

24 January 2023

**ASX Limited** Level 40. Central Park 152-158 St George's Terrace Perth WA 6000

Sandfire Resources Ltd (Sandfire or the Company) is pleased to advise release of the following announcements to the ASX today, 24 January 2023.

- Near-mine Exploration Success at MATSA
- 2. December 2022 Quarterly Report; and
- 3. December 2022 Quarterly Report Presentation.

In addition, a teleconference and live webcast on the Company's December 2023 Quarterly Report will be held for the investment community at 10.00am (AWST) / 1.00pm (AEST) today.

The December 2022 Quarterly Report and accompanying slide presentation, and the Company's ASX announcements are available via the ASX Company Announcements Platform (ASX Code: SFR) and Sandfire's website at <a href="https://www.sandfire.com.au">www.sandfire.com.au</a>.

A live webcast of the teleconference and synchronised slide presentation will also be available by clicking here.

Yours sincerely

Sophie Raven Company Secretary

**ASX:SFR** 



24 January 2023

# **Near-mine Exploration Success at MATSA**

Ongoing review and re-interpretation of the MATSA geological model yields early success with a significant new zone of VMS copper-zinc mineralisation delineated at San Pedro, adjacent to the Aguas Teñidas Mine and less than 100m from existing underground mine infrastructure.

# **Highlights**

- Encouraging widths and grades of VMS copper-zinc-silver mineralisation intersected in near-mine exploration drilling at the newly identified San Pedro Zone.
- Mineralisation intersected to date over a strike extent of at least 400m, with assay results including:
  - 15.9m @ 2.2% Cu, 1.7% Zn, 0.5% Pb and 27.4ppm Ag from 177.3m including 8.4m @ 1.1% Cu, 4.0% Zn, 1.5% Pb and 53.6ppm Ag from 202.2m (DAF-168)
  - 13.4m @ 1.5% Cu, 4.1% Zn, 2.2% Pb and 81.5ppm Ag from 126.6m (DAF-151)
  - 7.1m @ 1.8% Cu, 1.8% Zn, 0.5% Pb and 23.9ppm Ag from 33.4m (DAF-109)
- The mineralisation at San Pedro is located less than 100m south of the Aguas Teñidas Mine, is hosted by the same prospective geological horizon and is likely part of the same deposit.
- Step-out and in-fill drilling continuing from underground drill platforms, with closer-spaced drilling already completed over 300m of strike extent.
- The San Pedro Zone was identified following a geological reinterpretation of the prospective host horizon by the Sandfire exploration team and represents the first significant exploration breakthrough under Sandfire ownership.
- Extensional drilling is currently underway to test 250m along strike from the intercept in DAF-168, with a potential 2km strike length of untested horizon still to be tested. Down-hole electromagnetic (DHEM) surveys are also being utilised to help refine drill targeting.

Sandfire Resources Ltd (**Sandfire** or **the Company**) is pleased to advise that recent underground drilling at its MATSA Copper Operations in south-western Spain has delineated a new zone of volcanic massive sulphide (VMS) copper-zinc-silver mineralisation adjacent to the Aguas Teñidas Mine.

The newly identified San Pedro Zone is strategically located less than 100m from, and is likely connected, to the Aguas Teñidas Deposit (Figure 1). The mineralisation is defined by a series of highly encouraging VMS, copper-zinc-silver assay results which have been received from recent and ongoing drilling, with significant assays including:

- DAF-92: 6.9m @ 0.4% Cu, 3.8% Zn, 1.1% Pb and 33.9ppm Ag from 90.2m
- **DAF-93**: 7.7m @ 0.5%Cu, 4.1% Zn, 1.2% Pb and 46.9ppm Ag from 90.2m
- DAF-98: 4.2m @ 0.6% Cu, 7.2% Zn, 5.5% Pb and 95.7ppm Ag from 87.4m
- DAF-109: 7.1m @ 1.8% Cu, 1.8% Zn, 0.5% Pb and 23.9ppm Ag from 33.4m
- **DAF-168**: 15.9m @ 2.2% Cu, 1.7% Zn, 0.5% Pb and 27.4ppm Ag from 177.3m
- & 8.4m @ 1.1% Cu, 4.0% Zn, 1.5% Pb and 53.6ppm Ag from 202.2m

• **DAF-151**: 13.4m @ 1.5% Cu, 4.1% Zn, 2.2% Pb and 81.5ppm Ag from 126.6m

All assay composite results are reported as down-hole thickness.





Figure 1: Aerial photograph of the Aguas Teñidas Mine and new San Pedro Zone.

Drilling to date has confirmed that the newly delineated VMS mineralisation within the San Pedro Zone extends over a strike of at least 400m, with closer spaced drilling on a 20m x 20m pattern completed over a 300m strike extent.

The mineralisation is located immediately south of the current Aguas Teñidas Mine and lies within a newly identified VMS mineralised horizon which the Sandfire exploration team identified as part of an ongoing structural geological review.

The close proximity of the San Pedro Zone to existing underground mine infrastructure at Aguas Teñidas will allow for expeditious access and potential development, further elevating its importance as a near-mine exploration opportunity.

See Appendix 1 for details of the underground drill-holes completed within the San Pedro Zone.

#### San Pedro Zone Geology

The San Pedro Zone is interpreted to be hosted within the same geological horizon as the Aguas Teñidas Mine, suggesting that it is likely part of the same deposit. The geological horizon consists of rhyodacite, tuffs and shales.

The identification of the new zone represents one of the most significant initial outcomes of ongoing geological re-interpretation work being conducted by the Sandfire geology team.

This re-interpretation work commenced in the December Quarter of FY2023 and aims to build a geologically sound common litho-structural framework integrating all current operations and exploration projects at MATSA.

This work is continuing and has the potential to identify additional extensions and other discoveries along the prospective horizon along strike from the Aguas Teñidas Mine.

Geological cross-sections are provided in Figures 2 to 4.



