



# SUBSTANTIAL INCREASE TO TALLEBUNG MRE WITH EXCEPTIONAL, CONSISTENT ORE SORTING UPGRADE

## QUARTERLY ACTIVITIES REPORT TO 31 DECEMBER 2023

### TALLEBUNG PROJECT

- Updated JORC-2012 Mineral Resource Estimate (MRE)\* shows a 53% increase in total tonnes from the maiden MRE as well as a significant increase in the Exploration Target. Updated MRE Indicated and Inferred Resources totalled:

**15.6Mt @ 0.15% tin for 23.2kt of contained tin at a 0.08% tin cut-off grade.**

- Exceptional results for the TOMRA Ore Sorting variability testwork at Tallebung show consistent, very strong upgrades of the resource tin grade, results included:

TBD005 (206-232m): **0.17% tin upgraded 6.6x to = 1.10% tin** (99.1% Tin recovery)

TBD008 (152-169m): **0.14% tin upgraded 5.1x to = 0.70% tin** (98.6% Tin recovery)

TBD005 (2-22m): **0.21% tin upgraded 6.5x to = 1.38% tin** (99.3% Tin recovery)

- The extent of the Tallebung mineralisation has been substantially broadened with high-grade tin in three rock chips samples ~200m past the current extent of drilling and also with tin lodes intercepted in a groundwater monitoring bore, results included:

Rock Chips: **2.60% tin, 2.16% tin & 1.55% tin** (OD20231020-1-3)

Monitoring Bore: TBRC072: **18m @ 0.12% tin from 14m**, including;  
**1m @ 1.27% tin & 0.03% Tungsten from 24m.**

- Further work is planned in the next quarter to further build on these excellent results.

### NARRIAH PROJECT

- Six (6) diamond drillholes for a total of 498.05m were completed and strong tin and tungsten mineralisation was intercepted in all 6 holes of the maiden program, best results included:

**RED001: 13.1m @ 0.14% tin and 0.18% tungsten from 17.7m**, including;  
**0.35m @ 0.92% tin & 5.28% tungsten from 20m.**

- SKY will use these first stage results to target new areas for large-scale tin mineralisation, previously untested at Narriah due to sand cover in the project area.

\* For further details on the latest Tallebung MRE please see SKY ASX Announcement 23 January 2024.

## MARCH 2024 QUARTER – PROPOSED WORK PROGRAM

### TALLEBUNG PROJECT

- Continue building towards Mine Scoping Studies to assess the economic potential at Tallebung.
- Further diamond and RC drilling (as required) to grow the maiden MRE and increase confidence in the tin resources over the coming quarter to release Mine Scoping Studies.

### NARRIAH PROJECT

- Airborne geophysical magnetic survey to increase drill targeting to discover further tin and tungsten along with potential Lithium mineralisation within the Narriah Project.
- Compilation of the extensive historic exploration data from the 1960s, 70s and 80s will be completed and will aid SKY in vectoring to potential large-scale tin-tungsten mineralisation at Narriah and will allow accurate targeting of any anomalies delineated from in historic exploration programs.

The Board of Sky Metals Limited ('SKY' or 'The Company') is pleased to provide a Quarterly Activities Report outlining SKY's exploration program during the December 2023 quarter.

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

#### EXPLORATION TARGET

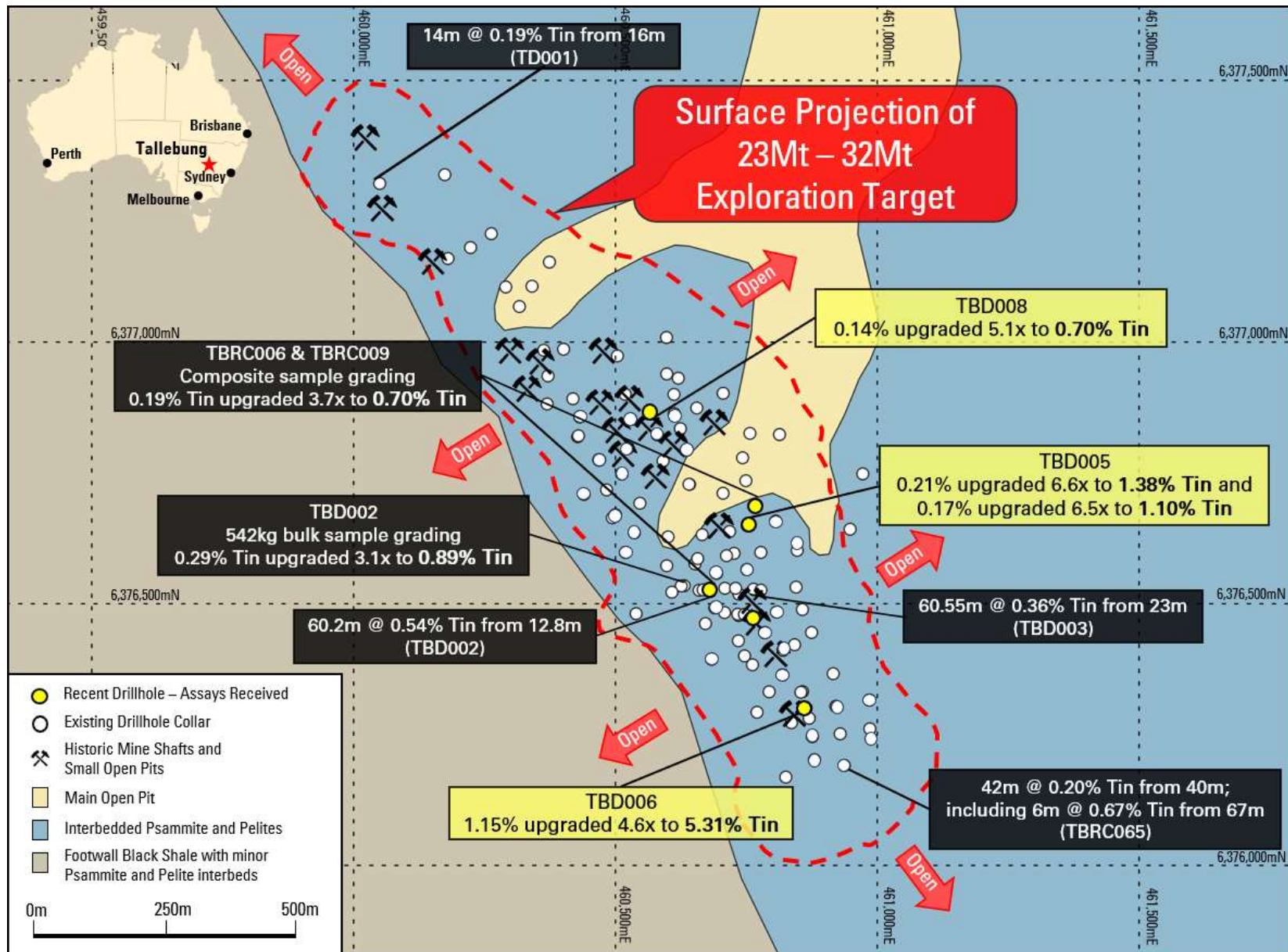
This quarter a new Exploration Target of approximately **23 – 32 Mt at a grade ranging between 0.14 - 0.17 % tin** was defined from the drilling completed to date. The potential quantity and grade referred to above as the Exploration Target is conceptual in nature, as there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. SKY will commence drilling of this exploration target in the coming months with at least 20 RC holes and diamond drilling with the aim to expand the MRE and grow confidence in this estimated Exploration Target. Supporting report and further details on the Mineral Resource Estimate and the definition of the Exploration Target are included in SKY ASX Announcement 23 January 2024.

