Alphamin Resources Corp.
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## ALPHAMIN REPORTS HIGH GRADE EXPLORATION ASSAY RESULTS

February 1, 2022 - Alphamin Resources Corp. (AFM:TSXV, APH:JSE AltX, "Alphamin" or the "Company"), a producer of $4 \%$ of the world's mined tin ${ }^{1}$ from its high-grade operation in the Democratic Republic of Congo, is pleased to announce drill results from its Bisie Tin Complex.

## HIGHLIGHTS

> Mpama South high-grade assay results ${ }^{2}$ received, including BGH079 which is the best drillhole assayed to date at Mpama South by contained tin:
> BGH079: 15.6 metres @ $5.00 \%$ Sn from 290.2 metres, including 10.0 metres @ $6.1 \%$ from 291.1 metres, and
> BGH079: 9.0 metres @ $5.63 \%$ Sn from 316.9 metres
> BGH077: 4.8 metres @ 4.68\% Sn from 335.3 metres and 11.4 metres @ 2.23\% Sn from 318.8 metres
> Mpama North high-grade assay results ${ }^{2}$ received, including MND011 which is the second best drillhole assayed to date at Mpama North by contained tin:
> MND011: 19.6 metres @ 17.16\% Sn from 419.3 metres, including 14.5 metres @ 23.0\%
> Visual cassiterite mineralised intercepts at Mpama South are now within 85 metres from the Mpama North mine orebody
> Finalising completion of the Maiden Mineral Resource estimation on Mpama South

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## Mpama South Update and Forthcoming Completion of a Maiden Mineral Resource

Mpama South is the high-grade tin deposit adjoining the southern end of Alphamin's operating Mpama North mine. By year end 2021, 24,235 metres of drilling has been completed in 89 drillholes. Including the original sixteen 2014/15 drillholes, $23,109 \mathrm{~m}$ and 79 drillholes will form the basis of the Maiden Mineral Resource estimation exercise which is nearing completion, results expected to be announced in February 2022. Subsequent Mineral Resource updates are expected to be announced throughout 2022 as Alphamin plans to aggressively drill the deposit which is open in multiple directions.

Selected significant intercepts from the most recently received batch of drillhole assays, including the best intercept to date at Mpama South in BGH079 in terms of contained metal (Sn\% x metres), are listed below as apparent widths:

- BGH079: 15.6 metres @ 5.00\% Sn from 290.2 metres, including 10.0 metres @ 6.1\% from 291.1 metres, and
- BGH079: 9.0 metres @ 5.63\% Sn from 316.9 metres
- BGH077: 4.8 metres @ 4.68\% Sn from 335.3 metres and 11.4 metres @ 2.23\% Sn from 318.8 metres
- BGH084: 26.0 metres @ 2.71\% Sn from 280.3 metres
- BGH086: 6.1 metres @ $2.75 \%$ Sn from 275.35 metres

The success of the Mpama South drilling is such that the zone of high-grade mineralisation has grown substantially throughout 2021. Visual cassiterite intercepts at Mpama South are now within 85 metres of Mpama North mine and are in the export and assay pipeline already. Figure 1 demonstrates the location of received assays, awaited assays on visual cassiterite intercepts and proximity of these to the Mpama North Mine based on drilling to date. The complete list of assayed intercepts to date is shown in Appendix 2.

Figure 1: Mpama South Assays to-date


## Mpama North Update

Drilling commenced on Mpama North in July 2021 on the Mpama North Deeps target. The first drillholes showed increased structural complexity associated with a northeast-southwest crosscutting fault which had constrained the Deeps target to smaller extents than originally planned. After revising the model and drilling approach, several high-grade intercepts of visual cassiterite were intersected east of the fault subsequently as well as west of the fault in the shallower Oso target. Drilling continues in 2022 to close out what is left of the Deeps target, the shallow Oso target as well as the down Dip eastern side of Mpama North which still remains open (Figure 2).

A particularly significant new intercept from the first batch of drillhole assays on Mpama North is listed below as an apparent width. The intercept is the second best drillhole at Mpama North drilled to date in terms of contained metal (Sn\% x metres):-

- MND011: 19.6 metres @ 17.16\% Sn from 419.3 metres, including 14.5 metres @ 23.0\% The complete list of assayed intercepts to date is shown in Appendix 2.

Figure 2: Mpama North Drill Targets


Source: Alphamin 2022

## Bisie Ridge Exploration Drilling

The Bisie Ridge is a 13 km long ridge hosting both the Mpama North and Mpama South deposits. Only a fraction ( $\sim 20 \%$ ) of this ridge has been intensively drill tested to date. The full length of the ridge has been the subject of a follow up geochemical investigation in 2021 confirming tin and other base metal anomalies over the majority of its length. Six high priority drill areas have been identified in 2021 in conjunction with the Company's expert structural advisors TECT. With the goal of making new discoveries, the Company is pleased to announce that the first of these six targets commenced drill testing in January 2022.