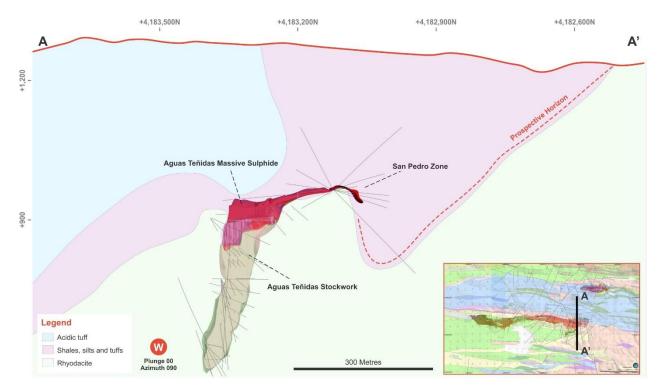


Figure 2: Geological cross section Aguas Teñidas Mine and new San Pedro Zone.

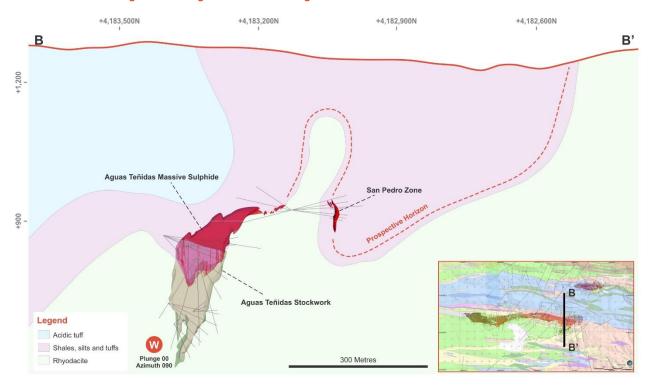


Figure 3: Geological cross section Aguas Teñidas Mine and new San Pedro Zone.



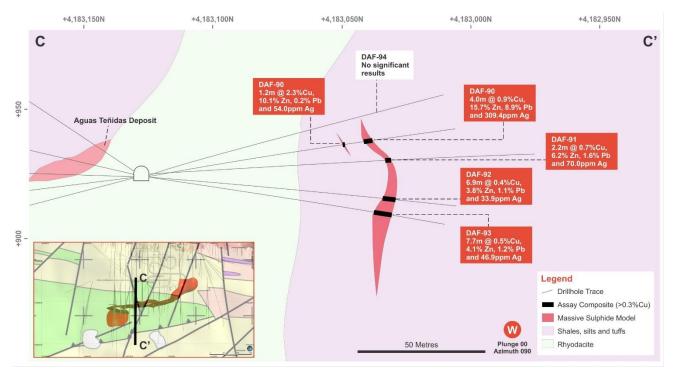


Figure 4: Zoomed cross-sectional view of San Pedro Zone with composites highlighted.

#### San Pedro Zone Mineralisation

The mineralisation at San Pedro has so far been defined over a strike length of 400m, with the potential to be extended further as it remains open to the west.

The Zone can be described as zinc-dominated with drilling returning significant zinc, copper and silver assay results. The San Pedro Zone is interpreted as typical VMS mineralisation of the Iberian Pyrite Belt.

Figure 5 shows a long section of the mineralisation with selected significant intercepts highlighted.

Appendix 2 presents all composite assays available to date based on a 0.3% Cu cut-off grade.



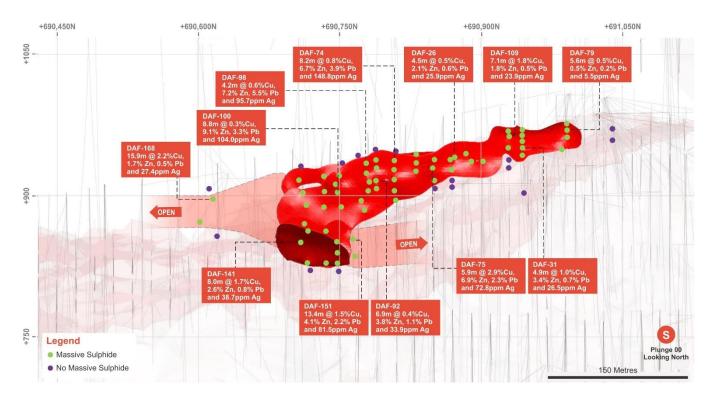


Figure 5: Long section displaying selected significant intercepts in the San Pedro zone.

#### **Ongoing Activities**

Current activities include step-out drilling to test the strike extent of the San Pedro Zone, in conjunction with down-hole electromagnetic (DHEM) surveys to help refine drill targeting and identify accumulations of massive sulphide mineralisation.

Figure 6 shows the strike potential of the newly defined mineralised horizon, which is currently being assessed.

Hole DAF-171 is currently being drilled to test 250m along-strike from the DAF-168 intersection. Based on its new geological understanding, Sandfire has outlined a 2km strike length of untested prospective horizon.



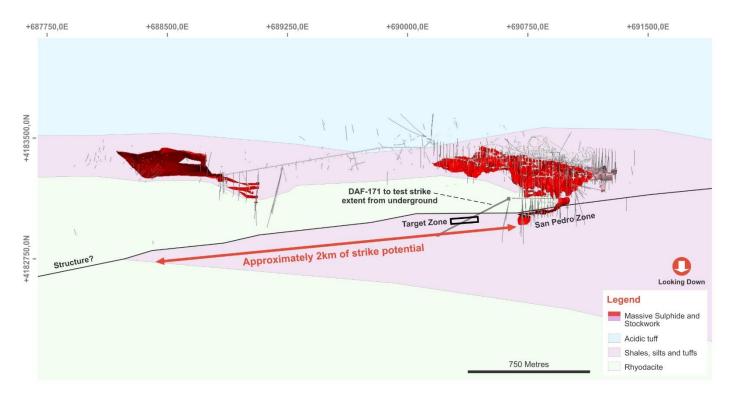


Figure 6: Plan view slice of open strike extent.

### **Management Comment**

Sandfire Acting CEO, Jason Grace, said: 'MATSA is a world-class VMS system and we have always had a high degree of confidence in the potential to find both extensions of existing deposits and to make new discoveries in the near-mine environment and further afield. This potential was one of several key drivers for Sandfire's decision to acquire the asset.

'This represents the first significant exploration breakthrough by the Sandfire team since we acquired the MATSA Copper Operations in February 2022. The identification of the San Pedro Zone shows what can be achieved through a disciplined, systematic and technically sound approach to exploration – and highlights the enormous exploration opportunity in front of us.