#### UPDATED MINERAL RESOURCE ESTIMATE

Independent geological consultants, H&S Consultants Pty Ltd (H&SC), were retained to provide an updated Mineral Resource Estimate (MRE) for the Tallebung Tin Project. H&SC compiled the 115 holes drilled at Tallebung to date, including 85 holes drilled by SKY since 2019, for approximately 19,098 assays in total, to produce the MRE. The MRE was reported in accordance with the 2012 JORC Code and Guidelines and the Inferred and Indicated MRE is shown in **Table 1** and further details can be found in SKY ASX Announcement 23 January 2024.

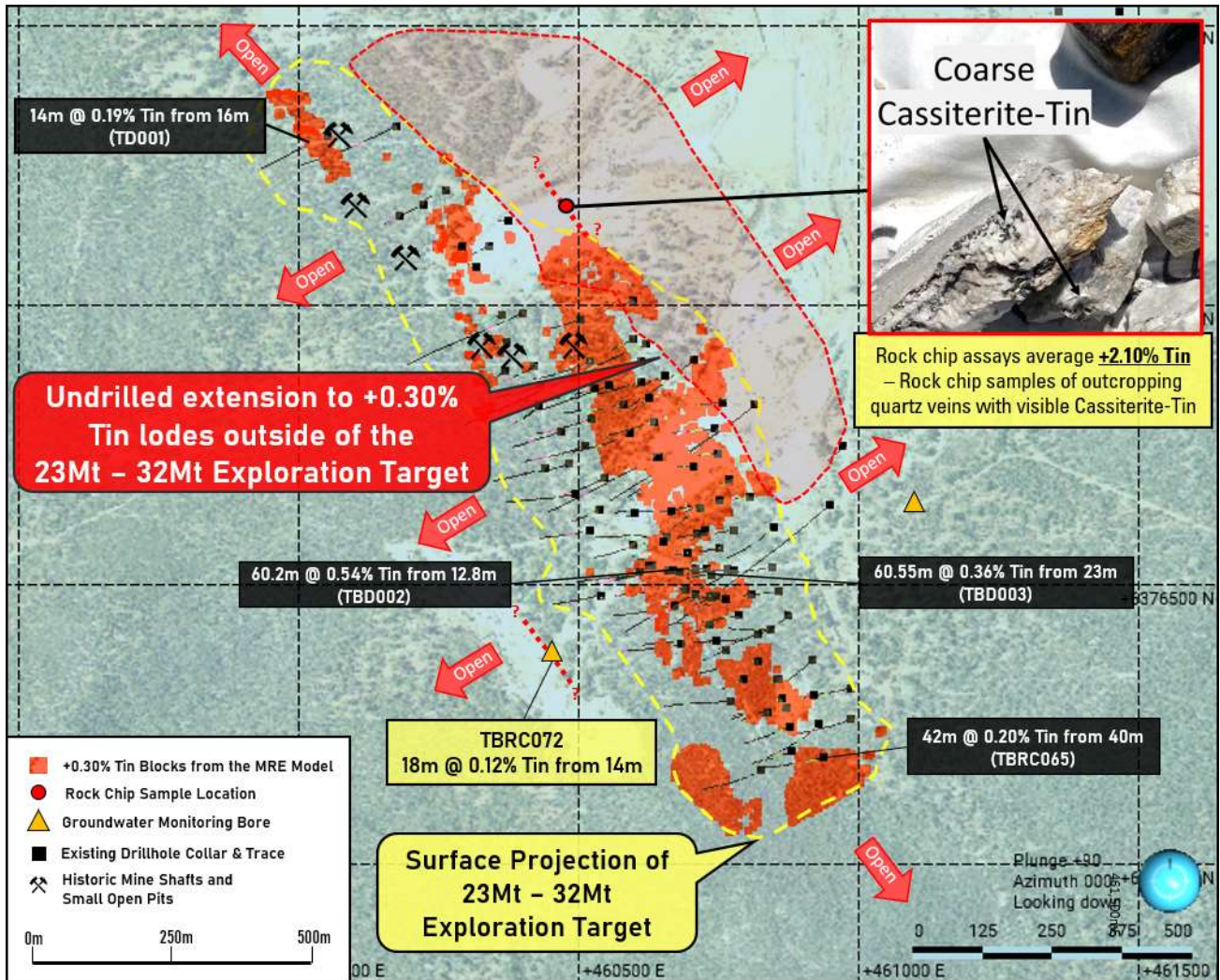
**Table 1** – Tallebung MRE showing total tonnage, grade and contained metals at a 0.08% Tin cut-off grade. NB:  $WO_3$  refers to the Tungsten reported as an oxide as it is likely to be a significant by-product. Additionally, mtu refers to metric tonne units which Tungsten is conventionally reported as, 1 mtu = 10 kg  $WO_3$ .

Resource Category	Tonnes	Grade		Contained Metal	
	Mt	Tin (%)	$WO_3$ (%)	Tin (kt)	$WO_3$ (mtu)
Inferred	10.6	0.14	0.03	15.2	302,106
Indicated	5.00	0.16	0.03	7.93	131,833
<b>Total</b>	<b>15.6</b>	<b>0.15</b>	<b>0.03</b>	<b>23.2</b>	<b>433,940</b>



**Figure 1:** Tallebung Tin Project – Plan showing extent of the current Exploration Target along with the drillholes sampled for the TOMRA variability study testwork shown in yellow. TOMRA ore sorting shows a consistent 3-6x upgrade across the entire deposit, increasing average grade from 0.15% Tin to over 0.70% Tin.





**Figure 2:** Tallebung Tin Project – Plan showing extent of the current Exploration Target along with the identified extensions to the mineralisation with the tin intercepted by the groundwater monitoring bore and the location of the outcropping tin veins which substantially broaden the tin mineralisation footprint, overlaid on the geological map. New results are in yellow.

## TOMRA ORE SORTING UPGRADE

Excellent and consistent results were received for the variability testing of TOMRA Ore Sorting, further demonstrating the extremely amenable nature of the Tallebung tin mineralisation for ore sorting. The results show that the product was upgraded on average over **5x** across the entire deposit. An average of only 18% of the sorted mass was in the product, leaving 82% of the mass to be rejected. The sorting product consistently contained approximately 99% of the tin with **no tin detected in the waste** for all but one sample (**Table 2**).

Crucially, TOMRA ore sorting not only increases the tin grade but also **greatly reduces the tonnes to be processed to produce a saleable tin concentrate**. There are a number of significant advantages of this reduction in mass for any potential mining operation.

