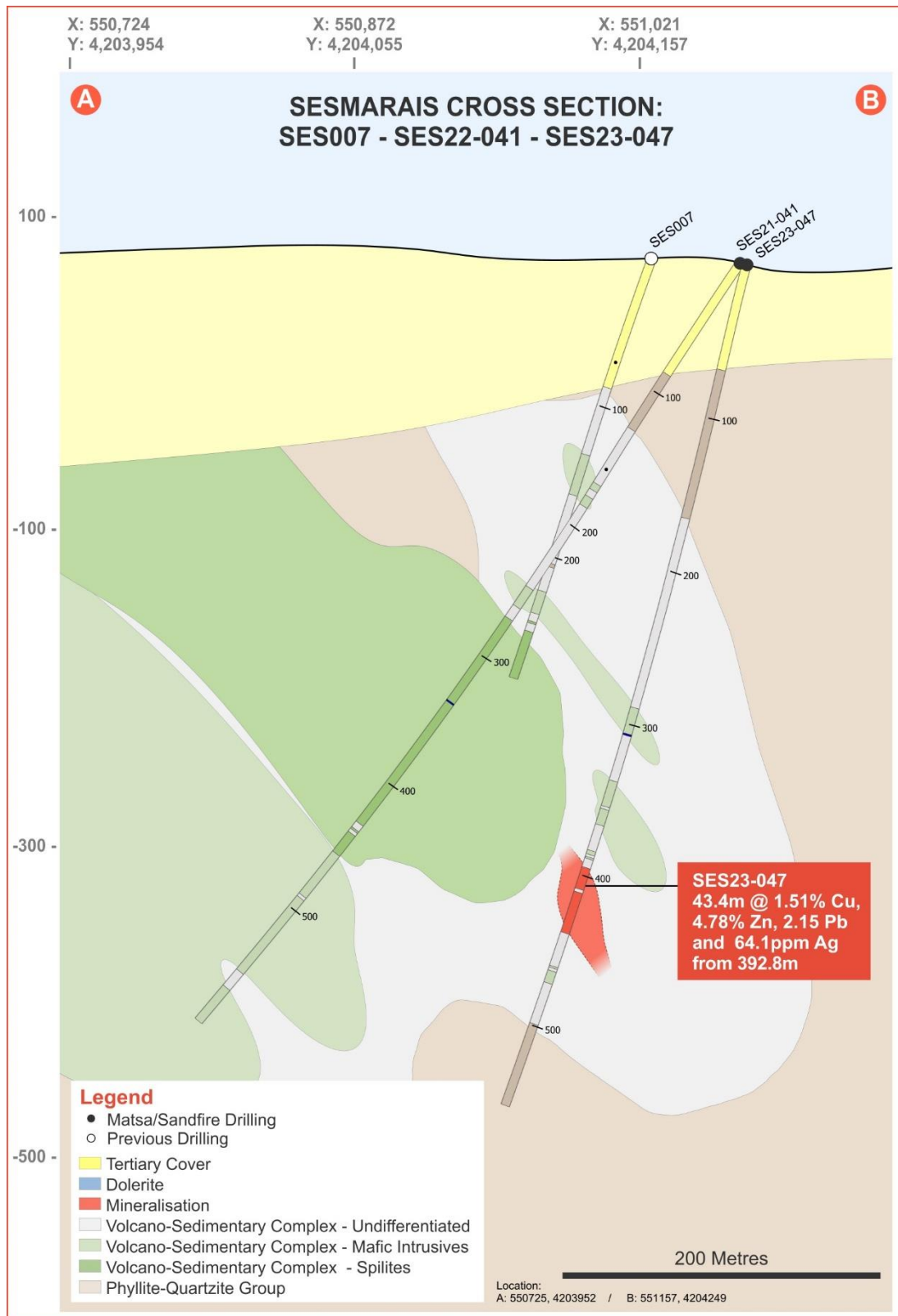
See Appendix 1 and 2 for details of the drilling to date at Sesmarias.