'In the short-term, we look forward to the results of step-out drilling to test the full potential of the San Pedro Zone, including the 2km long prospective horizon that has been identified along strike. In-fill drilling will continue in parallel with these step-outs as we work to advance this exciting new discovery towards resource status. We are confident that it will contribute to future Mineral Resource updates at MATSA and, given its proximity to existing underground infrastructure, ultimately be converted to Ore Reserves.'

#### **ENDS**

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This announcement is authorised for release by Sandfire's Acting CEO, Jason Grace.





#### **Competent Person's Statement**

#### **Exploration Results**

The information in this report that relates to Exploration Results at the San Pedro Zone, 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. No representation, express or implied, is made as to the accuracy, likelihood of achievement or reasonableness of any forecasts, prospects, returns or statements in relation to future matters contained in this announcement.

Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, delays or changes in project development, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in metals prices and exchange rates and business and operational risk management.

Except for statutory liability which cannot be excluded, each of Sandfire, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in these forward-looking statements and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in forward-looking statements or any error or omission. Sandfire undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly, you should not place undue reliance on any forward-looking statement.





## **Appendix 1: Drill Collar Information**

Hole ID	Depth	Dip	Azimuth	Grid_ID	Easting	Northing	RL	Hole Status
DAF-26	150.00	16.50	179.00	ED50 UTM29N	690869.93	4183147.68	908.30	Complete
DAF-27	135.00	14.58	183.79	ED50 UTM29N	690910.13	4183147.27	913.98	Complete
DAF-28	140.00	14.10	193.10	ED50 UTM29N	690910.03	4183147.22	914.03	Complete
DAF-30	90.00	29.00	358.40	ED50 UTM29N	690944.00	4183126.00	964.53	Complete
DAF-31	120.00	-10.80	178.80	ED50 UTM29N	690943.91	4183119.87	962.80	Complete
DAF-32	120.00	-17.70	178.50	ED50 UTM29N	690943.86	4183119.99	962.50	Complete
DAF-33	120.00	-3.00	180.00	ED50 UTM29N	690943.87	4183119.99	962.49	Complete
DAF-34	120.00	25.02	175.97	ED50 UTM29N	690943.75	4183121.31	963.39	Complete
DAF-35	200.00	44.10	177.40	ED50 UTM29N	690943.86	4183120.19	965.29	Complete
DAF-36	150.00	64.66	357.39	ED50 UTM29N	690943.69	4183124.63	966.09	Complete
DAF-37	250.00	-44.21	179.55	ED50 UTM29N	690943.85	4183119.98	962.06	Complete
DAF-39	100.00	18.30	359.10	ED50 UTM29N	690990.03	4183119.78	969.42	Complete
DAF-40	100.00	27.90	359.37	ED50 UTM29N	690990.19	4183119.35	969.45	Complete
DAF-41	120.00	-11.00	178.60	ED50 UTM29N	690990.26	4183114.62	967.79	Complete
DAF-42	50.00	9.00	178.10	ED50 UTM29N	690943.94	4183119.63	963.41	Complete
DAF-53	120.00	3.63	178.16	ED50 UTM29N	690830.05	4183124.99	925.53	Complete
DAF-54	120.00	7.50	178.70	ED50 UTM29N	690830.05	4183124.99	925.53	Complete
DAF-55	120.00	18.08	178.77	ED50 UTM29N	690830.17	4183124.94	925.80	Complete
DAF-72	110.00	3.54	179.48	ED50 UTM29N	690809.94	4183126.65	925.16	Complete
DAF-73	130.00	-3.05	179.59	ED50 UTM29N	690809.95	4183125.95	925.29	Complete
DAF-74	130.00	8.04	179.90	ED50 UTM29N	690809.95	4183126.23	925.32	Complete
DAF-75	110.00	1.53	180.22	ED50 UTM29N	690850.06	4183125.12	926.61	Complete
DAF-76	110.00	12.27	182.51	ED50 UTM29N	690850.20	4183126.47	926.41	Complete
DAF-77	130.00	-15.66	191.19	ED50 UTM29N	690809.98	4183124.98	924.76	Complete
DAF-78	50.00	19.90	178.10	ED50 UTM29N	690990.00	4183090.00	976.00	Complete
DAF-79	50.00	-1.10	177.90	ED50 UTM29N	690990.00	4183114.00	968.00	Complete
DAF-80	50.00	53.60	358.20	ED50 UTM29N	690990.00	4183120.00	970.00	Complete
DAF-83	120.00	17.28	180.05	ED50 UTM29N	690809.94	4183124.68	925.93	Complete
DAF-84	110.00	-16.24	175.68	ED50 UTM29N	690809.82	4183126.37	924.90	Complete
DAF-86	120.00	-5.96	179.48	ED50 UTM29N	690850.14	4183125.14	926.32	Complete
DAF-87	120.00	-11.42	179.10	ED50 UTM29N	690849.98	4183125.07	926.24	Complete
DAF-90	120.00	10.16	177.64	ED50 UTM29N	690789.95	4183124.77	924.19	Complete
DAF-91	150.00	3.00	180.00	ED50 UTM29N	690790.00	4183125.00	925.00	Complete
DAF-92	120.00	-5.05	178.06	ED50 UTM29N	690789.96	4183124.78	923.91	Complete
	120.00	-8.53	180.51	ED50 UTM29N	690790.04	4183128.71	924.41	Complete