## Qualified Person

Mr Jeremy Witley, Pr. Sci. Nat., B.Sc. (Hons.) Mining Geology, M.Sc. (Eng.), is a qualified person (QP) as defined in National Instrument 43-101 and has reviewed and approved the scientific and technical information contained in this news release. He is a Principal Mineral Resource Consultant of The MSA Group (Pty.) Ltd., an independent technical consultant to the Company.

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## CAUTION REGARDING FORWARD LOOKING STATEMENTS

Information in this news release that is not a statement of historical fact constitutes forwardlooking information. Forward-looking statements contained herein include, without limitation, statements relating to anticipated future exploration activities and outcomes and the timing and positive outcome of a future resource estimation for Mpama South. Forward-looking statements are based on assumptions management believes to be reasonable at the time such statements are made. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Although Alphamin has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Factors that may cause actual results to differ materially from expected results described in forward-looking statements include, but are not limited to: uncertainties with respect to social, community and environmental impacts, uninterrupted access to required infrastructure, adverse political events, impacts of the global Covid-19 pandemic on mining as well as those risk factors set out in the Company's Management Discussion and Analysis and other disclosure documents available under the Company's profile at www.sedar.com. Forward-looking statements contained herein are made as of the date of this news release and Alphamin disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by applicable securities laws.

Neither the TSX Venture Exchange nor its regulation services provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news release.

## Appendix 1: SAMPLE PREPARATION, ANALYSES AND QUALITY CONTROL AND QUALITY ASSURANCE (QAQC)

After receipt of diamond drill core from the drillers at the drill rig in marked core trays, core was transported to the Company's core shed by the site geologist for logging and sampling. After sample mark up, lithological and geotechnical logging and photography, the core was split longitudinally in half using a water-cooled rotating diamond blade core saw. The cut core was replaced into the core tray with the half to be sampled facing upward. Based on previous experience at Bisie with high density variability and at the qualified person's instruction ( Mr J . Witley of MSA Group), specific gravity (SG) was performed exclusively on the half core that was to be sampled. The Archimedes method of weight in air vs weight in water was used on the whole length of the half core that was to be sampled and then replaced in the core trays.

Air dried samples were placed in pre-numbered sample bags together with pre-printed numbered sample tickets, which were cross-checked afterwards to prevent sample swaps. Sample bags were sealed using a plastic cable tie and then placed into poly-weave sacks which were in turn sealed with plastic cable ties. Each poly-weave sack was marked with a number and the sample numbers contained within, ready for delivery to the on-site Alphamin-Bisie laboratory for sample preparation.

At the laboratory, samples were first checked off against the submission list supplied and then weighed and oven dried for 2 hours at 105 degrees Celsius. The dried samples were crushed by jaw crusher to $75 \%$ passing 2 mm , from which a 250 g riffle split was taken. This 250 g split was pulverised in ring mills to $90 \%$ passing $75 \mu \mathrm{~m}$ from which a sample for analysis was taken. Samples were homogenised using a corner-to-corner methodology and two samples were taken from each pulp, one of 10 g for on-site laboratory assaying and another 150 g sample for export and independent accredited 3rd party laboratory assaying.

For the initial on-site laboratory assay, 10 grams of pulverised sample is mixed with 2 grams of binder before press pellet preparation at 20t/psi for 1 minute. Press pellets are analysed in a desktop Spectro Xepos XRF analyser, twelve at a time, for $\mathrm{Sn}, \mathrm{Fe}, \mathrm{Zn}, \mathrm{Cu}, \mathrm{Ag}, \mathrm{Pb}$ and As along with a standard, duplicate and blank. The analytical method conducted on the pressed pellet has an expected $10 \%$ precision and an upper detection limit of $70,000 \mathrm{ppm}$ and lower detection limit of 500 ppm . Over-limit samples are titrated by wet chemistry with an upper limit validation of $70 \%$ Sn . The on-site laboratory assays are merely an exploration tool and were not used for reporting the exploration results, which are based solely on the ALS assays.

The 150 g sample is packaged in sealed paper sample envelopes and packed in a box for export in batches of approximately 500 samples and prepared for export authorisation with national authorities. Once authorisation is received, samples are air-couriered to ALS Group in Johannesburg South Africa, a subsidiary of ALS Limited, which is an independent commercial analytical facility. ALS operations are ISO 9001:2015 certificated and the Johannesburg office is ISO 17025 accredited for Chemical Analysis by SANAS (South African National Accreditation System, facility number T087), although the accreditation does not extend to the methods used for tin.

Received samples at ALS Johannesburg are checked off against the list of samples supplied and logged in the system. Quality Control is performed in the way of sieve tests every 50 samples and should a sample fail, the preceding 50 samples are ground in a ring mill pulveriser using a carbon steel ring set to $85 \%$ passing $75 \mu \mathrm{~m}$. Samples are analysed for tin using method code ME-XRF05
conducted on a pressed pellet with $10 \%$ precision and an upper limit of 5,000ppm. The over-limit tin samples are analysed as fused disks according to method ME-XRF15c, which makes use of pre-oxidation and decomposition by fusion with 12:22 lithium borate flux containing $20 \%$ Sodium Nitrate as an oxidizing agent, with an upper detection limit of $79 \%$ Sn.