### **Sesmarias Geology**

At Sesmarias the target IPB geological units are covered by younger Tertiary rocks usually of about 70-110m thickness (Figure 4). The Sesmarias host rocks and mineralisation are interpreted to be folded in a syncline. The target sequence consists of black shales and felsic volcanics of the Volcanic Sedimentary Complex (**VSC**). At Sesmarias the VSC sequence comprises thick intervals of shales, felsic volcanics and basalt. The syncline core of VSC rocks is surrounded by the older Phyllite and Quartzite Group (**PQ Group**). The current target is on the eastern limb of the syncline, which mostly has a steep (60-80°) dip to the north-east.

The higher-grade intersection at drill hole SES23-047 follows ongoing geological modelling and re-interpretation work conducted by Sandfire Mineira Portugal and PorMining (Avrupa) geology teams. This work is planned to continue in FY2023-24 to test the extents of the Sesmarias mineralisation and possibly other targets.

A plan view of Sesmarias and a geological cross section are provided as Figures 2 and 3 respectively.



**Figure 3: Geological cross section of Sesarais intersection in DH SES23-047 looking to the north-west. The location of the section is shown in Figure 2.**

**Sesmarias Mineralisation**

The central zone of the Sesmarias mineralisation extends for at least 70m along-strike in the overturned limb of a syncline, with the potential to be extended further along strike and down-dip around the syncline as it remains open to NW and SE. Mineralisation intersected to date is zinc-dominated but also contains appreciable levels of copper, silver, lead and minor gold, and is interpreted as typical VMS mineralisation of the IPB.

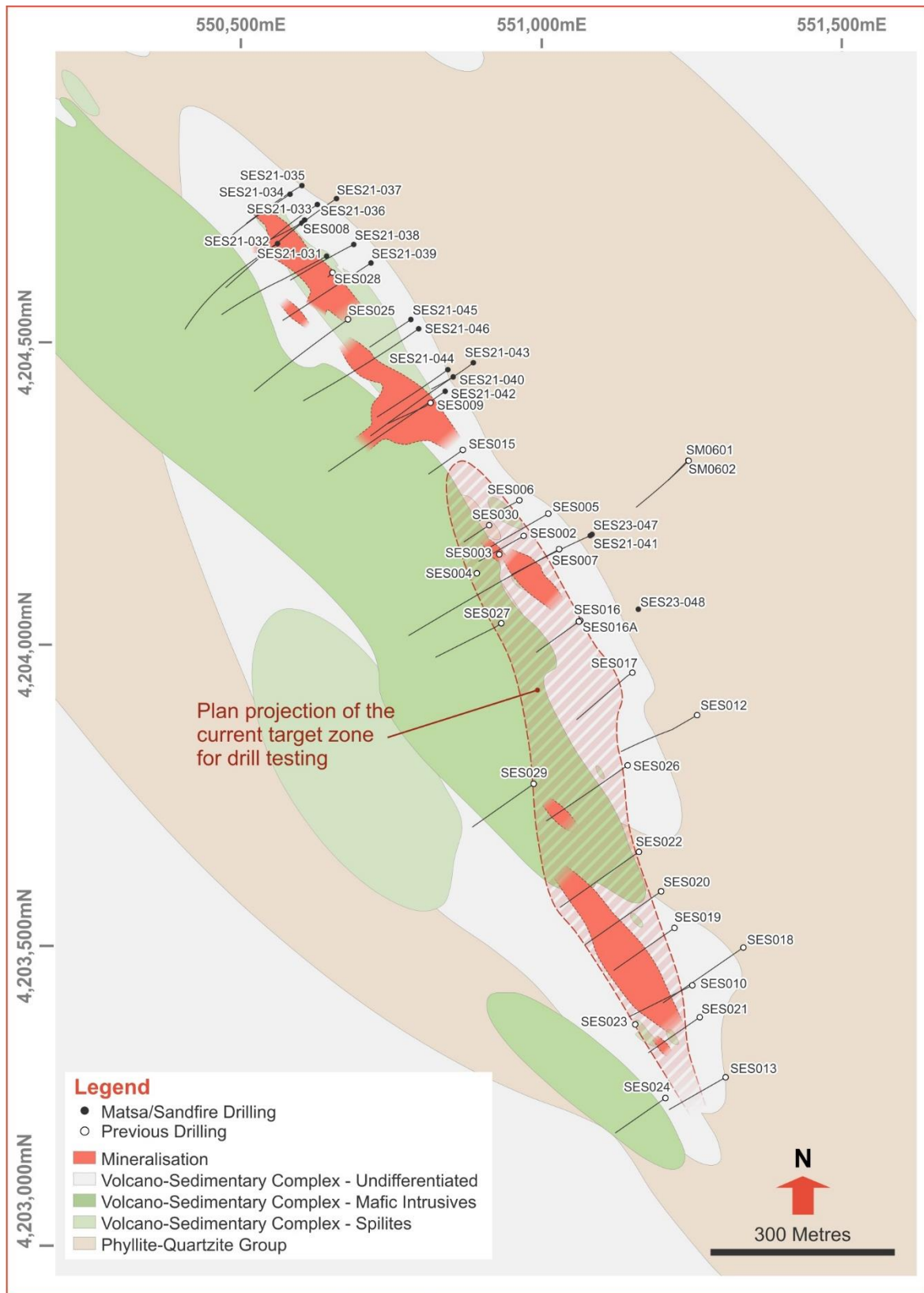
Appendix 2 presents all assays available to date based on a >0.3% Cu cut-off grade. Mineralisation intersected to date consists of massive sulphide, semi-massive sulphides and stringer styles.