Hole ID	Depth	Dip	Azimuth	Grid_ID	Easting	Northing	RL	Hole Status
DAF-94	120.00	19.19	183.63	ED50 UTM29N	690790.19	4183126.21	924.02	Complete
DAF-95	110.00	-10.50	174.49	ED50 UTM29N	690772.35	4183125.04	922.63	Complete
DAF-96	110.00	-3.55	174.39	ED50 UTM29N	690772.36	4183125.02	922.83	Complete
DAF-97	110.00	5.06	174.08	ED50 UTM29N	690772.34	4183125.13	923.09	Complete
DAF-98	110.00	9.18	174.94	ED50 UTM29N	690772.38	4183125.15	923.20	Complete
DAF-99	110.00	14.32	181.42	ED50 UTM29N	690772.09	4183125.47	923.58	Complete
DAF-100	114.00	-11.15	193.40	ED50 UTM29N	690771.54	4183124.97	922.60	Complete
DAF-101	110.00	9.61	194.29	ED50 UTM29N	690771.54	4183124.97	922.60	Complete
DAF-102	112.00	-5.17	194.53	ED50 UTM29N	690771.54	4183124.97	922.60	Complete
DAF-103	115.80	1.78	194.92	ED50 UTM29N	690771.86	4183126.22	922.86	Complete
DAF-104	110.00	-18.47	193.33	ED50 UTM29N	690771.57	4183125.05	922.42	Complete
DAF-105	110.00	-16.02	178.55	ED50 UTM29N	690772.19	4183124.97	922.48	Complete
DAF-106	150.00	-22.66	176.85	ED50 UTM29N	690772.24	4183124.97	922.37	Complete
DAF-108	50.00	79.42	181.45	ED50 UTM29N	690930.93	4183092.67	931.76	Complete
DAF-109	50.00	60.00	180.00	ED50 UTM29N	690930.75	4183089.99	930.14	Complete
DAF-110	50.00	37.81	183.96	ED50 UTM29N	690930.75	4183089.99	930.14	Complete
DAF-111	50.00	20.65	183.44	ED50 UTM29N	690930.77	4183089.90	928.76	Complete
DAF-112	80.00	-0.58	183.36	ED50 UTM29N	690930.73	4183089.90	928.40	Complete
DAF-119	100.00	8.51	181.10	ED50 UTM29N	690871.25	4183126.09	927.62	Complete
DAF-120	110.00	1.50	180.97	ED50 UTM29N	690870.00	4183124.78	927.38	Complete
DAF-121	100.00	-6.00	180.00	ED50 UTM29N	690870.00	4183124.70	927.00	Complete
DAF-129	120.00	-20.93	176.49	ED50 UTM29N	690730.08	4183125.01	922.85	Complete
DAF-130	120.00	-11.40	176.86	ED50 UTM29N	690730.05	4183124.86	923.11	Complete
DAF-131	120.00	0.87	177.83	ED50 UTM29N	690729.99	4183124.90	923.47	Complete
DAF-132	132.30	-30.15	177.13	ED50 UTM29N	690730.05	4183125.08	922.78	Complete
DAF-133	166.20	-38.62	177.64	ED50 UTM29N	690730.01	4183125.10	922.68	Complete
DAF-140	160.60	-40.56	177.05	ED50 UTM29N	690710.00	4183124.03	923.25	Complete
DAF-141	164.90	-30.28	177.95	ED50 UTM29N	690710.02	4183124.02	923.43	Complete
DAF-142	300.00	-19.42	176.75	ED50 UTM29N	690710.05	4183123.89	923.56	Complete
DAF-143	240.00	-12.81	179.53	ED50 UTM29N	690710.05	4183123.85	923.69	Complete
DAF-144	91.40	-3.00	180.00	ED50 UTM29N	690710.00	4183129.00	922.00	Complete
DAF-145	200.00	-47.57	175.64	ED50 UTM29N	690710.04	4183124.13	923.19	Complete
DAF-146	220.00	6.41	179.20	ED50 UTM29N	690710.02	4183123.71	924.15	Complete
DAF-147	200.00	-30.87	182.35	ED50 UTM29N	690750.03	4183124.68	922.43	Complete
DAF-148	200.00	-39.89	180.96	ED50 UTM29N	690750.00	4183124.72	922.25	Complete
DAF-150	200.00	-46.70	181.42	ED50 UTM29N	690749.98	4183124.70	922.20	Complete





Hole ID	Depth	Dip	Azimuth	Grid_ID	Easting	Northing	RL	Hole Status
DAF-151	200.00	-32.52	180.03	ED50 UTM29N	690762.52	4183124.87	922.43	Complete
DAF-158	200.00	-40.91	178.88	ED50 UTM29N	690762.51	4183124.84	922.29	Complete
DAF-163	100.00	5.91	179.36	ED50 UTM29N	691040.14	4183138.06	976.11	Complete
DAF-164	150.00	-9.82	179.12	ED50 UTM29N	691040.14	4183138.06	975.70	Complete
DAF-165	200.10	-21.61	177.90	ED50 UTM29N	691040.18	4183138.11	975.21	Complete
DAF-166	200.00	-29.33	178.62	ED50 UTM29N	691040.22	4183138.15	975.04	Complete
DAF-167	200.00	-8.88	194.17	ED50 UTM29N	690632.21	4183124.64	924.56	Complete
DAF-168	300.00	-18.18	190.99	ED50 UTM29N	690632.16	4183124.56	924.26	Complete
DAF-169	200.00	-39.25	190.22	ED50 UTM29N	690632.23	4183124.65	923.68	In progress
DAF-170	200.00	-48.61	193.11	ED50 UTM29N	690632.28	4183124.77	923.41	In progress
DAF-171	220.60	-7.63	243.98	ED50 UTM29N	690626.45	4183124.74	924.30	In progress



## **Appendix 2: Assay results**

(0.3% Cu cut-off, 3m maximum consecutive internal dilution)