Method code ME-ICP61 (HF, HNO3, HCIO4 and HCl leach with ICP-AES finish) is used for 33 elements including base metals. ME-OG62, a four-acid digestion, is used on ore grade samples for lead, zinc, copper and silver. Both methods are accredited by SANAS.

The program is designed to include a comprehensive analytical quality assurance and control routine comprising the systematic use of Company inserted standards, blanks and field duplicate samples, internal laboratory standards and analysis at an accredited laboratory. The pulps were accompanied by blind QAQC samples inserted into the sample stream by the Alphamin-Bisie geologists. These comprised blank samples, certified reference materials and pulp duplicates each at an insertion rate of approximately $5 \%$.

The QAQC results demonstrate that the assay results are both accurate and precise with an insignificant amount of contamination (in the order of 10 pmm Sn on average) and negligible sampling errors. Further verification work is in progress by additional check assays by SGS South Africa (Pty) Ltd.

Appendix 2: SIGNIFICANT INTERCEPTS (0.5\% Sn lower threshold) ("BGH" holes refer to Mpama South; "MND" holes refer to Mpama North)

| Hole | Easting | Northing | RL_m | Azi ${ }^{\circ}{ }^{\circ}$ | Dip ( ${ }^{\circ}$ ) | From | To | Sn \% | $\begin{aligned} & \text { Width } \\ & (\mathrm{m})^{1} \\ & \hline \end{aligned}$ | Sample Position |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | GPS | GPS |  |  |  |  |  |  |  | mid_x | mid_y | mid_z |
| BGH017 | 582535 | 9884822 | 732 | 55 | -10 | 237.80 | 238.80 | 4.99 | 1.00 | 582,732 | 9,884,966 | 678.6 |
| BGH018 | 582535 | 9884822 | 732 | 93 | 0 | 141.20 | 144.35 | 2.07 | 3.15 | 582,691 | 9,884,820 | 727.9 |
|  |  |  |  |  |  | 145.75 | 151.00 | 0.76 | 5.25 | 582,696 | 9,884,820 | 727.9 |
| BGH019 | 582535 | 9884822 | 732 | 85 | -5 | 147.00 | 152.00 | 2.05 | 5.00 | 582,696 | 9,884,837 | 715.8 |
| BGHO20 | 582535 | 9884822 | 732 | 84 | -15 | 160.60 | 164.40 | 1.45 | 3.80 | 582,704 | 9,884,846 | 689.3 |
|  |  |  |  |  |  | 169.30 | 171.10 | 5.42 | 1.80 | 582,711 | 9,884,846 | 687.7 |
| BGH021 | 582535 | 9884822 | 732 | 93 | -15 | 109.15 | 110.25 | 3.20 | 1.10 | 582,654 | 9,884,821 | 700.1 |
|  |  |  |  |  |  | 164.60 | 167.32 | 3.29 | 2.72 | 582,708 | 9,884,818 | 687.6 |
| BGH022 | 582554 | 9884785 | 732 | 90 | 0 | 75.00 | 80.53 | 3.99 | 5.53 | 582,633 | 9,884,784 | 729.3 |
|  |  |  |  |  |  | 109.00 | 110.00 | 1.35 | 1.00 | 582,664 | 9,884,785 | 729.9 |
|  |  |  |  |  |  | 119.22 | 122.10 | 2.22 | 2.88 | 582,676 | 9,884,785 | 730.1 |
| BGH023 | 582535 | 9884822 | 732 | 75 | -15 | 171.43 | 174.32 | 1.72 | 2.89 | 582,710 | 9,884,859 | 683.7 |
|  |  |  |  |  |  | 175.85 | 178.00 | 1.09 | 2.15 | 582,714 | 9,884,860 | 683 |
| BGH024 | 582554 | 9884785 | 732 | 103 | -5 | 127.70 | 129.60 | 0.54 | 1.90 | 582,679 | 9,884,749 | 717.2 |
|  |  |  |  |  |  | 137.95 | 142.00 | 1.13 | 4.05 | 582,690 | 9,884,746 | 716.2 |
| BGH025 | 582535 | 9884822 | 732 | 55 | -20 | 212.25 | 213.40 | 0.60 | 1.15 | 582,724 | 9,884,919 | 662.3 |
|  |  |  |  |  |  | 218.00 | 221.45 | 2.29 | 3.45 | 582,731 | 9,884,921 | 660.7 |
|  |  |  |  |  |  | 222.70 | 223.70 | 13.05 | 1.00 | 582,734 | 9,884,923 | 659.9 |
|  |  |  |  |  |  | 228.00 | 234.80 | 2.73 | 6.80 | 582,741 | 9,884,926 | 658 |