**Ongoing Activities**

Drilling is continuing with the objective of further testing the extent of the Sesmarias mineralisation. Current activities include drill testing the along-strike and down-dip extent of the higher-grade zone intersected in SES23-047.

Figure 4 shows the strike extent of the zone which is currently being assessed.

SES23-048 is currently being drilled to test 150m along-strike to the south-east from the SES23-047 intersection. Present geological understanding suggests a potential 1,100m strike length of poorly tested prospective horizon.



**Figure 4: Plan view of current target zone at the Sesmaria prospect.**



**Appendix 1: Drill Collar Information**

HoleID	Depth	Dip	Azimuth	Grid ID	Easting	Northing	RL	Hole Status	Phase
SES001	155.00	-70	240	ED50 / UTM 29N	551627	4200911	59	Completed	Historical Hole
SES002	274.70	-70	240	ED50 / UTM 29N	550972	4204181	75	Completed	Historical Hole
SES003	160.20	-90	0	ED50 / UTM 29N	550929	4204150	76	Completed	Historical Hole
SES004	183.90	-90	0	ED50 / UTM 29N	550893	4204119	77	Completed	Historical Hole
SES005	320.30	-70	240	ED50 / UTM 29N	551012	4204218	76	Completed	Historical Hole
SES006	253.10	-70	240	ED50 / UTM 29N	550964	4204240	72	Completed	Historical Hole
SES007	279.70	-70	240	ED50 / UTM 29N	551030	4204159	75	Completed	Historical Hole
SES008	334.10	-70	240	ED50 / UTM 29N	550604	4204702	80	Completed	Historical Hole
SES009	263.10	-70	240	ED50 / UTM 29N	550817	4204402	85	Completed	Historical Hole
SES010	371.10	-70	240	ED50 / UTM 29N	551252	4203434	68	Completed	Historical Hole
SES011	372.10	-70	240	ED50 / UTM 29N	551537	4202744	90	Completed	Historical Hole
SES012	438.10	-70	240	ED50 / UTM 29N	551260	4203883	68	Completed	Historical Hole
SES013	400.50	-70	240	ED50 / UTM 29N	551308	4203281	60	Completed	Historical Hole
SES014	604.90	-70	240	ED50 / UTM 29N	551908	4203712	70	Completed	Historical Hole
SES015	214.90	-70	235	ED50 / UTM 29N	550870	4204324	90	Completed	Historical Hole
SES016	114.20	-70	235	ED50 / UTM 29N	551066	4204040	84	Completed	Historical Hole
SES016A	243.80	-70	235	ED50 / UTM 29N	551064	4204038	84	Completed	Historical Hole
SES017	362.50	-70	230	ED50 / UTM 29N	551152	4203954	88	Completed	Historical Hole
SES018	502.50	-70	235	ED50 / UTM 29N	551336	4203497	66	Completed	Historical Hole
SES019	359.50	-70	235	ED50 / UTM 29N	551222	4203529	68	Completed	Historical Hole
