

# SALEABLE TIN CONCENTRATE PRODUCED FROM METALLURGICAL TESTWORK - TALLEBUNG

# **TALLEBUNG TIN PROJECT**

- <u>Saleable +60% tin concentrate</u> has been produced from a simple gravity flowsheet in a bulk metallurgical testwork program.
- Final gravity concentrate was treated via reverse sulphide flotation and magnetic separation to significantly reduce smelter penalties and increase tin concentrate grade.
- This testwork continues to build on the exceptional ore sorting results which upgraded the tin by over 3x with a 98% tin recovery before undergoing further processing to deliver the final concentrate.

SKY CEO Oliver Davies commented, "These excellent results establish that the favourable tin mineralisation present as coarse cassiterite at Tallebung is very amenable to concentration using cost-effective and simple gravity processing. When combined with the exceptional ore sorting results, the testwork has demonstrated the extremely responsive nature of the Tallebung tin mineralisation to straightforward tin concentration. In addition to these advantages, a +60% tin concentrate can achieve a very high payability with few penalties at the smelter. This work significantly strengthens the growing potential of the development of a bulk tonnage tin mine at Tallebung."

The Board of Sky Metals Limited ('SKY' or 'The Company') is pleased to advise of the successful production of a saleable tin concentrate from the metallurgical testwork program completed on the Tallebung Tin Project.

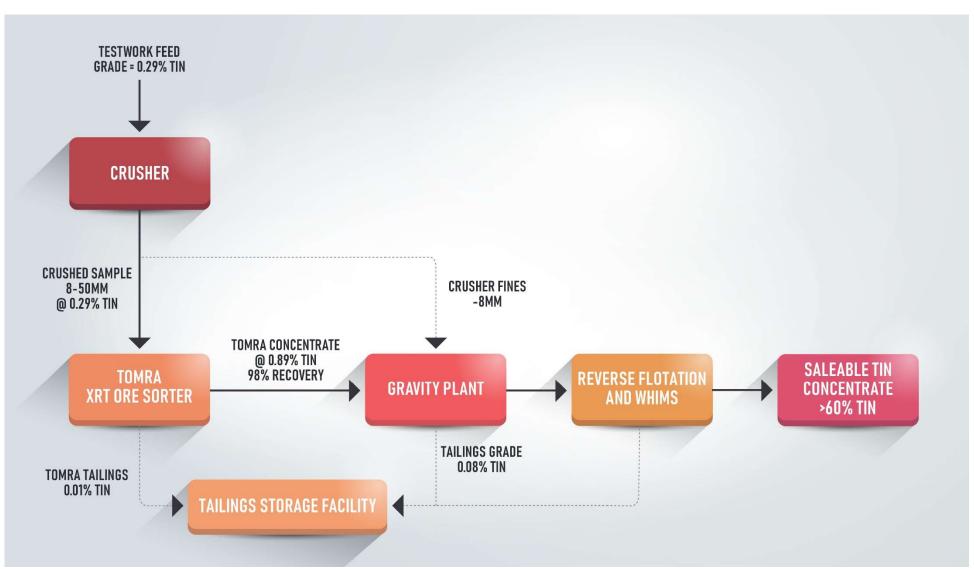
# TALLEBUNG PROJECT: TIN (EL 6699, SKY 100%)

# TALLEBUNG TARGET – BULK METALLURGICAL TESTWORK

To build on the exceptional ore sorting results previously announced in September 2022 (ASX SKY 5 September 2022), the ore sorting products were sent for metallurgical testing to produce a saleable tin concentrate at ALS Metallurgy. This testwork has successfully yielded a saleable tin concentrate.

The testwork showed a tin concentrate from the Tallebung tin mineralisation can be achieved through concentration via a simple gravity circuit with gravity concentrate dressing via reverse sulphide flotation and wet high intensity magnetic separation (WHIMS) to produce a >60% tin concentrate (**Figure 1**).

# SKY METALS LIMITED



*Figure 1:* Tallebung Target – Simplified schematic flowsheet starting with the TOMRA XRT Ore Sorter to increase the tin grade and significantly reduce the total mass to undergo further processing. The TOMRA concentrate then gets further upgraded in the gravity plant before reverse flotation and WHIMS dressing to produce the saleable tin concentrate.



# TALLEBUNG TARGET -TESTWORK PROCEDURE

These results were generated from the typical samples of the Tallebung tin mineralisation collected from the widediameter diamond drillhole **TBD002** (60.2m @ 0.54% tin from 12.8m) from 2m – 92m for a total 542kg. This sample was sent to TOMRA Ore Sorting Solutions in Sydney and was crushed to down into -50mm grains. The sample was then split into 25-50mm and 8-25mm fractions for sorting and a <8mm fines fraction which was too fine to be sorted effectively.

The 25-50mm and 8-25mm fractions were then sorted with TOMRA's XRT ore sorter into a product and waste. Assays for this testwork showed a tripling of the tin grade with 98% recovery for tin. Further work will be conducted on ore sorting to continue to build on these very exceptional results in the future.

The ore sorted samples were then sent on to ALS Metallurgy, Burnie, Tasmania where a thorough testwork program has developed a gravity flowsheet. This started with combining the TOMRA Ore Sorting product with the fines which were crushed and ground to -1180um before a series of spirals followed by a set of tables were used to produce a gravity concentrate. These gravity concentration processes removed over 97% of the total mass processed and upgraded the tin concentration by over 25 times.