| BGH026 | 582554 | 9884785 | 732 | 113 | -10 | 103.71 | 108.00 | 3.30 | 4.29 | 582,649 | 9,884,735 | 713.7 |
|  |  |  |  |  |  | 134.80 | 136.45 | 3.72 | 1.65 | 582,676 | 9,884,722 | 708.6 |
|  |  |  |  |  |  | 161.00 | 162.50 | 5.61 | 1.50 | 582,699 | 9,884,711 | 704.5 |
| BGH030 | 582554 | 9884785 | 732 | 115 | -20 | 110.00 | 111.40 | 7.24 | 1.40 | 582,655 | 9,884,753 | 692.2 |
|  |  |  |  |  |  | 141.90 | 152.50 | 4.85 | 10.60 | 582,686 | 9,884,745 | 680 |
|  |  |  |  |  |  | 158.00 | 161.20 | 3.61 | 3.20 | 582,699 | 9,884,742 | 675.3 |
|  |  |  |  |  |  | 174.45 | 175.80 | 11.03 | 1.35 | 582,713 | 9,884,738 | 670.5 |
| BGH032 | 582554 | 9884785 | 732 | 125 | -20 | 177.00 | 178.72 | 1.70 | 1.72 | 582,692 | 9,884,684 | 671.3 |
|  |  |  |  |  |  | 182.00 | 188.25 | 3.00 | 6.25 | 582,697 | 9,884,679 | 669.1 |
|  |  |  |  |  |  | 190.25 | 193.00 | 0.95 | 2.75 | 582,702 | 9,884,676 | 667.2 |
|  |  |  |  |  |  | 194.40 | 202.00 | 1.37 | 7.60 | 582,707 | 9,884,672 | 665.3 |
|  |  |  |  |  |  | 203.50 | 208.00 | 2.67 | 4.50 | 582,713 | 9,884,668 | 663.2 |
| BGH034 | 582554 | 9884785 | 732 | 115 | -25 | 174.80 | 178.00 | 11.99 | 3.20 | 582,689 | 9,884,696 | 653.3 |
|  |  |  |  |  |  | 195.70 | 200.00 | 1.21 | 4.30 | 582,706 | 9,884,686 | 644.8 |
|  |  |  |  |  |  | 202.37 | 206.65 | 1.86 | 4.28 | 582,711 | 9,884,683 | 642.3 |
|  |  |  |  |  |  | 208.00 | 213.30 | 1.40 | 5.30 | 582,716 | 9,884,680 | 640.1 |
|  |  |  |  |  |  | 216.25 | 221.30 | 1.42 | 5.05 | 582,722 | 9,884,676 | 637.3 |
|  |  |  |  |  |  | 225.65 | 231.00 | 0.70 | 5.35 | 582,730 | 9,884,671 | 634 |
| BGH027 | 582544 | 9884822 | 732 | 68 | -27 | 212.35 | 214.00 | 0.58 | 1.65 | 582,729 | 9,884,879 | 634 |
|  |  |  |  |  |  | 226.00 | 229.30 | 1.32 | 3.30 | 582,741 | 9,884,883 | 628.4 |
|  |  |  |  |  |  | 235.45 | 236.58 | 1.54 | 1.13 | 582,749 | 9,884,885 | 625.2 |
| BGH028 | 582554 | 9884785 | 732 | 90 | -10 | 125.00 | 126.00 | 1.72 | 1.00 | 582,676 | 9,884,772 | 700.9 |
|  |  |  |  |  |  | 136.10 | 137.18 | 1.85 | 1.08 | 582,687 | 9,884,770 | 698.4 |
|  |  |  |  |  |  | 140.28 | 142.00 | 1.03 | 1.72 | 582,691 | 9,884,770 | 697.4 |
|  |  |  |  |  |  | 147.46 | 151.25 | 2.88 | 3.79 | 582,699 | 9,884,769 | 695.5 |
| BGH029 | 582544 | 9884822 | 732 | 93 | -25 | 126.00 | 128.35 | 4.66 | 2.35 | 582,663 | 9,884,826 | 678.5 |
|  |  |  |  |  |  | 178.90 | 184.05 | 1.25 | 5.15 | 582,713 | 9,884,827 | 657.7 |
|  |  |  |  |  |  | 193.70 | 196.05 | 3.95 | 2.35 | 582,726 | 9,884,827 | 653 |
| BGH031 | 582544 | 9884822 | 732 | 75 | -25 | 208.00 | 211.53 | 0.99 | 3.53 | 582,729 | 9,884,876 | 639.9 |
|  |  |  |  |  |  | 219.40 | 222.38 | 1.16 | 2.98 | 582,739 | 9,884,879 | 636 |
| BGH033 | 582544 | 9884822 | 732 | 60 | -27 | 259.00 | 265.46 | 7.32 | 6.46 | 582,756 | 9,884,929 | 612.8 |
|  |  |  |  |  |  | 268.53 | 270.52 | 1.02 | 1.99 | 582,762 | 9,884,931 | 610 |
| BGH035 | 582554 | 9884785 | 732 | 90 | -25 | 152.00 | 165.00 | 2.96 | 13.00 | 582,686 | 9,884,816 | 665 |
|  |  |  |  |  |  | 171.00 | 173.60 | 1.47 | 2.60 | 582,703 | 9,884,815 | 657.4 |
|  |  |  |  |  |  | 176.60 | 180.08 | 2.40 | 3.48 | 582,709 | 9,884,814 | 654.9 |
| BGH036 | $582544$ | $9884822$ | $732$ | 65 | 0 | 147.45 | 151.35 | 2.31 | 3.90 | 582,687 | 9,884,878 | 724.8 |
|  |  |  |  |  |  | 156.63 | 160.65 | 0.93 | 4.02 | 582,696 | 9,884,881 | 724.7 |