SES020	420.50	-70	235	ED50 / UTM 29N	551200	4203590	70	Completed	Historical Hole
SES021	347.00	-70	235	ED50 / UTM 29N	551264	4203381	61	Completed	Historical Hole
SES022	440.50	-70	235	ED50 / UTM 29N	551163	4203656	67	Completed	Historical Hole
SES023	299.50	-90	0	ED50 / UTM 29N	551157	4203369	60	Completed	Historical Hole
SES024	296.50	-70	235	ED50 / UTM 29N	551207	4203247	58	Completed	Historical Hole
SES025	409.55	-60	235	ED50 / UTM 29N	550679	4204541	93	Completed	Historical Hole
SES026	447.85	-70	235	ED50 / UTM 29N	551144	4203800	78	Completed	Historical Hole
SES027	529.15	-80	235	ED50 / UTM 29N	550934	4204036	81	Completed	Historical Hole
SES028	505.80	-90	0	ED50 / UTM 29N	550653	4204619	86	Completed	Historical Hole
SES029	441.60	-75	235	ED50 / UTM 29N	550988	4203769	81	Completed	Historical Hole
SES030	164.70	-70	235	ED50 / UTM 29N	550914	4204199	83	Completed	Historical Hole
SES20-031	536.00	-70	240	ED50 / UTM 29N	550643	4204646	81	Completed	Current
SES21-032	338.20	-60	235	ED50 / UTM 29N	550562	4204667	82	Completed	Current
SES21-033	791.60	-80	235	ED50 / UTM 29N	550607	4204706	82	Completed	Current
SES21-034	392.60	-75	235	ED50 / UTM 29N	550581	4204749	82	Completed	Current
SES21-035	419.40	-75	235	ED50 / UTM 29N	550601	4204764	82	Completed	Current
SES21-036	461.70	-80	235	ED50 / UTM 29N	550628	4204731	82	Completed	Current
SES21-037	641.00	-80	235	ED50 / UTM 29N	550660	4204742	81	Completed	Current
SES21-038	423.00	-75	240	ED50 / UTM 29N	550689	4204666	82	Completed	Current
SES21-039	645.00	-75	235	ED50 / UTM 29N	550718	4204635	82	Completed	Current
SES21-040	623.50	-75	235	ED50 / UTM 29N	550854	4204445	85	Completed	Current
SES21-041	590.50	-55	240	ED50 / UTM 29N	551082	4204182	72	Completed	Current
SES21-042	644.20	-73	235	ED50 / UTM 29N	550841	4204422	85	Completed	Current
SES21-043	292.40	-75	235	ED50 / UTM 29N	550887	4204469	85	Completed	Current
SES21-043A	309.90	-75	235	ED50 / UTM 29N	550887	4204469	85	Completed	Current
SES21-044	706.10	-79	235	ED50 / UTM 29N	550845	4204457	85	Completed	Current
SES21-045	332.40	-75	235	ED50 / UTM 29N	550784	4204541	82	Completed	Current
SES21-046	746.80	-75	235	ED50 / UTM 29N	550797	4204526	82	Completed	Current
SM0601	152.60	-70	225	ED50 / UTM 29N	551246	4204307	78	Completed	Current
SM0602	400.80	-70	225	ED50 / UTM 29N	551245	4204307	78	Completed	Current
SES23-047	552.7	-75	240	ED50 / UTM 29N	551085	4204184	70	Completed	Current