Hole ID	From (m)	To (m)	Downhole (m)	Cu (%)	Zn (%)	Pb (%)	Ag (ppm)	Au (g/t)	Mineralisation Style (Poly or Cup)
DAF-100	94.30	103.10	8.80	0.34	9.12	3.30	103.95	1.08	Polymetallic
DAF-102	99.00	99.60	0.60	0.56	0.97	0.71	12.00	0.10	Polymetallic
DAF-102	101.60	106.60	5.00	0.33	5.73	2.08	49.76	0.38	Polymetallic
DAF-103	97.10	98.60	1.50	0.82	2.55	0.46	43.93	0.26	Polymetallic
DAF-104	94.00	102.10	8.10	0.38	3.12	1.13	31.07	0.35	Polymetallic
DAF-105	93.30	97.40	4.10	2.32	4.39	1.26	52.46	0.76	Polymetallic
DAF-106	94.45	100.20	5.75	0.74	3.07	0.93	32.64	0.35	Polymetallic
DAF-108	32.70	35.90	3.20	1.59	3.90	1.15	41.31	0.54	Polymetallic
DAF-109	25.90	30.00	4.10	0.36	0.53	0.52	17.24	0.00	Halo Mineralised
DAF-109	33.40	40.50	7.10	1.76	1.80	0.54	23.89	0.74	Polymetallic
DAF-110	26.30	32.60	6.30	1.13	3.17	0.77	20.70	0.35	Polymetallic
DAF-119	86.80	87.20	0.40	0.59	7.71	2.50	62.00	0.78	Polymetallic
DAF-120	87.80	89.80	2.00	1.25	4.27	2.08	37.30	0.38	Polymetallic
DAF-129	96.60	100.30	3.70	0.39	6.70	2.05	70.59	0.91	Polymetallic
DAF-130	91.00	97.50	6.50	0.40	0.03	0.06	12.24	0.23	Cupriferous
DAF-130	101.20	103.00	1.80	0.37	0.04	0.03	84.28	0.01	Cupriferous
DAF-132	109.60	110.00	0.40	0.30	4.65	1.31	32.50	0.42	Polymetallic
DAF-132	120.20	124.00	3.80	0.30	1.25	0.61	16.18	0.01	Halo Mineralised
DAF-133	135.90	152.85	16.95	0.98	3.24	1.32	32.81	0.44	Polymetallic
DAF-140	139.90	153.60	13.70	1.10	0.53	0.09	32.99	0.42	Cupriferous
DAF-141	98.70	100.20	1.50	0.42	1.99	0.63	19.40	0.25	Polymetallic
DAF-141	105.20	112.70	7.50	0.39	2.64	0.70	30.69	0.25	Polymetallic
DAF-141	144.70	152.70	8.00	1.72	2.55	0.78	38.71	0.24	Polymetallic
DAF-141	164.60	164.90	0.30	0.55	8.03	2.03	64.00	0.66	Polymetallic
DAF-142	90.80	91.30	0.50	5.43	0.18	0.02	56.00	0.56	Cupriferous
DAF-142	97.90	98.90	1.00	0.32	0.04	0.09	16.00	0.41	Cupriferous
DAF-142	99.10	100.90	1.80	0.31	0.03	0.10	19.00	0.63	Cupriferous
DAF-142	173.45	174.50	1.05	1.41	4.73	2.57	93.00	0.00	Polymetallic
DAF-143	84.00	85.00	1.00	0.38	0.06	0.07	5.00	0.00	Cupriferous
DAF-143	95.00	100.90	5.90	1.02	2.39	0.55	30.05	0.07	Polymetallic
DAF-144	88.70	90.00	1.30	3.69	2.99	0.10	232.00	0.25	Polymetallic
DAF-147	108.40	111.20	2.80	0.36	0.91	0.27	16.32	0.10	Halo Mineralised
DAF-147	120.40	142.20	21.80	0.69	1.30	0.48	14.18	0.28	Polymetallic
DAF-147	156.00	157.90	1.90	0.65	7.04	2.49	141.00	0.66	Polymetallic
DAF-148	143.30	151.10	7.80	2.04	5.02	1.52	92.79	1.10	Polymetallic
DAF-151	114.30	116.70	2.40	0.52	1.16	0.39	12.00	0.00	Polymetallic
DAF-151	126.60	140.00	13.40	1.52	4.14	2.16	81.48	0.00	Polymetallic



Hole ID	From (m)	To (m)	Downhole (m)	Cu (%)	Zn (%)	Pb (%)	Ag (ppm)	Au (g/t)	Mineralisation Style (Poly or Cup)
DAF-151	156.60	159.50	2.90	0.52	0.24	0.10	14.10	0.00	Cupriferous
DAF-158	135.90	151.40	15.50	1.00	0.33	0.18	37.99	0.00	Cupriferous
DAF-158	154.50	156.30	1.80	1.00	0.07	0.05	6.00	0.00	Cupriferous
DAF-163	32.00	34.00	2.00	0.53	0.42	0.42	11.00	0.00	Polymetallic
DAF-163	36.30	42.20	5.90	0.49	2.05	0.64	24.32	0.00	Polymetallic
DAF-164	31.00	33.10	2.10	0.35	0.03	0.01	1.00	0.00	Cupriferous
DAF-164	43.00	45.00	2.00	0.44	1.60	0.86	36.00	0.00	Polymetallic
DAF-164	49.00	51.00	2.00	0.41	1.51	0.54	17.00	0.00	Polymetallic
DAF-165	0.10	4.50	4.40	0.42	0.72	0.23	7.34	0.00	Polymetallic
DAF-168	108.90	127.10	18.20	0.99	5.32	1.75	56.49	0.00	Polymetallic
DAF-168	177.30	193.20	15.90	2.15	1.70	0.49	27.36	0.00	Polymetallic
DAF-168	199.10	200.20	1.10	2.34	2.73	1.18	69.00	0.00	Polymetallic
DAF-168	200.40	201.80	1.40	4.45	8.95	3.40	130.00	0.00	Polymetallic
DAF-168	202.20	210.60	8.40	1.09	4.01	1.46	53.55	0.00	Polymetallic
DAF-26	103.50	105.70	2.20	0.93	2.25	3.60	141.00	0.10	Polymetallic
DAF-26	109.60	114.10	4.50	0.45	2.12	0.57	25.93	0.19	Polymetallic
DAF-27	100.00	104.60	4.60	0.97	0.06	0.03	3.61	0.08	Cupriferous
DAF-28	109.30	111.50	2.20	0.58	1.08	0.28	17.27	0.17	Polymetallic
DAF-31	20.00	22.00	2.00	0.37	0.42	0.28	9.00	0.00	Halo Mineralised
DAF-31	41.00	45.90	4.90	1.00	3.40	0.72	26.53	0.44	Polymetallic
DAF-32	56.80	57.10	0.30	0.53	1.11	0.11	6.00	0.13	Polymetallic
DAF-33	5.00	6.90	1.90	0.59	1.24	0.11	8.00	0.00	Polymetallic
DAF-33	17.00	19.00	2.00	0.33	0.47	0.25	11.00	0.00	Halo Mineralised
DAF-33	40.00	43.30	3.30	0.71	2.93	0.80	26.27	0.39	Polymetallic
DAF-34	10.00	11.70	1.70	0.45	0.11	0.05	6.00	0.00	Cupriferous
DAF-34	17.60	19.60	2.00	0.82	2.94	0.99	37.00	0.65	Polymetallic
DAF-35	4.30	8.70	4.40	0.87	3.32	1.00	29.94	0.37	Polymetallic
DAF-36	1.30	2.40	1.10	0.83	6.85	2.39	57.00	0.66	Polymetallic
DAF-40	1.10	3.00	1.90	1.29	0.49	0.41	17.11	0.11	Cupriferous
DAF-40	14.90	15.60	0.70	0.81	0.06	0.06	7.00	0.15	Cupriferous
DAF-41	21.70	23.50	1.80	1.95	0.07	0.06	24.00	0.32	Cupriferous
DAF-41	70.00	71.10	1.10	0.98	0.17	0.13	6.00	0.00	Cupriferous
DAF-42	5.00	7.00	2.00	0.45	0.02	0.02	3.00	0.00	Cupriferous
DAF-42	28.40	28.90	0.50	0.62	0.81	0.23	24.00	0.00	Polymetallic
DAF-53	88.00	92.00	4.00	0.94	9.03	3.29	96.50	0.69	Polymetallic
DAF-53	95.20	97.30	2.10	0.45	12.25	5.30	153.00	0.89	Polymetallic
DAF-55	70.40	70.70	0.30	3.65	10.81	9.72	589.00	0.05	Polymetallic
DAF-72	89.30	94.00	4.70	0.76	6.73	2.22	75.28	0.71	Polymetallic
DAF-73	89.30	91.35	2.05	1.30	6.36	1.65	59.00	0.60	Polymetallic