| BGH037 | 582554 | 9884785 | 732 | 105 | -30 | 154.00 | 157.00 | 3.81 | 3.00 | 582,680 | 9,884,741 | 647.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 194.60 | 197.55 | 1.54 | 2.95 | 582,712 | 9,884,730 | 626 |
|  |  |  |  |  |  | 207.95 | 211.18 | 1.29 | 3.23 | 582,723 | 9,884,726 | 619.3 |
|  |  |  |  |  |  | 216.25 | 220.15 | 2.79 | 3.90 | 582,730 | 9,884,723 | 615.1 |
|  |  |  |  |  |  | 222.40 | 226.70 | 1.77 | 4.30 | 582,735 | 9,884,721 | 612.1 |
| BGH038 | 582544 | 9884822 | 732 | 75 | -30 | 151.70 | 154.60 | 5.22 | 2.90 | 582,677 | 9,884,851 | 654.3 |
|  |  |  |  |  |  | 218.30 | 223.65 | 3.38 | 5.35 | 582,735 | 9,884,861 | 621.4 |
|  |  |  |  |  |  | 226.70 | 231.50 | 1.95 | 4.80 | 582,743 | 9,884,862 | 617.6 |
| BGH039 | 582554 | 9884785 | 732 | 100 | -22 | 112.08 | 113.00 | 2.12 | 0.92 | 582665.1 | 9,884,755 | 687.6 |
|  |  |  |  |  |  | 116.30 | 120.95 | 3.33 | 4.65 | 582,661 | 9,884,753 | 686.1 |
|  |  |  |  |  |  | 145.00 | 166.00 | 2.20 | 21.00 | 582,696 | 9,884,744 | 674.2 |
|  |  |  |  |  |  | 174.50 | 176.00 | 0.95 | 1.50 | 582,713 | 9,884,739 | 668.9 |
| BGH040 | 582544 | 9884822 | 732 | 60 | -30 | 232.00 | 233.00 | 0.95 | 1.00 | 582,725 | 9,884,922 | 618.2 |
|  |  |  |  |  |  | 273.70 | 277.05 | 3.79 | 3.35 | 582,761 | 9,884,937 | 600 |
| BGH041 | 582500 | 9884847 | 732 | 55 | -25 | 340.00 | 344.50 | 3.03 | 4.50 | 582,807 | 9,885,002 | 599.5 |
| BGH042 | 582544 | 9884822 | 732 | 60 | -35 | 277.35 | 280.00 | 1.93 | 2.65 | 582,751 | 9,884,922 | 569.4 |
|  |  |  |  |  |  | 308.50 | 312.00 | 0.62 | 3.50 | 582,776 | 9,884,932 | 552.6 |
|  |  |  |  |  |  | 313.00 | 315.55 | 1.52 | 2.55 | 582,779 | 9,884,933 | 550.5 |
| BGH043 | 582544 | 9884822 | 732 | 100 | -10 | 102.50 | 104.15 | 2.69 | 1.65 | 582,644 | 9,884,808 | 709 |
|  |  |  |  |  |  | 123.00 | 124.00 | 1.06 | 1.00 | 582,663 | 9,884,805 | 704.8 |
|  |  |  |  |  |  | 163.64 | 167.00 | 2.82 | 3.36 | 582,704 | 9,884,798 | 696.7 |
| BGH044 | 582500 | 9884847 | 710 | 70 | -35 | 330.00 | 334.13 | 1.31 | 4.13 | 582,764 | 9,884,941 | 533.4 |
| BGH045 | 582544 | 9884822 | 732 | 100 | -20 | 120.65 | 121.75 | 31.55 | 1.10 | 582,656 | 9,884,806 | 687.4 |
|  |  |  |  |  |  | 156.00 | 159.40 | 0.56 | 3.40 | 582,689 | 9,884,799 | 674.7 |
|  |  |  |  |  |  | 176.70 | 183.62 | 3.24 | 6.92 | 582,708 | 9,884,795 | 668.1 |
| BGH046 | 582544 | 9884822 | 732 | 100 | -30 | 195.18 | 206.00 | 2.85 | 10.82 | 582,712 | 9,884,795 | 630.5 |
|  |  |  |  |  |  | 212.53 | 215.18 | 1.90 | 2.65 | 582,723 | 9,884,793 | 623.7 |
|  |  |  |  |  |  | 218.00 | 220.60 | 7.16 | 2.60 | 582,728 | 9,884,792 | 620.8 |
|  |  |  |  |  |  | 225.00 | 226.00 | 4.36 | 1.00 | 582,733 | 9,884,791 | 617.7 |
| BGH047 | 582565 | 9884535 | 718 | 60 | 0 | 121.58 | 124.57 | 0.91 | 2.99 | 582,653 | 9,884,879 | 739.2 |