**Appendix 2: Assay results** (0.3% Cu cut-off, 3m maximum consecutive internal dilution)

HOLEID	FROM	TO	Length m	Cu %	Zn %	Pb %	Ag ppm	Au ppm
SES002	151.65	164	12.35	1.61	3.97	2.28	66.8	0.16
SES003	132.05	151.35	19.30	1.49	1.76	0.86	29.9	0.21
SES008	304.1	309.1	5.00	0.62	1.53	0.95	0.5	1.27
SES010	228.4	243.5	15.10	0.44	1.91	0.55	28.6	0.40
SES010	275	286.25	11.25	0.36	1.24	0.35	16.0	0.21
SES019	263.5	314	50.50	0.44	2.68	0.77	17.5	0.41
SES020	302.4	319.95	17.55	0.63	0.67	0.66	20.6	0.60
SES021	262.85	276.85	14.00	0.37	0.42	0.30	10.2	0.45
SES022	326.6	348.6	22.00	0.59	0.89	0.63	18.8	0.60
SES026	384.55	414.65	30.10	0.47	1.26	0.51	15.5	0.74
SES21-033	365.6	385.25	19.65	0.45	1.99	1.05	40.6	0.59
SES21-036	401.1	423.1	22.00	0.38	1.84	0.95	30.3	0.55
SES21-038	356.65	362.85	6.20	0.71	1.36	0.94	31.5	0.54
SES21-039	349.4	387.2	37.80	0.44	2.12	0.80	27.8	0.72
SES21-040	479.4	515.85	36.45	0.73	0.14	0.82	21.0	0.36
SES21-044	417.2	475	57.80	0.41	2.37	0.96	37.6	0.69
SES21-044	508.2	523	14.80	0.56	0.49	0.15	8.3	0.33
SES21-046	380.3	401.4	21.10	0.50	2.21	1.05	37.2	0.71
SES23-047	392.8	433	40.20	1.61	4.97	2.29	68.1	0.28

## APPENDIX I: JORC 2012 CODE

### JORC 2012 MINERAL RESOURCE PARAMETERS

#### SANDFIRE MINEIRA PORTUGAL

JORC Code Assessment Criteria	Comment
<b>Section 1 Sampling Techniques and Data</b>	
<p><b>Sampling Techniques</b></p> <p><i>Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., '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 (e.g., submarine nodules) may warrant disclosure of detailed information.</i></p>	<ul style="list-style-type: none"> <li>• Drilling undertaken by PorMining complies with the industry best practices and the resultant sampling pattern is sufficiently dense to interpret the geometry, boundaries, and different styles of the sulphide mineralisation at Sesmarias with a high level of confidence within well drilled areas.</li> <li>• All core samples were taken from diamond drill cores drilled from the surface.</li> <li>• Diamond drill holes were generally sampled through intervals of visual mineralisation and into visually barren material above and below the mineralised rocks and also from several different units for geochemical characterization.</li> <li>• Sampling intervals are then marked by a geologist to ensure representativity of the sampling, and the length of the samples are typically between 1 and 2m intervals, although this can be reduced depending on the geology and mineralisation in the core. The most common sample lengths in the assay database are 1 and 2m.</li> <li>• Samples were cut longitudinally in half using a manual operated diamond core saw, or in quarter core when routine duplicate samples were included.</li> <li>• The core is then sampled by hand, avoiding any possible contamination from adjacent sampling intervals, it's double bagged to prevent contamination, tagged with barcoded ticket and sealed.</li> </ul>
<p><b>Drilling Techniques</b></p> <p><i>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.), and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i></p>	<ul style="list-style-type: none"> <li>• All drilling conducted has been diamond drilling ("DDH") – from surface collar locations.</li> <li>• Core is orientated in HQ and NQ drilling diameters with COREMASTER from Stockholm Precision Tools (SPT). The core is placed in a "v" shaped tray, and then oriented and marked before reading and recording the angles to core axis of the geological structures. Each structure recorded is classified according to its nature. The information is then recorded in database (Excel file).</li> <li>• Drilling has been carried out by external third-party contractor.</li> <li>• The diamond drilling has been conducted using several drilling machines and is usually undertaken using wireline double tube tools.</li> </ul>