Hole ID	From (m)	To (m)	Downhole (m)	Cu (%)	Zn (%)	Pb (%)	Ag (ppm)	Au (g/t)	Mineralisation Style (Poly or Cup)
DAF-74	81.80	89.90	8.10	0.81	6.71	3.92	148.77	0.59	Polymetallic
DAF-75	89.90	95.80	5.90	2.91	6.87	2.26	72.78	0.57	Polymetallic
DAF-76	78.00	80.40	2.40	0.38	10.08	5.39	87.13	0.43	Polymetallic
DAF-77	91.10	92.45	1.35	0.44	3.69	1.20	21.00	0.57	Polymetallic
DAF-79	18.40	24.00	5.60	0.54	0.53	0.18	5.48	0.08	Polymetallic
DAF-80	5.20	5.55	0.35	1.31	3.16	1.70	55.00	0.05	Polymetallic
DAF-80	10.00	10.30	0.30	0.35	0.18	0.24	19.00	0.54	Cupriferous
DAF-86	90.10	90.90	0.80	0.69	0.05	0.06	5.00	0.18	Cupriferous
DAF-90	76.20	77.40	1.20	2.30	0.13	0.19	54.00	0.35	Cupriferous
DAF-90	83.80	87.80	4.00	0.90	15.65	8.90	309.40	0.76	Polymetallic
DAF-91	92.30	94.50	2.20	0.72	6.18	1.61	70.00	0.00	Polymetallic
DAF-92	90.20	97.10	6.90	0.35	3.78	1.10	33.90	0.41	Polymetallic
DAF-93	90.20	97.90	7.70	0.52	4.10	1.21	46.91	0.53	Polymetallic
DAF-95	91.90	97.50	5.60	0.50	7.93	2.60	85.95	0.75	Polymetallic
DAF-96	92.60	95.50	2.90	0.48	7.59	2.51	63.31	1.09	Polymetallic
DAF-97	93.50	97.20	3.70	0.48	4.70	1.26	39.30	0.58	Polymetallic
DAF-98	82.00	84.00	2.00	1.02	0.03	0.01	16.00	0.00	Cupriferous
DAF-98	87.40	91.60	4.20	0.63	7.18	5.48	95.74	0.00	Polymetallic



## **APPENDIX 3: JORC 2012 CODE**

## JORC 2012 MINERAL RESOURCE PARAMETERS - MATSA COPPER OPERATIONS

JORC Code Assessment Criteria	Comment
Section 1 Sampling Techniques and Data	
Sampling Techniques  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.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  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)	<ul> <li>Drilling undertaken by MATSA conforms to industry best practices and the resultant sampling pattern is sufficiently dense to interpret the geometry, boundaries, and different styles of the sulphide mineralisation at the three mines with a high level of confidence within well drilled areas.</li> <li>All samples were taken from diamond drill cores drilled from underground. Samples were cut longitudinally in half using an auto-feeding diamond core saw, or whole core, depending on the purpose of the drill hole and the core diameter.</li> <li>Sampling intervals are then marked, typically at 2m intervals, although this is reduced depending on the geology and mineralisation in the core. The most common sample lengths in the assay database are 1m and 2m.</li> <li>Diamond drill holes were generally sampled through intervals of visual mineralisation and into visually barren material.</li> </ul>
Drilling Techniques  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.).	<ul> <li>All drilling conducted has been diamond drilling ("DDH") – from underground collar locations.</li> <li>No core was orientated.</li> <li>Drilling has been carried out by external third-party contractors for underground programs.</li> <li>The diamond drilling has been conducted using various drilling machines and is usually undertaken using wireline double tube tools.</li> <li>The underground drillholes start in HQ and can be reduced to NQ size depending on the target depth of the drillhole.</li> </ul>



JORC Code Assessment Criteria	Comment
Drill Sample Recovery  Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the samples.  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.	<ul> <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 MATSA geologists.</li> <li>Diamond core recovery is logged and captured in the database. Core recoveries are measured by the drillers for every run.</li> <li>Core was cut along a cut-line marked by the supervising geologist, which was marked orthogonal to the main core axis.</li> </ul>
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.  Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.), photography.  The total length and percentage of the relevant intersections logged.	<ul> <li>The drill core is laid out on an angled logging rack with dedicated lights and water supply. The MATSA logging includes lithological coding as well as assigning an overall geological unit. The lithological coding system used records 68 individual rock types. These individual rock types are grouped into an overall geological unit code, or main rock type.</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> <li>Longitudinally cut half core samples are produced using a core saw.</li> </ul>



# JORC Code Assessment Criteria Sub-Sampling Techniques and Sample Preparation

If core, whether cut or sawn and whether quarter, half or all core taken.

If non-core, whether riffled, tube sampled, rotary split, etc., and whether sampled wet or dry.

For all sample types, the nature, quality and appropriateness of the sample preparation technique.

Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.

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.

Whether sample sizes are appropriate to the grain size of the material being sampled.

#### Comment

- For all intersections with logged presence of sulphides and adjacent waste zones, cores are marked for sampling and cut into two equal halves. The core is placed in a v-rail prior to being placed in the core cutting 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.
- Core sample preparation at the laboratory was completed as follows:
  - Weight.
  - Oven dry, each sample is stored in a metal tray on a rack and dried at 105°C for at least two hours.
  - The entire dried sample is first crushed using a jaw crusher.
  - The sample is then run through a cone crusher which reduces 90% of the particles to less than 2 mm in size.
  - Each sample is then placed on a large plastic sheet and rolled (mixed) 20 times to homogenise the sample.
  - After homogenisation, sample is split using an automatic riffle splitter resulting in a 500g sample, the sample must be at least 400g in weight and no more than 800g.
  - The 500 g sample is milled using a ring mill for seven minutes resulting in the sample particles passing through a 75 μm sieve.
  - The pulverised sample is then placed on a large plastic sheet, and it is mixed (rolled) 20 times to homogenise the sample. The pulp sample is then dip sampled to obtain a 150g sub-sample.
  - Any external check samples, which require pulp material, are also taken during this process (external umpire and MATA reference samples). This 150g sample is then placed in a small plastic or paper bag with the sample number printed on it.
- Coarse blanks and twin duplicates are inserted at the laboratory at the start of the sample preparation process.
- Duplicate analysis of pulp samples has been completed and identified no issues with sampling representatively
  with assays showing a high level of correlation.
- The sample size is considered appropriate for the mineralisation style.



JORC Code Assessment Criteria	Comment				
Quality of Assay Data and Laboratory Tests	Samples are assayed using ICP-OES, with aqua regia digest at the Internal MATSA laboratory. Samples are also				
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	fire-assayed for Au. The elements (Cu, Zn, Pb, Ag, Au, As, Sb, Bi, Cd, Ni, Se, Mn and Co, Hg, Fe and S) that are analysed at the MATSA laboratory, along with the minimum detection limits of the assaying equipment (ICP-				
For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times,	OES).  The historical Aguas Teñidas core was assayed for the current MATSA suite of element in most cases (when the mine was active), twicelly by ICB and XBE.				
calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (e.g., standards,	<ul><li>mine was active), typically by ICP and XRF.</li><li>No geophysical tools were used to analyse the drilling products.</li></ul>				
blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	<ul> <li>QAQC samples (blanks, certified reference material and duplicates) are inserted by MATSA staff into the sample stream prior to these being sent to the laboratory for assay analysis. MATSA also employs ALS (previously OMAC Laboratories Ltd) and ALS Chemex (Global) as its external reference laboratories used to undertake check (umpire) assay analysis.</li> </ul>				
	Blank samples used by MATSA comprise silica material and have been included in the sample stream for Aguas Teñidas since 2009. In reviewing the blanks analysis data, Matsa has applied a 4X detection limit threshold, specific for each element. Samples which plot above this threshold are determined as failed samples is typically due to contamination or a mix up of samples (incorrect labelling). The results of the blank analysis demonstrate that the sample preparation process employed at MATSA limit contamination to a reasonable level.				
	Fine blank samples were used by MATSA on 2016 for Aguas Teñidas and Magdalena and 2017 for other projects (these samples have not continued to be made). Those comprise pulped (homogenised) silica material, these have been included in the sample stream. The results of the fine blank analysis are within reasonable limits, with little evidence for sample contamination between the ICP samples.				
	• Twin duplicate samples used by MATSA are quarter core field duplicate samples which have been included in the sample stream at Aguas Teñidas since 2016. As expected, these duplicate results show a wider range of variation than the other duplicate types inserted into the sample stream by MATSA but still show reasonably good repeatability as well as good correlation between the original and duplicate sample. The twin duplicates report correlation coefficients typically more than 0.85 (most above 0.9).				



JORC Code Assessment Criteria	Comment
	<ul> <li>Coarse duplicate samples used by MATSA are collected after the second split following crushing. The results for the coarse duplicates show a high degree of repeatability and a very high degree correlation between the original and duplicate sample, with a correlation coefficient typically more than 0.97.</li> </ul>
	<ul> <li>Internal pulp duplicates sample used by MATSA are collected at the final stage of sample preparation. The results for the pulp duplicates show a high degree of repeatability and a high degree of correlation between the original and duplicate sample, with a correlation coefficient typically more than 0.98.</li> </ul>
	<ul> <li>External duplicate samples are collected at the final stage of sample preparation and sent to the umpire laboratory (ALS Laboratories, Ireland ISO/IEC 17025). The results for the external duplicates show a high degree of repeatability and a high degree of correlation between the original and duplicate samples, with a correlation coefficient typically more than 0.97.</li> </ul>
	• MATSA has used 37 different CRM across all the deposits since production at the Aguas Teñidas mine recommenced in 2008. The CRM are used to monitor Cu, Zn, Pb, Ag, and Au grades. All CRM used have been created in - house by MATSA and were sent for round robin laboratory analysis, at ALS Vancouver, ALS Loughrea, SGS Peru, SGS Canada, ALS Perth, and ALS Brisbane. Overall, the grade ranges of the CRM are representative of the different mineralisation types (cupriferous and polymetallic) and grades as demonstrated in the drillhole statistics.
Verification of Sampling and Assaying	Documented verification of significant intervals by independent personnel has not been done, however the
The verification of significant intersections by either independent or alternative company personnel.	mineralisation appears to be reasonably continuous and is not dominated by any one significant intersection.
The use of twinned holes.	Furthermore, the tenor of copper and zinc is visually predictable in massive or semi massive sulphide
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	intersections.
Discuss any adjustment to assay data.	