The sorted mass is reduced to only one fifth of the mass on average, with a much higher tin grade, this means:

- Reduced Capex as only one fifth of sorted mass requires processing in a dedicated processing plant,
- Opex of any mining operation will also be a fraction of any operation without ore sorting,
- Excellent environmental outcomes including:
  - A small fraction of the water will be required to produce saleable tin concentrates,
  - A small fraction of the power will be required to produce saleable tin concentrates tin,
  - Reduced mine footprint including smaller waste emplacements such as tailings dams.

The samples selected for the ore sorting variability testwork were selected from a variety of lodes across the deposit, including near surface and at depth, as well as along the entire strike of the deposit (**Figure 1**). The purpose of the testwork was to identify if there were any areas within the Tallebung deposit that were either better suited to ore sorting or where ore sorting was found less be effective. All areas were discovered to be consistently and exceptionally amenable to ore sorting.

The results of the testwork are **consistent throughout the deposit**, demonstrating a strong upgrade in all cases with no tin detected in the ore sorting waste. As such, TOMRA ore sorting continues to demonstrate an exceptional potential to establish Tallebung strongly as a very low-cost potential tin mining operation.

**Table 2: Tallebung Tin Project – Results table for the TOMRA ore sorting variability testwork showing significant 4.6 - 6.6 times increase in tin grade and 1/5 reduction in mass for around 99% recovery of tin on average.**

Sample	Feed Size	Mass Sorted	Product	Waste	Accepted Product	Head Grade	Product Grade	Upgrade	Waste Grade	Tin Recovery
	mm	kg	kg	kg	%	% Tin	% Tin	x	% Tin	%
TBD005: 206-232m	8-32	158	26	132	16%	<b>0.17</b>	<b>1.10</b>	<b>6.6</b>	<b>&lt;0.01</b>	<b>99.1</b>
TBD008: 152-169m	8-32	100.3	19.3	81	19%	<b>0.14</b>	<b>0.70</b>	<b>5.1</b>	<b>&lt;0.01</b>	<b>98.6</b>
TBD006: 25-35m	8-32	43.2	10.5	32.7	24%	<b>1.15</b>	<b>5.31</b>	<b>4.6</b>	<b>0.07</b>	<b>98.7</b>
TBD005: 2-22m	8-32	73.4	10.8	62.6	15%	<b>0.21</b>	<b>1.38</b>	<b>6.5</b>	<b>&lt;0.01</b>	<b>99.3</b>

These results were from samples collected from four wide-diameter PQ diamond drillholes, namely **TBD005-TBD008**. The samples were then sent to TOMRA Ore Sorting Solutions in Sydney and crushed to down into -32mm grains. The sample was then split into 8-32mm fraction for sorting and a <8mm fines fraction which was too fine to be sorted effectively and retained as fines for follow up Dense Medium Separation (DMS) testwork.

The 8-32mm fraction was then sorted with TOMRA’s XRT ore sorter into a product and waste. (NB: TOMRA’s XRT sensor measures and sorts the samples based on the relative density of the samples. As tin is almost 3 times denser than the waste material, the denser-tin-bearing sample is ejected as the product while the less dense and, therefore, tin-poor sample, is the waste).

The TOMRA ore sorting results combined with the shallow, open pit Tallebung tin resource and simple gravity processing of the tin, all contribute to establish Tallebung as a potential low-cost tin mining operation.

## RESOURCE EXTENSIONS

In addition to this substantial expansion of the Tallebung MRE, quartz veining with visible cassiterite nuggets was also discovered in the base of the historic central lead open pit where alluvial tin resources were extracted in the 1960s - 1970s. Three rock chip samples, OD20231020-1 – OD20231020-3, were taken of these outcrops and assays have now been received (**Figure 3 & Table 3**).

The samples taken assayed on **average over 2.10% Tin** which demonstrates the high-grade nature of the veins with viable coarse cassiterite, characteristic of the Tallebung Tin Deposit. These results show the potential for further extensions, outside of the already large **23 – 32 Mt Exploration Target** estimated as these results represent a substantial increase in the tin mineralisation footprint at Tallebung (**Figure 2**).

In addition to these high-grade rock chips, significant resource expansion potential has also been identified in one of two groundwater monitoring bores complete last quarter. The groundwater monitoring bores were drilled to commence recording data for mining and environmental permits to progress the Tallebung Tin Project.

The bores were designed to be drilled well outside of any known tin mineralisation and outside of any potential future open pit area. However, one of these groundwater monitoring bores intercepted strong tin mineralisation which substantially expands the extents of the tin mineralisation at Tallebung; results include:

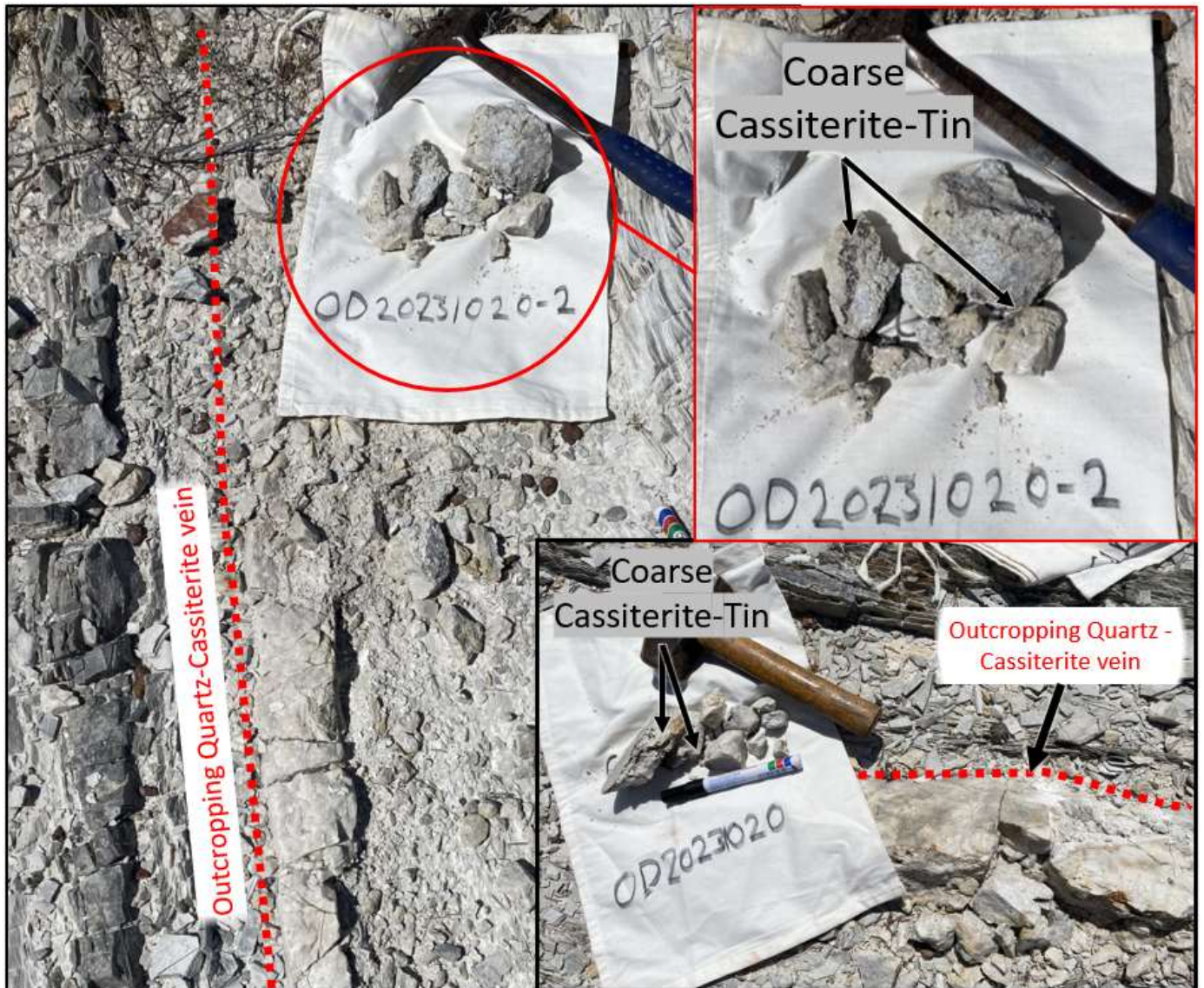
**TBRC072: 18m @ 0.12% Tin from 14m, including;  
1m @ 1.27% Tin & 0.03% Tungsten from 24m.**