JORC Code Assessment Criteria	Comment
	<ul style="list-style-type: none"> <li>The drillholes start in PQ to penetrate the Tertiary rocks and into the first meters of the Palaeozoic rocks. These are then reduced to HQ and can be reduced to NQ size depending on technical problems.</li> </ul>
<p><b>Drill Sample Recovery</b></p> <p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> <li>The drill core is transported from the drilling rigs to the Core Shed where it is sorted and stored before being processed. Core intervals are measured against the drillers recorded measurements and then the core recovery is determined by the geologists and by trained technicians supervised by the geologists.</li> <li>Diamond core recovery is logged and captured in the database. The drillers also record the length on every run. Both records are compared.</li> <li>When low recovery is captured, the specific sampling interval is noted to avoid bias in over or under reporting.</li> </ul>
<p><b>Logging</b></p> <p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.), photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> <li>The drill core is laid out on a flat logging rack with natural lights and water supply. The logging includes lithological coding as well as assigning an overall geological unit. The lithological coding system comprises 47 individual rock types. These individual rock types are grouped into an overall geological unit code, or main rock type depending on its nature. Logging also includes a visual rock alteration log according to its type (sericite, chlorite, silica) and intensity. Geological structure characterisation is logged in a separate table with its nature and length. Structural readings are also registered to aid with the structural knowledge. Mineralisation logging includes only visible mineralisation aspects with its occurrence and visible mineralogy. Trained technicians measure and record RQD in the core and density of the rocks.</li> <li>The core logging is qualitative in nature whereas the sampling and results are quantitative. All drill cores are photographed and catalogued appropriately.</li> <li>All drill holes are fully logged.</li> </ul>
<p><b>Sub-Sampling Techniques and Sample Preparation</b></p> <p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc., and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p>	<ul style="list-style-type: none"> <li>For all intersections with logged presence of sulphides and adjacent rocks, cores are marked for sampling and cut into two equal halves. The core is placed in a “v” shaped tray and oriented prior to being placed in the core cutting tray machine, the core is then cut. One half of the core is selected for sample preparation and assay analysis, whilst the other is retained as a reference sample. When routine duplicates are present, the half core cut is then cut into a quarter for a duplicate sample.</li> <li>Core sample preparation at the used commercial laboratory (ALS) is completed as follows:             <ul style="list-style-type: none"> <li>LOG-22 - Samples are weighted and logged in.</li> <li>Samples are prepared with the preparation package PREP-31BY that consists in the following:</li> <li>The entire sample is run through a crusher which reduces 70% of the particles to less than 2 mm in size;</li> <li>A rotary splitter then splits out a 1kg subsample;</li> <li>The 1kg subsample is then pulverised to &gt; 85% passing 75 microns.</li> </ul> </li> </ul>

JORC Code Assessment Criteria	Comment
<p><i>Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.</i></p> <p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<ul style="list-style-type: none"> <li>• Coarse blanks, twin duplicates and certified reference materials are alternately inserted on a 1:10 ratio in the batch of samples.</li> <li>• Pulp samples are randomly selected for duplicate analysis. Re-assaying of these pulp samples is used to identify issues with non-representative sampling. The pulp re-assays typically display a high level of correlation.</li> <li>• The sample size is considered appropriate for the mineralisation style.</li> </ul>
<p><b>Quality of Assay Data and Laboratory Tests</b></p> <p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</i></p>	<ul style="list-style-type: none"> <li>• Samples are assayed using four acid digestion with ICP-MS finish (ME-MS61) with a suite of 48 elements. Samples are fire-assayed for Au using the laboratory method Au-AA23 and also analysed for Sn using the ME-XRF05.</li> <li>• Selected historical core was also assayed using the same methods as for new core.</li> <li>• A portable magnetic susceptibility meter (SM30-ZH Instruments) was used to record point data on a 2-3m intervals over all lithological units.</li> <li>• QAQC samples (blanks, certified reference material and duplicates) are inserted into the sample stream prior to these being sent to the laboratory for assay analysis.</li> <li>• Blank samples comprise local sedimentary country rock and have been included in the sample stream of the project since 2020. The results of the blank analysis demonstrate that the sample preparation process employed at ALS limits contamination to acceptable levels.</li> <li>• Pulverised certified blank samples were used when pulps were sent for re-assay due to the nature of the sample. The assay results of the pulverised blank analysis are within acceptable limits.</li> <li>• Twin duplicate samples are quarter core field duplicate samples which have been included in the sample stream on a regular basis. These duplicate results show reasonably good repeatability as well as good correlation between the original and duplicate samples.</li> <li>• The company has used 4 different CRM across all the projects. The CRM are used to monitor Cu, Zn, Pb, Mo and Au grades. The CRMs used have been purchased from certified commercial laboratories (Geostats Pty Ltd).</li> </ul>
<p><b>Verification of Sampling and Assaying</b></p> <p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic)</i></p>	<ul style="list-style-type: none"> <li>• Significant intervals documented have not been verified by independent or alternative company personnel.</li> <li>• The mineralisation appears to be reasonably laterally continuous and has been intersected in fence-style drilling programmes. Separation between drill holes is usually between 25 to more than 100m.</li> <li>• Data entry is completed after core logging and surveying mineralised intervals. Documentation of sampling is undertaken on assay tags provided by <i>ALS Minerals</i> and within a digital assay database (Excel file).</li> <li>• Sampling documentation is then added on <i>ALS Minerals</i> sample submittal form. Lithological information about the sampled interval is later added in the assay database.</li> </ul>