JORC Code Assessment Criteria	Comment
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.  Specification of the grid system used.  Quality and adequacy of topographic control.	<ul> <li>The MATSA drillhole collars, for underground drillholes, are surveyed by the MATSA survey department. The underground collars are surveyed using a total station method which has an accuracy of less than 10cm in the X, Y, and Z coordinates.</li> <li>Regarding downhole survey the majority of the drillholes have a start and end of hole measurement only. MATSA typically uses a REFLEX Flexi-It multi-shot tool for all of its downhole surveys, with the measurements taken every 25m. The REFLEX tool is a magnetic tool, and the survey azimuth is aligned to mine grid north.</li> <li>Collars are marked out and picked up in the ETRS89 UTM Zone 29 N format.</li> <li>A local mining grid is used for Aguas Tenidas. Conversion to this grid is undertaken from WGS84 co-ordinates and is achieved by adding 1,002.968m to the elevation (Z) values (to avoid negative numbers in the underground development).</li> </ul>
Data Spacing and Distribution  Data spacing for reporting of Exploration Results.  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.  Whether sample compositing has been applied.	<ul> <li>All underground drilling at the is typically aimed to intersect mineralisation perpendicular to strike where access facilitates this.</li> <li>Underground drill spacing is 20m then further underground exploration step-out drilling is done based on size and location of target.</li> <li>No sample compositing is applied during the sampling process.</li> </ul>
Orientation of Data in Relation to Geological Structure  Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  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.	<ul> <li>All drilling undertaken is typically aimed to intersect mineralisation perpendicular to strike where access facilitates this.</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 MATSA 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 at the three mines with a high level of confidence within well drilled areas. Confidence in the geological interpretation decreases in areas of reduced sample coverage and is reflected in the classification of mineral resources.</li> </ul>



JORC Code Assessment Criteria	Comment			
Sample Security  The measures taken to ensure sample security.	<ul> <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> </ul>			
	<ul> <li>The core shed, sample preparation facilities and laboratory are all confined within secure boundaries, with controlled access points, where only authorised, mine personnel are allowed entry.</li> </ul>			
Audits and Reviews	No audits or reviews have been completed.			
The results of any audits or reviews of sampling techniques and data.				
Section 2 Reporting of Exploration Results				
Mineral Tenement and Land Tenure Status  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.	MATSA currently holds 55 mining permits which cover all three mines and has the rights to exploit the Aguas Teñidas and Magdalena mines in the municipality of Almonaster la Real and the Sotiel mine in the municipality of Calañas, both of which are located in the province of Huelva. The Company also has exploitation (mining) and research (exploration) permits which cover more than 1,100 km² in the IPB and 160km² in the Spanish region of Extremadura.			
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.	The Aguas Teñidas, Magdalena, and Sotiel mines are covered by 33, 21, and one mining permits, respectively. The Aguas Teñidas mining permits were renewed in 2012 for a 30-year period and are due to expire on 31 August 2042. The Magdalena mining permits were issued in 2013 and are due to expire on 15 January 2043, except for the Magdalena Masa 2 permit which is due to expire on 07 July 2046. The Sotiel mining permit was renewed in 2015 and is due to expire on 19 January 2045.			
<b>Exploration Done by Other Parties</b>	<ul> <li>Mining in the IPB has occurred for over 2,500 years. Activity can be dated to Roman and Phoenician periods.</li> </ul>			
Acknowledgment and appraisal of exploration by other parties.	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 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.			



JORC Code Assessment Criteria	Comment
	• The Calañesa deposit is the oldest known deposit in the mine area. The deposit was first mined in the Roman period; however, the oldest records referencing exploration and mining are from 1886 by the Compagnie des Mines de Cuivre d Aguas Teñidas, who operated the mine until the end of the 19th Century. It was later mined in 1916 by Huelva Copper Company until 1934. Since this time, most of the exploration in relation to the Calañesa deposit has been surface drilling by MATSA, the majority of which was completed in 2018, except for the exploration conducted by Billiton during the 1980s. Billiton relinquished the property in 1990. Placer Dome subsequently acquired the project and between 1991 and 1994 drilled the deposit and built on Billiton's previous work. Navan then acquired the project between 1995 and 2000 and, in 1995, acquired the mining rights for the Aguas Teñidas and Western Extension deposit. In April 1997, Navan acquired Almagrera SA from the Spanish government. This operation comprised the Sotiel underground mine, a minerals processing complex (at Sotiel mine) for Cu, Zn, and Pb, and an acid plant.
Geology  Deposit type, geological setting and style of mineralisation.	• The MATSA deposits are interpreted to be volcanogenic massive sulphide (VMS), and sedimentary hosted massive sulphide (SHMS) deposits. 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. SHMS deposits are similar to VMS deposits but are formed by fluid mixing in permeable sedimentary rocks and generally lack the abundance of volcanics/magmatism.
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:  Easting and northing of the drill hole collar  Elevation or rl (reduced level – elevation above sea level in metres) of the drill hole collar  Dip and azimuth of the hole  Downhole length and interception depth  Hole length.  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.	Refer to Appendix 1 of this accompanying document.



JORC Code Assessment Criteria	Comment
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.  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.	<ul> <li>Appendix 2 shows intercepts that are based on a 0.3% Cu COG and may include up to a maximum of 3m consecutive waste as long as final composites are greater than 0.3%Cu.</li> <li>Minimum and maximum DDH sample intervals used for intersection calculation are 0.1m and 2m respectively subject to geological boundaries.</li> <li>No metal equivalents are used in the intersection calculation.</li> <li>Mineralisation type has been recorded in the composites table. These are based on the below parameters:         <ul> <li>Cupriferous material has 'Cu%/Zn% &gt;1.7 and Zn% &lt;2.5'.</li> <li>Polymetallic material has 'Zn% &gt;2.5' or 'Zn% &lt;2.5 and Cu%/Zn% &lt;1.7 and Cu% &gt;0.4'</li> </ul> </li> <li>Halo Mineralised material has 'Zn% &lt;2.5 and Cu%/Zn% &lt;1.7 and Cu% &lt;0.4</li> </ul>
Relationship between mineralisation widths and intercept lengths  These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.  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').	<ul> <li>All drillhole intercepts are reported in downhole thickness.</li> <li>The drill holes are interpreted to be approximately perpendicular to the strike and dip of mineralisation.</li> <li>True thickness is estimated to be approximately &gt;80% of downhole thickness reported.</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.	Appropriate maps and sections are included within the body of the accompanying document.
Balance reporting  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.	The accompanying document is considered to represent a balanced report. Reporting of grades is done in a consistent manner.



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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.	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.
Further work  The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).	Step-out drilling along-strike and down-dip extensions of mineralisation continue subject to geological interpretation and observations.
Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	