This hole was drilled over 140m further west from the nearest drillhole, adding over 140m of width to the 300-400m wide mineralisation discovered at Tallebung.

**Table 3: Tallebung Project – Rock Chip Samples.**

Sample Number	Easting mE	Northing mN	RL AHD	Grid	Tin %	Comment
OD20231020-1	460455	6377173	292	MGA94_55	<b>2.60</b>	Quartz veins outcropping with coarse cassiterite along margins of veining in base of central lead, west of the beginning of the trees before the main lead intersection with the central lead open pit.
OD20231020-2	460448	6377165	293	MGA94_55	<b>2.16</b>	Quartz veins outcropping with visible cassiterite and scheelite near mullock heap in base of central lead.
OD20231020-3	460456	6377172	291	MGA94_55	<b>1.55</b>	Quartz veins outcropping with coarse cassiterite in base of central lead, west of the beginning of the trees before the main lead intersection with the central lead.





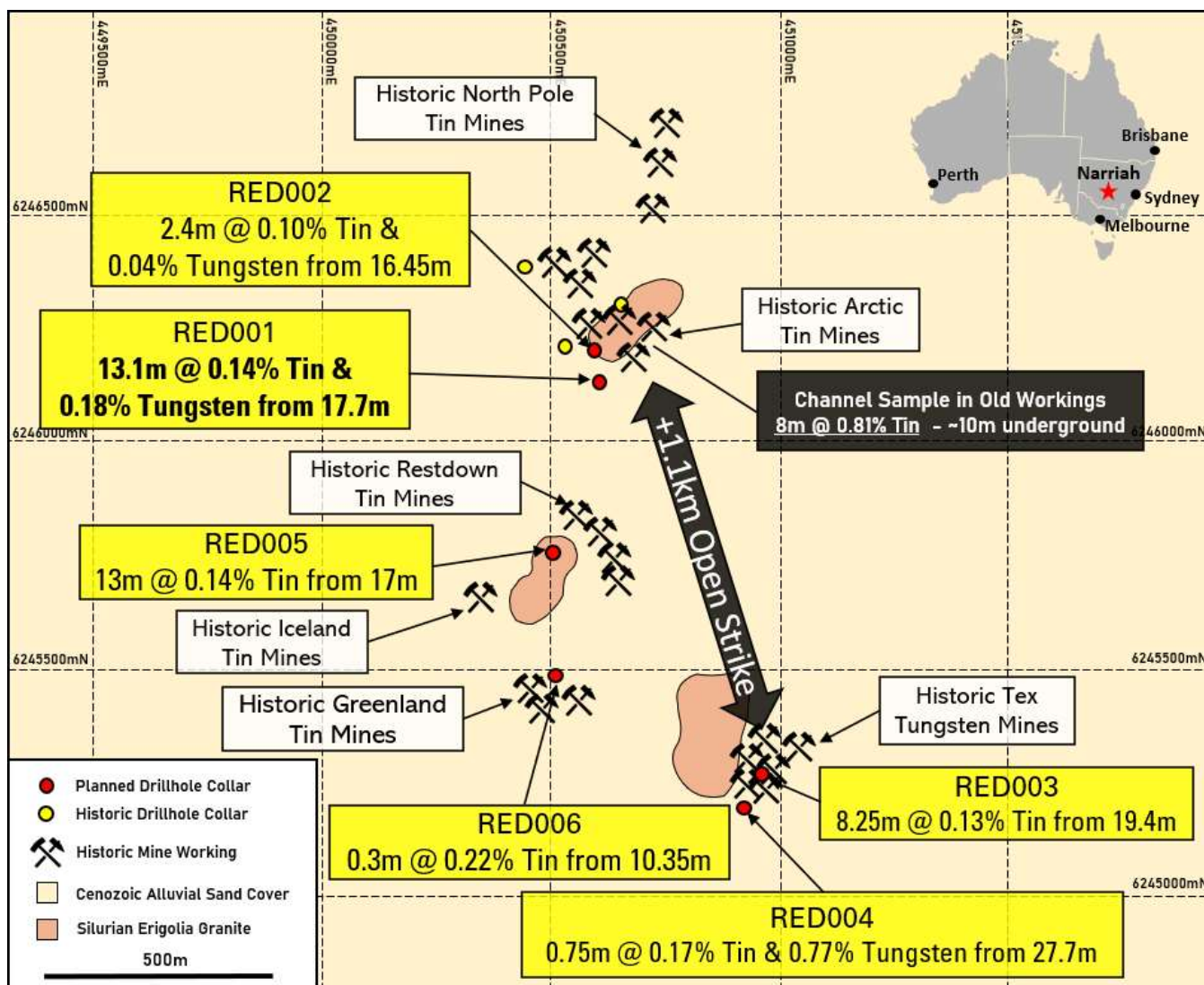
**Figure 3:** Tallebung Tin Project – Rock chip samples pictured next to the outcropping quartz veins sampled.

## **NARRIAH PROJECT (EL 9524, SKY 100%)**

### **MAIDEN DIAMOND DRILLING PROGRAM**

SKY has this quarter completed a maiden drilling program of six diamond drill holes, **RED001-RED006**, for a total of 498.05m to test under the historic workings in the Restdown Mining Area. Numerous historic shafts and small open pits with at least 6 areas of historic workings have now been discovered by SKY in the Restdown Mining Area, namely the Arctic, Restdown, Greenland, Iceland, North Pole and Tex Prospects (**Figure 4 & 5**).

SKY's maiden drilling program targeted the most developed areas of historic workings with **RED001 & RED002** drilled under the historic Arctic Tin Mine, **RED003 & RED004** drilled under the historic Tex Tungsten Mine, **RED005** drilled under the historic Restdown Tin Mine and, finally, **RED006** was drilled to test extensions to the historic Greenland Tin Mine (**Figure 4 & 5**).



**Figure 4:** Narriah Project – Plan showing recent drilling and locations of the numerous historic mine workings in the Restdown Mining Area with sand cover predominating across the area and most locations of rock outcropping coincide with historic tin and tungsten mines.