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<p><i>protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <li>Once assay results are received, the digital assay database is updated.</li> <li>All values under the lower detection limit are transformed to half of the lower detection limit value and all values above the higher detection limit are added "+1". Copper, Lead, Zinc and Silver values above maximum detection limits are re-processed with ore grade methods based on ALS protocols.</li> </ul>
<p><b>Location of Data Points</b></p> <p><i>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>Drillhole collars are marked by the geology personnel in LEAPFROG and/or QGIS, using ED50 UTM Zone 29N format and then verified in the field using a GARMIN gps with the same coordinate system, which has an accuracy of 3m in the X, Y and Z coordinates.</li> <li>The drilling company typically uses a REFLEX single shot tool for all of its downhole surveys, with the measurements routinely taken every 25m.</li> </ul>
<p><b>Data Spacing and Distribution</b></p> <p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<ul style="list-style-type: none"> <li>Planned drilling programs are typically aimed to intersect mineralisation perpendicular to strike and also in fan-style distribution for depth continuity verification.</li> <li>Drill spacing can vary from 25m to more than 100m, based on the geological model and location of the bodies of mineralisation.</li> <li>No sample compositing is applied during the sampling process.</li> </ul>
<p><b>Orientation of Data in Relation to Geological Structure</b></p> <p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<ul style="list-style-type: none"> <li>Deposit type implies that the mineralization is typically stratiform. Drilling programs are aimed to intersect mineralisation perpendicular to strike and also in "fan style" distribution for depth continuity verification. However, high average unit dips and local aspects may constrain drill hole collar positioning.</li> <li>No significant sampling bias occurs in the data due to the orientation of drilling with regards to mineralisation.</li> <li>Drilling undertaken by Sandfire Mineira Portugal/PORMINING conforms to industry best practices and the resulting sampling pattern is sufficiently dense to interpret the geometry, boundaries, and different styles of the sulphide mineralisation. Confidence in the geological interpretation decreases in areas of reduced sample coverage and is reflected in the classification of mineral resources.</li> </ul>
<p><b>Sample Security</b></p> <p><i>The measures taken to ensure sample security.</i></p>	<ul style="list-style-type: none"> <li>All drill core is delivered to the core shed, usually via flatbed trucks, for photography, core recovery calculations, geological and geotechnical logging, and sampling.</li> <li>The core shed, sample preparation facilities and laboratory are all confined within secure boundaries, with controlled access points, where only authorised personnel are allowed entry.</li> </ul>