The tin grade in the gravity concentrate is then further increased with a reverse sulphide flotation and Wet, High-Intensity Magnetic Separation (WHIMS) dressing of the gravity concentrate to produce a saleable +60% tin concentrate with low smelter penalties and a high payability product. 70-75% is the standard range of tin recovery for operations using this conventional tin gravity concentration methods as used in this testwork program, SKY has achieved over 73% recovery through the entire testwork process, however, SKY will be looking to increase the recovery with the addition of a gravity circuit for ultrafines to recover further fine tin and incremental improvements throughout the process.

SKY will continue to build on these excellent initial testwork programs with large scale testing of ore sorting and further development of this simple flowsheet to refine the production of a saleable tin concentrate for the Tallebung tin mineralisation over the coming months.



This report has been approved for release by the Board of Directors.

# ABOUT SKY (ASX: SKY)

SKY is an ASX listed public company focused on the exploration and development of high value mineral resources in Australia. SKY's project portfolio offers exposure to the tin, gold, and copper markets in the world class mining jurisdiction of NSW.

# TIN PROJECTS

#### TALLEBUNG PROJECT (EL6699, IOO% SKY)

The Tallebung Project is located ~70km north-west of Condobolin in central NSW. The project encompasses the historic Tallebung Tin Mining Field at the northern extent of the Wagga Tin Belt within the central Lachlan Orogen and is considered prospective for lode and porphyry-style tin - tungsten mineralisation.

#### DORADILLA PROJECT (EL6258, IOO% SKY)

The Doradilla Project is located ~ 30km south of Bourke in north-western NSW and represents a large and strategic tin project with excellent potential for associated polymetallic mineralisation (tin, tungsten, copper, bismuth, indium, nickel, cobalt, gold).

#### NEW ENGLAND PROJECT (EL9200 & 9210, 100% SKY)

SKY has been granted two exploration licences in the New England Orogen covering areas of significant historical tin production – Emmaville & Gilgai. These areas were selected as they have considerable potential to host hardrock tin resources and limited modern exploration has been conducted.

### **COPPER GOLD PROJECTS**

#### IRON DUKE (EL6064, BALMAIN OPTION; EL9191 100% SKY)

The Iron Duke project is located ~10km south-east of Tottenham in central NSW. High grade copper-gold mineralisation has been intersected by previous explorers (e.g. 13m (@ 1.56% Cu & 4.48g/t Au).



The Galwadgere project is located ~15km south-east of Wellington in central NSW. High grade copper-gold mineralisation has been intersected by previous explorers (e.g. 47m @ 0.90% Cu & 1.58g/t Au) and the mineralisation is open along strike and at depth.

### **GOLD PROJECTS**

#### CULLARIN / KANGIARA PROJECTS (EL7954; EL8400 & EL8573, DVP FARM-IN)

The Cullarin Project contains equivalent host stratigraphy to the McPhillamys deposit with a similar geochemical, geophysical & alteration signature. 'McPhillamys-style' gold results from previous drilling at the Cullarin Project include 148.4m @ 0.97 g/t Au (WL31) including 14.6m @ 5.1 g/t Au from 16.2m, & 142.1m @ 0.89 g/t Au (WL28) including 12m @ 4.4 g/t Au from 25.9m. SKY's maiden drill program was successful, including HUD002 which returned 93m @ 4.2 g/t Au from 56m.

#### CALEDONIAN / TIRRANA PROJECTS ( EL8920, EL9048, EL9120 100% SKY)

Highlight, 'McPhillamys-style' gold results from previous exploration include 36m @ 1.2 g/t Au from 0m to EOH in drillhole LM2 and 81m @ 0.87g/t Au in a costean on EL8920 at the Caledonian Project. The distribution of multiple historic drill intersections indicates a potentially large gold zone with discrete high-grade zones, e.g. 6m @ 8g /t Au recorded from lode at historic Caledonian Mines (GSNSW). A strong, robust soil gold anomaly (600 x 100m @ +0.1ppm) occurs and most drillholes (depth ~25m) terminate in the mineralised zone.

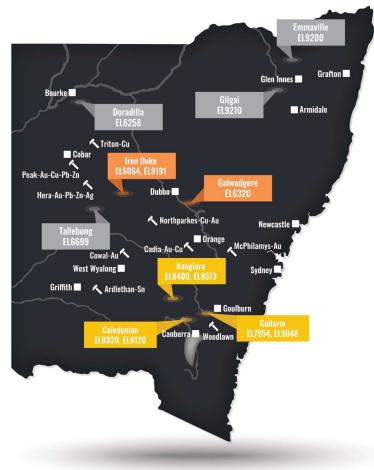


Figure 2: SKY Tenement Location Map

# COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Rimas Kairaitis, who is a Member of the Australasian Institute of Mining and Metallurgy. Rimas Kairaitis is a Director of Sky Metals Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Kairaitis consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

# PREVIOUSLY REPORTED INFORMATION

The information in this report that references previously reported exploration results is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website or on the ASX website (www. asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

### DISCLAIMER

This report contains certain forward-looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Sky Metals Ltd, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Sky Metals Ltd. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors. Nothing in this report should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geoscientists.