The first hole, **RED001**, was drilled under the southwestern end of the main underground mine shaft at the Arctic Tin Mine to test for extensions to the tin mineralisation previously mined. **RED002** was then drilled up dip and to the northeastern end of the Arctic Mine to test for shallower tin mineralisation. Both holes intercepted extensions to the tin mineralisation hosted in the Erigolia Granite, results included:

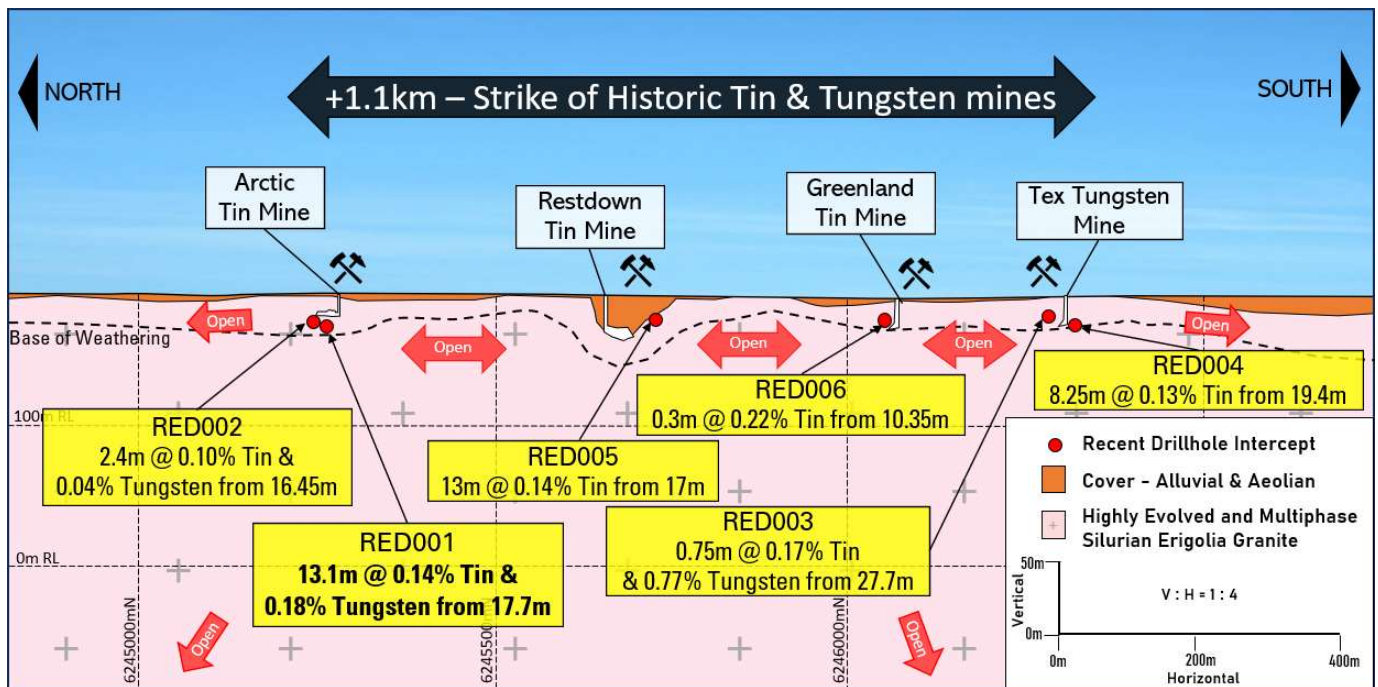
**RED001:** 13.1m @ 0.14% Sn & 0.18% W from 17.7m including;  
 0.35m @ 0.92% Sn & 5.28% W from 20m and;  
 0.8m @ 1.25% Sn from 30m.

**RED002:** 2.4m @ 0.10% Sn & 0.04% W from 10.65m

The next two holes in the program, **RED003** & **RED004**, were drilled to test under the Tex Mine. From the records of the historic underground workings, it was difficult to determine the dip of the mineralisation while the strike of the ore body could be interpreted to be west-southwest – east-northeast.

As the dip could not be confidently estimated, **RED003** was drilled orientated to the south and **RED004** was drilled orientated to the north in a ‘scissor’ method to give the best chance to discover tin and tungsten mineralisation





**Figure 5:** Narriah Project – Schematic long section of the Restdown Mining Area showing sand cover predominating across the area with the recent drill intercepts under the areas of the tin and tungsten mines where the underlying rock is exposed at surface.

under the Tex Mine. Both holes successfully intercepted tin and tungsten mineralisation hosted in the Erigolia Granite, results included:

**RED003:** 8.25m @ 0.13% Sn from 19.4m including;  
0.3m @ 2.37% Sn from 24.8m

**RED004:** 0.75m @ 0.17% Sn & 0.77% W from 27.7m.

**RED005** was drilled to target the fresh rock under the alluvial tin channel, exploited by the Restdown Mine while in operation. Historic mining records showed the location and depth of the historic alluvial channel. As it appeared the area of the Restdown Mine had been preferentially exploited by paleo-erosion, it was interpreted that the area underlying the Restdown Mine might be faulted or represent a different phase of the host Erigolia Granite.

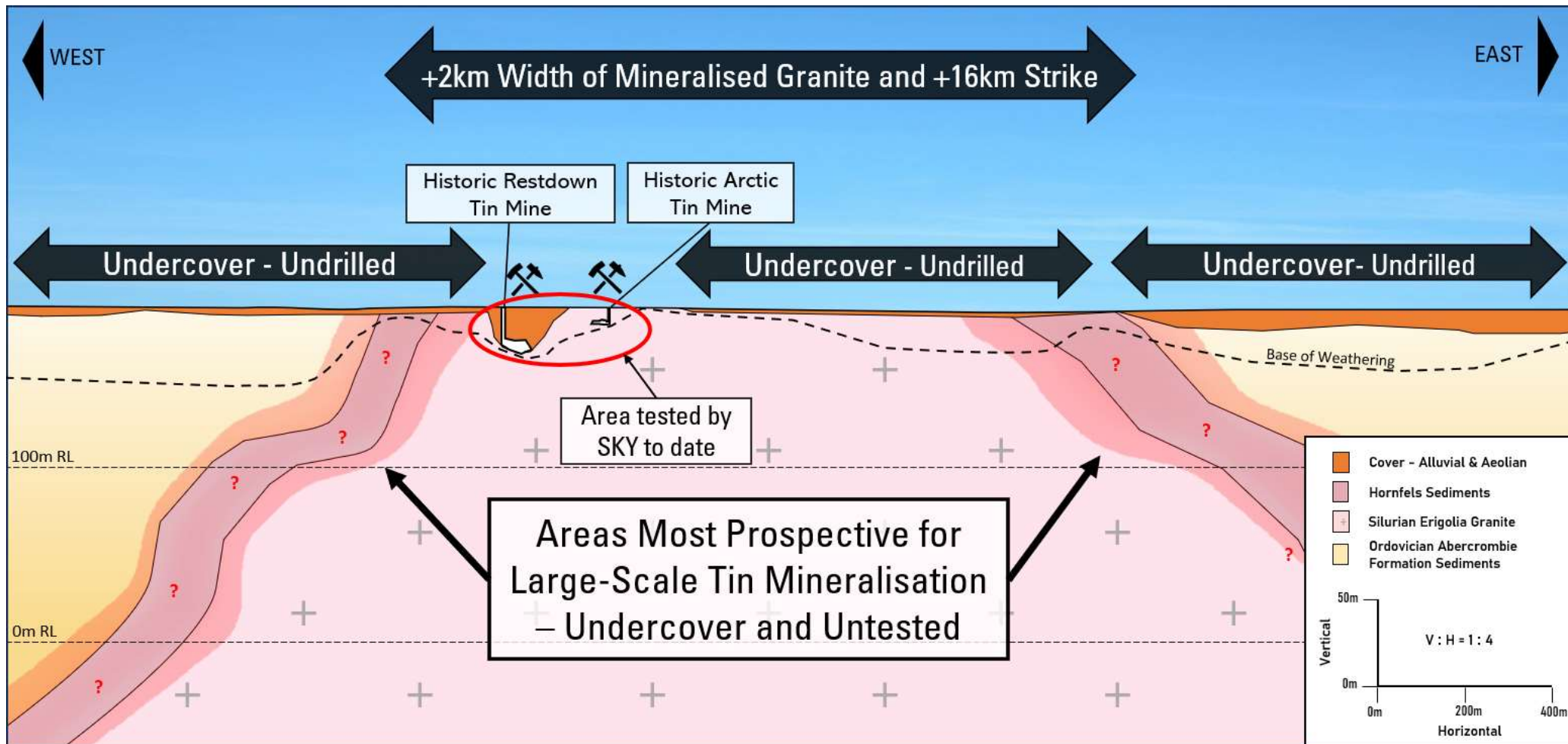
**RED005** was targeted to drill from the side of the alluvial channel and intercept the underlying rock. Tin mineralisation was successfully discovered in the fresh rock and while the granite phases intercepted appeared to be consistent with those intercepted in the other holes, it was more deeply weathered than the other drilling, results included:

**RED005:** 13m @ 0.14% Sn from 17m.

Finally, **RED006** targeted extensions to tin mineralisation under the Greenland Mine. Numerous intercepts of quartz-rich veining were intercepted; however, only narrow tin mineralisation was discovered. Results included:

**RED006:** 0.3m @ 0.22% tin from 10.35m

All holes in the program successfully discovered tin and tungsten mineralisation under the numerous historic workings throughout the Restdown Mining Area. However, all holes only intercepted the host Erigolia Granite. Further work will target the more prospective contact areas where Erigolia Granite has intruded the sediments.



**Figure 6:** Narriah Project – Schematic cross section across the Narriah Project. The red circle shows the area drilled by SKY where outcropping rocks with historic tin mines occur. These were drilled in the most recent program. However, the areas labelled 'Hornfels Sediments' are most prospective for large-scale and high-grade tin mineralisation on the margins of the mineralising Erigolia Granite. These areas are predominantly undercover and as such these areas have not been mined or even tested for tin and tungsten mineralisation previously.

## **NEXT STEPS**

The maiden drilling program successfully demonstrated that the Narriah Project is highly prospective for tin and tungsten. However, the most prospective areas for large-scale and high-grade tin and tungsten mineralisation remain untested by both this program and previous workers.

All mineralisation tested in this program was hosted within the granite. Historic mining would have targeted these areas as they were protruding from the sand cover, however, the most prospective areas for large-scale and high-grade tin and tungsten mineralisation are likely to be on the margins of the 16km long Erigolia Granite which appears to be mostly undercover.

To better target the exciting potential demonstrated in the first program at the Narriah Project, SKY will now complete geophysical surveys, including magnetic and radiometric surveys, to accurately delineate the underlying geology in the area under the alluvial and aeolian sand cover over the project area.

The results of the geophysical surveys will be combined with a thorough compilation of the historic data to target follow up drilling, aiming to discover a large-scale and high-grade tin-tungsten deposit.

## **DORADILLA PROJECT (EL 6258, SKY 100%)**

### **RARE EARTH ELEMENT MINERALISATION – METALLURGICAL TESTWORK PROGRAM**

UNSW has identified the clay hosted REE mineralisation to be at least in part hosted in apatite-group minerals which has been observed to be finely disseminated throughout the weathered clay profile and proximal to the weathered skarn along the entire 16km line DMK Line.

SKY will continue characterisation work and will use these results to assist ALS Burnie and ANSTO in developing a pathway for metallurgical concentration and/or extraction of the REE mineralisation discovered at Doradilla. A first pass trial of ammonium sulphate (AS) leaching at a solution pH of 4 and pH of 3 by ANSTO for samples from the DMK Line has not shown promise for economic extraction of REE via this method in the samples provided to date.

However, this is one of many possible methods for economic REE extraction that may be investigated. It is likely that a number of other extraction pathways will be available given the strong grades and the high value of mineralisation present at the project.

SKY will continue to work with engaged metallurgical consultants, UNSW, ALS Burnie and ANSTO, along with other experts, to continue to develop the broad range of methods available to extract the REE, tin and polymetallic mineralisation on the DMK Line to unlock the high-value, widespread mineralisation discovered at Doradilla.

### **POLYMETALLIC MINERALISATION – EXPLORATION PROGRAM**

In addition to SKY's work on finding viable extraction pathways for the REE mineralisation, SKY is also planning a number of programs to continue to evaluate the polymetallic – tin, copper, tungsten, silver, indium, bismuth, lead, and zinc – mineralisation potential of Doradilla.

This work will include ongoing data compilations, targeted geophysical surveys as required and continuing geological studies by SKY in partnership with UNSW.