|  |  |  |  |  |  | 147.09 | 148.09 | 1.28 | 1.00 | 582,675 | 9,884,889 | 741.1 |
| BGH048 | 582567 | 9884509 | 727 | 90 | 0 | 140.75 | 143.05 | 0.90 | 2.30 | 582,708 | 9,884,496 | 727.7 |
|  |  |  |  |  |  | 146.53 | 148.00 | 0.74 | 1.47 | 582,713 | 9,884,495 | 728 |
| BGH049 | 582565 | 9884535 | 718 | 65 | -15 | 145.40 | 147.40 | 4.27 | 2.00 | 582,689 | 9,884,599 | 674.5 |
| BGH050 | 582567 | 9884509 | 727 | 105 | -5 | 160.00 | 161.38 | 1.06 | 1.38 | 582,722 | 9,884,469 | 711.7 |
| BGH051 | 582565 | 9884535 | 718 | 40 | 0 | 134.80 | 137.00 | 2.23 | 2.20 | 582,662 | 9,884,630 | 712.3 |
|  |  |  |  |  |  | 151.00 | 156.30 | 1.20 | 5.30 | 582,675 | 9,884,642 | 711.4 |
|  |  |  |  |  |  | 164.18 | 169.45 | 3.95 | 5.27 | 582,685 | 9,884,651 | 710.8 |
|  |  |  |  |  |  | 171.27 | 172.57 | 4.08 | 1.30 | 582,688 | 9,884,655 | 710.6 |
| BGH052 | 582567 | 9884509 | 727 | 120 | 0 | 205.90 | 207.10 | 1.86 | 1.20 | 582,732 | 9,884,385 | 722.9 |
| BGH053 | 582565 | 9884535 | 718 | 40 | -15 | 173.73 | 176.93 | 9.58 | 3.20 | 582,685 | 9,884,653 | 669.2 |
|  |  |  |  |  |  | 178.55 | 181.43 | 4.07 | 2.88 | 582,688 | 9,884,656 | 667.9 |
|  |  |  |  |  |  | 192.41 | 196.86 | 3.28 | 4.45 | 582,698 | 9,884,666 | 664 |
|  |  |  |  |  |  | 198.86 | 206.77 | 2.45 | 7.91 | 582,704 | 9,884,671 | 661.8 |
|  |  |  |  |  |  | 207.53 | 209.50 | 5.04 | 1.97 | 582,708 | 9,884,675 | 660.3 |
|  |  |  |  |  |  | 214.65 | 216.00 | 2.32 | 1.35 | 582,713 | 9,884,680 | 658.6 |
| BGH054 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |
| BGH055 | 582565 | 9884535 | 718 | 80 | -15 | 145.00 | 146.00 | 0.62 | 1.00 | 582,705 | 9,884,549 | 682.7 |
| BGH056 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |
| BGH057 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |
| BGH058 | 582565 | 9884510 | 727 | 95 | -5 | 153.35 | 155.60 | 1.98 | 2.25 | 582,717.3 | 9,884,501.2 | 703.9 |
| BGH059 | 582567 | 9884536 | 718 | 95 | 0 | 165.00 | 166.00 | 3.63 | 1.00 | 582,732.3 | 9,884,528.3 | 714.4 |
| BGH060 |  |  |  |  |  | No sign | cant inte | epts |  |  |  |  |
| BGH061 | 582567 | 9884536 | 727 | 130 | -10 | 157.57 | 159.19 | 1.22 | 1.62 | 582,719 | 9,884,525 | 677.7 |
| BGH062 | 582567 | 9884537 | 718 | 95 | -15 | 154.00 | 156.00 | 2.18 | 2.00 | 582,695 | 9,884,589 | 650.2 |
| BGH063 | 582782 | 9884646 | 829 | 270 | -70 | 186.25 | 194.37 | 0.82 | 8.12 | 582,719 | 9,884,661 | 650.5 |
|  |  |  |  |  |  | 197.42 | 202.45 | 1.12 | 5.03 | 582,715 | 9,884,661 | 641.8 |
|  |  |  |  |  |  | 205.00 | 209.05 | 0.83 | 4.05 | 582,712 | 9,884,661 | 635.4 |
|  |  |  |  |  |  | 211.13 | 218.90 | 2.06 | 7.77 | 582,709 | 9,884,661 | 628.3 |
|  |  |  |  |  |  | 220.40 | 222.55 | 0.86 | 2.15 | 582,706 | 9,884,661 | 622.5 |
|  |  |  |  |  |  | 231.00 | 233.00 | 0.87 | 2.00 | 582,701 | 9,884,661 | 613 |