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<p><b>Audits and Reviews</b></p> <p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<ul style="list-style-type: none"> <li>No audits or reviews have been completed.</li> </ul>
<p><b>Section 2 Reporting of Exploration Results</b></p>	
<p><b>Mineral Tenement and Land Tenure Status</b></p> <p><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <p><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></p>	<ul style="list-style-type: none"> <li>Sandfire Mineira Portugal currently holds 4 exploration permits (Ermidas, Cercal, Ourique and Santiago) and an experimental exploitation licence (Alvalade) in joint venture with Avrupa, all in the IPB, which amounts to a total of approximately 1615km<sup>2</sup>.</li> <li>All drilling in this announcement is within the Alvalade experimental exploitation Licence. The Licence is held by PorMining, a subsidiary of Avrupa Mining Ltd. Sandfire Mineira Portugal has an option agreement with Avrupa whereby Sandfire may earn up to an 85% interest in the Licence via a series of stages.</li> </ul>
<p><b>Exploration Done by Other Parties</b></p> <p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<ul style="list-style-type: none"> <li>Mining in the IPB has occurred for over 2,500 years. Activity can be dated to prehistorical times and to Phoenician and Roman periods. Significant interest in IPB did not re-emerge until the 1800s following the successful extraction of Cu, resulting in over 60 mines operating by 1900. The Rio Tinto Company was formed in 1873 to operate some of these mines. The discovery of the Neves Corvo deposit in 1977, renewed exploration interest in the region, which ultimately led to the discovery of the mineralisation associated with the Aguas Teñidas mine and re-opening of the Sotiel Mine in 1983.</li> <li>The “Alvalade” experimental exploitation licence holds 2 VMS historical mine sites, Caveira and Lousal. The most recent exploration works developed in this area, from the past century up to 2019, include projects developed by Avrupa Minerals Ltd. with several joint venture partners (Antofagasta and Colt Resources), Riofinex plc, Billiton, SAPEC and Serviço de Fomento Mineiro (Portuguese Geological Survey).</li> </ul>
<p><b>Geology</b></p> <p><i>Deposit type, geological setting and style of mineralisation.</i></p>	<ul style="list-style-type: none"> <li>The mineral deposit at Sesmarias is interpreted to be volcanogenic massive sulphide (VMS) hosted by volcanic and sedimentary units. VMS deposits are predominantly stratiform accumulations of sulphide minerals that precipitate from upwelling hydrothermal fluids associated with magmatism on or below the seafloor in a wide range of geological settings.</li> <li>Work is underway to characterise the Sesmarias deposit, which is hosted by felsic volcanic rocks and black shales.</li> </ul>

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<p><b>Drill hole information</b></p> <p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li><i>Easting and northing of the drill hole collar</i></li> <li><i>Elevation or rl (reduced level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>Dip and azimuth of the hole</i></li> <li><i>Downhole length and interception depth</i></li> <li><i>Hole length.</i></li> </ul> <p><i>If the exclusion of this information is justified on the basis 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 case.</i></p>	<ul style="list-style-type: none"> <li>Refer to Appendix 1 of this accompanying document.</li> </ul>
<p><b>Data aggregation methods</b></p> <p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<ul style="list-style-type: none"> <li><i>Appendix 2 shows intercepts that are based on a &gt;0.3% Cu COG and may include up to a maximum of 3m consecutive intervals of included waste.</i></li> <li><i>Minimum and maximum DDH sample intervals used for intersection calculation are 0.5m and 2m respectively, and are subject to geological boundaries.</i></li> <li><i>No metal equivalents are used in the intersection calculation.</i></li> </ul>
<p><b>Relationship between mineralisation widths and intercept lengths</b></p> <p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p>	<ul style="list-style-type: none"> <li><i>All drillhole intercepts are reported in downhole thickness.</i></li> <li><i>The drill holes are interpreted to be approximately perpendicular, or at a high angle to the strike and dip of mineralisation. Secondary folds may influence the cross-cutting angle.</i></li> <li><i>True thickness is estimated to be approximately 50% of downhole thickness reported. Further drilling and work are required to confidently establish that thickness.</i></li> </ul>



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<p><i>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g., 'downhole length, true width not known').</i></p>	
<p><b>Diagrams</b> <i>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.</i></p>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections are included within the body of the accompanying document.</i></li> </ul>
<p><b>Balance reporting</b> <i>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.</i></p>	<ul style="list-style-type: none"> <li>• <i>The accompanying document is considered to represent a balanced report. Reporting of grades is undertaken in a consistent manner.</i></li> </ul>
<p><b>Other substantive exploration data</b> <i>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.</i></p>	<ul style="list-style-type: none"> <li>• <i>Other exploration data collected is not considered as material to this document at this stage, Further data collection will be reviewed and reported when considered material.</i></li> </ul>
<p><b>Further work</b> <i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>  <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<ul style="list-style-type: none"> <li>• <i>Step-out drilling along-strike and down-dip extensions of mineralisation continue subject to geological interpretation and observations.</i></li> </ul>