# CULLARIN PROJECT: GOLD-LEAD-ZINC-COPPER (EL 7954, SKY 80%; DVP JV)

## HUME TARGET – DIAMOND DRILLING AND DHEM

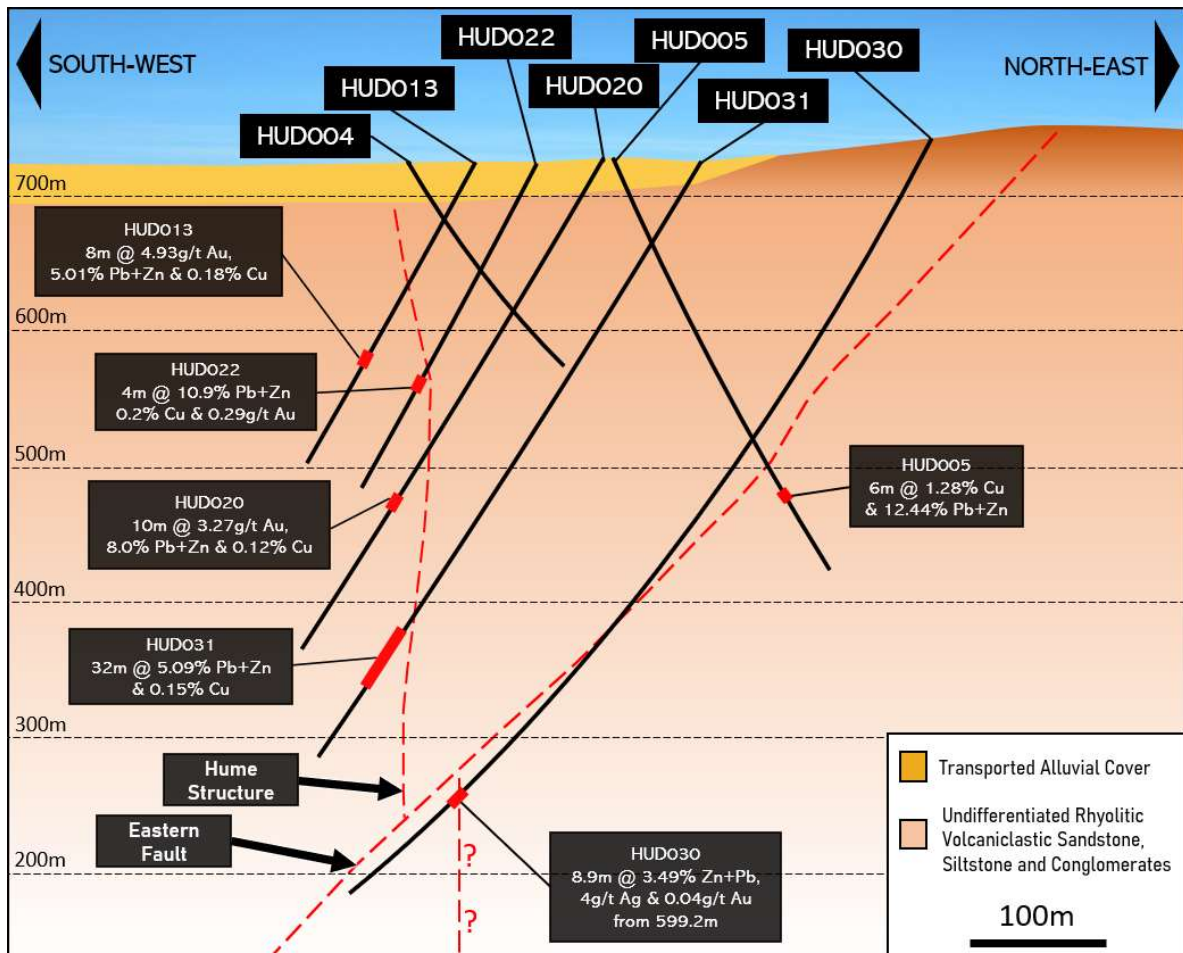
Diamond drilling completed at the Hume Target in 2021 highlighted the potential of the high-grade, gold-lead-zinc-copper mineralisation at depth at Hume. **HUD031** intercepted intervals of massive sulphides and strong base metal mineralisation, deeper than any previous drilling at Hume. Results included:

**HUD031:** **32m @ 5.09% Pb+Zn, 0.15% Cu, 6g/t Ag from 420m including;**  
**6m @ 8.93% Pb+Zn, 0.51% Cu, 18g/t Ag, 0.13g/t Au from 446m**

SKY was encouraged by these thicker intervals of mineralisation at the Hume Target. In the March 2023 quarter, SKY re-entered **HUD030** and extended the hole to intercept the Hume Structure 100m below **HUD031**. Previously, **HUD030** had been drilled to 303.6m in 2021 to test for extensions to the strong base metal mineralisation intercepted in **HUD005** (6m @ 1.28% Cu & 12.44% Pb+Zn). **HUD030** was extended and drilled on to 702.4m (**Figure 5**).

Initial geological logging and modelling of **HUD030** indicated that the hole had drilled through an interpreted moderately west dipping fault named the Eastern Fault. Although the hole intercept multiple zones of intense sericite-silica-pyrite alteration, results were subdued. The assay results and advances in the geological understanding of the Hume Target from this drilling will be studied by SKY geologists over the coming quarters to identify any further targets for expanding the gold-rich, polymetallic mineralisation at the Cullarin Project.

SKY is looking at a number of new approaches to delineate and target further mineralisation at Cullarin in the coming quarters. These will aim to highlight areas for discovering more of the high-grade mineralisation already intercepted across the Cullarin Project.



**Figure 7: Hume Target – Cross-section of HUD030 showing the trace in red of the extension of the hole to test the Hume Structure at depth and provide a platform for DHEM.**

## IRON DUKE PROJECT: COPPER-GOLD

### 100% SKY (EL6064 & 9191)

This quarter SKY exercised the option to purchase EL6064 – Iron Duke Project and SKY now holds 100% of the Iron Duke Project. The Iron Duke Project covers the Iron Duke Shear Zone which is at least 4km in strike and open to the south. Several historic copper mines occur along the Iron Duke Shear Zone including the Iron Duke, Christmas Gift, Monarch, Mount Pleasant and Silver Linings mines, along with several unnamed copper workings and shafts. In the June 2021 quarter, SKY completed a maiden drilling program at the Iron Duke Mine, in conjunction with a VTEM survey and DHEM, to identify extensions to the high-grade copper-gold mineralisation along the Iron Duke Shear Zone (SKY:ASX Announcement 2<sup>nd</sup> June 2021).

An RC and diamond drilling program is planned to test for further extensions to the Iron Duke mine and test the previously undrilled historic mines at the Christmas Gift Workings (comprising of the Christmas Gift, Monarch, Mount Pleasant and Silver Linings mines). This program was delayed due to extremely wet ground condition preventing access to the area. Currently, this program is planned for the following quarters after a detailed review of the geophysics, mining records, historic data and previous drilling to develop robust targets for further drill testing and expansion of the Iron Duke mineralisation.

## CALEDONIAN PROJECT: GOLD

### 100% SKY (EL8920 & EL9020)

SKY has now completed a soil sampling program, a phase of AC drilling, two phases of RC drilling and two diamond drill holes at the Caledonian Target. A review of SKY's and historic results indicates the Caledonian gold mineralisation likely represents a shallow, sub-horizontal blanket of oxide and supergene gold mineralisation developed over an oxidised skarn.

SKY completed a shallow aircore (AC) drilling program over the area consisting of 38 vertical AC holes for a total of 697m on 50-100m spacing over the 600m x 400m area of mineralisation defined by the previous drilling, soil sampling and costeaming. Due to significant ground waters intercepted by the AC drilling, preventing all but 4 of the 38 holes drilled from reaching refusal, SKY does not consider the target concept of a shallow, sub-horizontal blanket of oxide and supergene gold mineralisation to have been effectively tested. These results will be evaluated, along with the previous drilling, to direct SKY to further shallow high-grade oxide gold mineralisation in the target area.

SKY has been informed of the proposed development of a solar farm on the northern area of EL8920. This area covers the Jerrawa Strike which is a trend of metallic occurrences that SKY interprets to be an exhalative horizon with strong potential to host gold-silver and base metal mineralisation. SKY is continuing to work with the solar farm developers to ensure that the solar farm will not be developed over significant mineralisation. The work to date has delineated a gold soil anomaly which SKY plans to follow up in the following quarters, pending ongoing negotiations with the Solar Farm developers.

## GALWADGERE PROJECT: COPPER-GOLD

### 100% SKY (EL6320)

SKY and Burrendong Minerals Ltd (BML) have entered into to a purchase agreement for the divestment of SKY's non-core Galwadgere Project. Galwadgere, EL6320, will be purchased outright with \$600,000 worth of BML shares on the successful IPO of BML within a year from the commencement of the agreement.