| BGH064 | 582888 | 9884976 | 839 | 270 | -50 | 220.80 | 222.60 | 0.63 | 1.80 | 582,746 | 9,884,976 | 668.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BGH065 | 582913 | 9885057 | 819 | 270 | -60 | 271.00 | 275.95 | 2.93 | 4.95 | 582,769 | 9,885,057 | 586.1 |
|  |  |  |  |  |  | 291.56 | 292.56 | 1.70 | 1.00 | 582,759 | 9,885,057 | 570.9 |
| BGH066 | 582888 | 9884976 | 839 | 270 | -60 | 276.00 | 278.59 | 8.49 | 2.59 | 582,754 | 9,884,965 | 596.1 |
|  |  |  |  |  |  | 300.00 | 301.00 | 1.78 | 1.00 | 582,742 | 9,884,965 | 576.6 |
| BGH067 | 582913 | 9885057 | 819 | 270 | -67 | 295.75 | 300.47 | 3.21 | 4.72 | 582,789 | 9,885,065 | 548.1 |
|  |  |  |  |  |  | 303.00 | 304.62 | 1.56 | 1.62 | 582,786 | 9,885,065 | 543.1 |
|  |  |  |  |  |  | 337.00 | 338.00 | 0.55 | 1.00 | 582,769 | 9,885,068 | 514.3 |
| BGH068 | 582913 | 9885057 | 819 | 270 | -50 | 247.00 | 248.20 | 2.10 | 1.20 | 582,749 | 9,885,051 | 633.1 |
|  |  |  |  |  |  | 251.80 | 255.10 | 1.75 | 3.30 | 582,745 | 9,885,051 | 628.8 |
| BGH069 | 582888 | 9884976 | 839 | 270 | -70 | 321.80 | 324.73 | 3.84 | 2.93 | 582,779 | 9,884,962 | 534.7 |
| BGH070 | 582913 | 9885057 | 819 | 270 | -73 | 331.00 | 336.35 | 3.00 | 5.35 | 582,802 | 9,885,040 | 505.2 |
| BGH071 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |
| BGH072 | 582852 | 9884845 | 831 | 270 | -67 | 274.60 | 279.70 | 2.70 | 5.10 | 582,749 | 9,884,847 | 574 |
|  |  |  |  |  |  | 290.40 | 294.80 | 3.61 | 4.40 | 582,742 | 9,884,847 | 560 |
| BGH073 | 582731 | 9884691 | 838 | 280 | -60 | 121.00 | 123.00 | 0.72 | 2.00 | 582,671 | 9,884,702 | 731.9 |
| BGH074 | 582944 | 9885130 | 798 | 270 | -67 | 278.90 | 283.93 | 2.85 | 5.03 | 582,810 | 9,885,137 | 551.2 |
|  |  |  |  |  |  | 285.49 | 289.10 | 1.60 | 3.61 | 582,807 | 9,885,138 | 546.3 |
|  |  |  |  |  |  | 294.51 | 297.30 | 7.14 | 2.79 | 582,802 | 9,885,139 | 539.1 |
|  |  |  |  |  |  | 299.65 | 303.34 | 0.53 | 3.69 | 582,799 | 9,885,139 | 534.5 |
| BGH075 | 582731 | 9884691 | 838 | 270 | -70 | 115.40 | 116.65 | 6.76 | 1.25 | 582,690 | 9,884,690 | 729.4 |
|  |  |  |  |  |  | 119.50 | 120.80 | 15.22 | 1.30 | 582,688 | 9,884,690 | 725.7 |
|  |  |  |  |  |  | 125.09 | 129.80 | 3.56 | 4.71 | 582,684 | 9,884,690 | 719.3 |
|  |  |  |  |  |  | 162.55 | 164.63 | 8.94 | 2.08 | 582,667 | 9,884,689 | 687.8 |
| BGH076 | 582752 | 9884801 | 849 | 300 | -40 | 108.00 | 109.00 | 0.84 | 1.00 | 582,682 | 9,884,844 | 779.6 |
|  |  |  |  |  |  | 118.80 | 119.45 | 3.71 | 0.65 | 582,675 | 9,884,848 | 772.7 |
|  |  |  |  |  |  | 128.15 | 131.00 | 2.82 | 2.85 | 582,668 | 9,884,852 | 765.8 |
|  |  |  |  |  |  | 136.70 | 137.00 | 0.97 | 0.30 | 582,663 | 9,884,855 | 761 |
| BGH077 | 582944 | 9885130 | 798 | 270 | -72 | 316.84 | 321.20 | 2.57 | 4.36 | 582,830 | 9,885,130 | 501.7 |
|  |  |  |  |  |  | 323.00 | 328.36 | 2.56 | 5.36 | 582,827 | 9,885,130 | 495.8 |
|  |  |  |  |  |  | 329.06 | 330.13 | 0.52 | 1.07 | 582,825 | 9,885,130 | 492.4 |
|  |  |  |  |  |  | 335.25 | 337.36 | 9.63 | 2.11 | 582,822 | 9,885,130 | 486.5 |
|  |  |  |  |  |  | 339.77 | 340.07 | 7.07 | 0.30 | 582,820 | 9,885,131 | 483.4 |
| BGH078 | 582752 | 9884801 | 849 | 280 | -40 | 102.00 | 106.00 | 1.88 | 4.00 | 582,674 | 9,884,816 | 782.6 |
|  |  |  |  |  |  | 108.00 | 109.00 | 0.62 | 1.00 | 582,671 | 9,884,817 | 779.7 |
|  |  |  |  |  |  | 115.00 | 117.15 | 0.80 | 2.15 | 582,665 | 9,884,818 | 774.8 |
| BGH079 | 582852 | 9884845 | 831 | 270 | -73 | 290.15 | 294.40 | 1.00 | 4.25 | 582,765 | 9,884,842 | 552.6 |
|  |  |  |  |  |  | 296.30 | 302.30 | 9.46 | 6.00 | 582,763 | 9,884,841 | 546.1 |
|  |  |  |  |  |  | 304.81 | 305.70 | 18.75 | 0.89 | 582,761 | 9,884,841 | 540.5 |
|  |  |  |  |  |  | 312.00 | 313.00 | 1.08 | 1.00 | 582,758 | 9,884,841 | 533.8 |
|  |  |  |  |  |  | 316.90 | 321.63 | 4.65 | 4.73 | 582,755 | 9,884,840 | 527.5 |
|  |  |  |  |  |  | 322.57 | 328.00 | 5.41 | 5.43 | 582,753 | 9,884,840 | 522 |
|  |  |  |  |  |  | 328.95 | 329.48 | 1.59 | 0.53 | 582,751 | 9,884,840 | 518.4 |
|  |  |  |  |  |  | 340.68 | 341.42 | 4.29 | 0.74 | 582,747 | 9,884,839 | 507.6 |
| BGH080 | 582944 | 9885130 | 798 | 270 | -75 | 339.90 | 343.60 | 1.05 | 3.70 | 582,853 | 9,885,141 | 469.2 |
|  |  |  |  |  |  | 345.00 | 346.55 | 4.11 | 1.55 | 582,851 | 9,885,141 | 465.5 |
|  |  |  |  |  |  | 360.70 | 361.00 | 11.95 | 0.30 | 582,846 | 9,885,143 | 451.5 |
| BGH081a | 583022 | 9885299 | 776 | 270 | -50 | 269.00 | 274.56 | 1.99 | 5.56 | 582,838 | 9,885,306 | 578.6 |
|  |  |  |  |  |  | 275.56 | 275.86 | 0.64 | 0.30 | 582,835 | 9,885,307 | 576.0 |
| BGH082a | 583013 | 9885209 | 752 | 270 | -50 | 263.83 | 266.30 | 3.43 | 2.47 | 582,836 | 9,885,222 | 556.0 |
|  |  |  |  |  |  | 268.35 | 269.15 | 3.32 | 0.80 | 582,833 | 9,885,223 | 553.5 |
|  |  |  |  |  |  | 276.97 | 277.27 | 15.65 | 0.30 | 582,827 | 9,885,224 | 547.9 |
| BGH083 |  |  |  |  |  | No significant intercepts |  |  |  |  |  |  |
| BGH084 | 583023 | 9885299 | 776 | 270 | -57 | 278.95 | 280.90 | 6.25 | 1.95 | 582,857 | 9,885,307 | 552.8 |
|  |  |  |  |  |  | 283.06 | 286.31 | 1.28 | 3.25 | 582,854 | 9,885,307 | 549.2 |
| BGH085 | 583023 | 9885299 | 776 | 270 | -65 | 294.65 | 298.35 | 0.83 | 3.70 | 582,890 | 9,885,304 | 512.9 |
| BGH086 | 583013 | 9885208 | 752 | 270 | -57 | 275.35 | 280.78 | 3.07 | 5.43 | 582,847 | 9,885,214 | 530.1 |
|  |  |  |  |  |  | 286.05 | 286.51 | 18.90 | 0.46 | 582,841 | 9,885,215 | 524.4 |
| MND001 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |
| MND002 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |
| MND003 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |


| MND004 | 583392 | 9886283 | 682 | 270 | -52 | 524.76 | 525.06 | 0.67 | 0.30 | 582,994 | 9,886,250 | 347.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MND005 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |
| MND006 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |
| MND007 | 583100 | 9886210 | 726 | 270 | -75 | 402.00 | 402.45 | 0.58 | 0.45 | 582,987 | 9,886,211 | 340.5 |
| MND009 | 582881 | 9886200 | 752 | 270 | -65 | 96.35 | 96.75 | 2.28 | 0.40 | 582,842 | 9,886,200 | 667.3 |
| MND010 | No significant intercepts |  |  |  |  |  |  |  |  |  |  |  |
| MND011 | 583103 | 9886211 | 726 | 270 | -83 | 419.26 | 428.00 | 21.85 | 8.74 | 583,021 | 9,886,194 | 312.7 |
|  |  |  |  |  |  | 430.60 | 438.90 | 17.52 | 8.30 | 583,018 | 9,886,193 | 302.0 |
| MND012 | 582950 | 9886140 | 765 | 270 | -60 | 64.70 | 65.35 | 12.20 | 0.65 | 582,916 | 9,886,142 | 699.8 |
| 1. Apparent widths, not true thickness |  |  |  |  |  |  |  |  |  |  |  |  |


[^0]:    ${ }^{1}$ Data obtained from International Tin Association Tin Industry Review 2020
    ${ }^{2}$ All intercepts are reported as apparent widths and are not true widths