Burrendong Minerals has a portfolio of projects centred on the area around the Galwadgere Project including the Commonwealth Deposit. BML aims to list on the ASX with an IPO planned in the coming months with this portfolio of projects proximal and complimentary to the Galwadgere Project in NSW. The divestment of the non-core Galwadgere Project allows SKY to remain focused on developing SKY's core assets.

## **KANGIARA PROJECT: GOLD**

### **80% SKY (EL8400 & EL8573; DVP JV)**

The Kangiara Project (EL8400, EL8573) is located 30km northwest of Yass in the Southern Tablelands of New South Wales (**Figure 8**). The project contains volcanic/volcaniclastic rocks of the Silurian Douro Group considered prospective for gold and base metal (copper-zinc) mineralisation. The high grade Kangiara Mine operated during the early 1900s, with documented production of ~40,000 tonnes at 16% Pb, 3% Cu, 5% Zn, 280g/t Ag and 2g/t Au from narrow north-south trending sulphide veins (ASX PDM 18 June 2009). Previous work by Paradigm Metals led to the calculation of an Indicated and Inferred Mineral Resource at Kangiara. Further desktop studies and follow-up field investigations are planned for the following quarters.

## **TIRRANA PROJECT: GOLD**

### **100% SKY (EL9048)**

As part of a regional review of the Cullarin area for McPhillamys-style gold mineralisation, SKY identified an area of open ground to the south-east of the Cullarin project. A detailed desktop review of previous exploration covering Tirrana was completed in the December 2021 quarter. This review identified two key areas for follow up.

## **NEW ENGLAND PROJECT: TIN**

### **100% SKY (EL9200)**

The New England Projects in the New England Orogen of NSW cover areas of significant historical tin production at Emmaville. These areas were selected as they were considered to have significant potential to host hardrock tin resources and only limited modern-day exploration has been conducted. Additionally, recent reviews of the geochemistry of the intrusions in the licence area have identified significant potential for REE mineralisation to have developed in some suitable geological settings. During the quarter the Gilgai tenement was relinquished due to a lack of prospectivity identified by SKY geologists. SKY is currently in the process of negotiating with potential partners to divest this project as it does not fit with SKY's central tin strategy.



## CORPORATE

During the quarter \$752k was spent on the exploration activities outlined in this report.

No mining production and development activities were undertaken for the quarter.

During the quarter \$55k was paid as Non-Executive Director fees.

**Table 4:** Tenement Summary.

Holder	Equity	Licence ID	Grant Date	Expiry Date	Units	Area	Comment
Tarago Exploration Pty Ltd (DVP sub)	80%	EL7954	19-6-2012	19-6-2028	51	144 km <sup>2</sup>	Cullarin Project, SKY: DVP JV
Ochre Resources Pty Ltd (DVP sub)	80%	EL8400	20-10-2015	20-10-2024	52	147 km <sup>2</sup>	Kangiarra Project, SKY: DVP JV
Ochre Resources Pty Ltd (DVP sub)	80%	EL8573	23-5-2017	23-5-2029	17	48 km <sup>2</sup>	Kangiarra Project, SKY: DVP JV
Aurum Metals Pty Ltd (SKY sub)	100%	EL8920	5-12-2019	5-12-2025	65	183 km <sup>2</sup>	Caledonian Project
Aurum Metals Pty Ltd (SKY sub)	100%	EL9120	30-3-2021	30-3-2027	50	141 km <sup>2</sup>	Caledonian Project
Aurum Metals Pty Ltd (SKY sub)	100%	EL9048	15-2-2021	15-2-2026	52	147 km <sup>2</sup>	Tirranna Project
Cuprum Aurum Pty Ltd (SKY sub)	100%	EL6320	12-10-2004	12-10-2026	14	41 km <sup>2</sup>	Galwadgere Project -Purchase to pre-IPO Burrendong Minerals Ltd
Balmain Minerals Pty Ltd (SKY sub)	100%	EL6064	21-3-2003	20-3-2028	5	15 km <sup>2</sup>	Iron Duke Project
Balmain Minerals Pty Ltd (SKY sub)	100%	EL9191	8-6-2021	8-6-2027	60	174 km <sup>2</sup>	Iron Duke Project
Stannum Pty Ltd (SKY sub)	100%	EL6258	21-6-2004	21-6-2026	38	113 km <sup>2</sup>	Doradilla Project
Stannum Pty Ltd (SKY sub)	100%	EL6699	10-1-2007	10-1-2027	14	41 km <sup>2</sup>	Tallebung Project
Stannum Pty Ltd (SKY sub)	100%	EL9200	21-06-2021	21-06-2027	74	221 km <sup>2</sup>	Emmaville Project
Stannum Pty Ltd (SKY sub)	100%	EL9524	08-02-2023	08-02-2029	92	262 km <sup>2</sup>	Narriah Project

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, 100% 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 where SKY has now defined an MRE of 15.6Mt @ 0.15% Tin\*. SKY plans to advance the Tallebung by increasing the resource to the 23 - 32Mt\* Exploration Target and progress development for future mining (\*SKY ASX Announcement 23 January 2024).

#### DORADILLA PROJECT (EL6258, 100% SKY)

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

#### NARRIAH PROJECT (EL9524, 100% SKY)

The Narriah Project is located ~70km west of West Wyalong in western NSW and represents a large tin project with multiple historic workings prospective for tin, tungsten and lithium mineralisation with limited drill testing completed to date.

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

An exploration licences in the New England Orogen covering areas of significant historical tin production.

### COPPER-GOLD PROJECTS

#### IRON DUKE (EL6064, EL9191 100% SKY)

The Iron Duke project is located ~10km south-east of Tottenham in central NSW and covers at least 4 significant historic copper-gold mines. High grade copper-gold mineralisation intersected by previous explorers (e.g. 13m @ 1.56% Cu & 4.48g/t Au).

#### GALWADGERE (EL6320, 100% SKY)

The Galwadgere project is located ~15km south-east of Wellington in central NSW. An open MRE of 3.6Mt @ 0.78% Cu and 0.28g/t Au defined at Galwadgere with numerous targets with limited drilling testing adjacent to the MRE.

### GOLD PROJECTS

#### CULLARIN / KANGIARA projects (EL7954; EL8400 & EL8573, DVP JV)

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. 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.



Figure 8: SKY Tenement Location Map

## Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr. Oliver Davies, who is a Member of the Australasian Institute of Geoscientists. Mr. Oliver Davies is an employee 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. Davies 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](http://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.

SKY ASX releases released during the December 2023 Quarter or referenced in the announcement are listed below:

24 October 2023 – SKY ASX Announcement 'Tallebung - Substantial Expansion of Mineralised Footprint'

1 November 2023 – SKY ASX Announcement 'Strong Tin Intercepts Continue at Tallebung'

15 November 2023 – SKY ASX Announcement 'Expansion of Tin Mineralisation & High-Grade Tin - Tallebung'

23 January 2024 – SKY ASX Announcement 'Tallebung Substantial Increase to Mineral Resource Estimate'

24 January 2024 – SKY ASX Announcement 'Strong Tin and Tungsten Intercepted at Narriah - Updated'

## 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.