



## QUARTERLY ACTIVITIES REPORT TO 31 DECEMBER 2021

### HIGHLIGHTS

- Activities focused on expanding the major tin-polymetallic mineral system at 3KEL-Doradilla
- Drilling at the 3KEL Target intercepted further wide, strong, tin mineralisation, results included:

**3KRCD007:** 42m @ 0.41% Tin from 37m including;  
7m @ 1.31% Tin & 0.22% Cu from 63m

**3KRC009:** 14m @ 0.46% Tin from 106m including;  
7m @ 0.77% Tin from 108m

Strong primary tin mineralisation been established over a 2.5km strike and down dip at depth.

- This second phase of diamond drilling at Doradilla continues to intercept strong mineralisation including a new zinc zone along strike to the 3KEL Target.
- Further diamond drilling and a large infill RC drilling program to rapidly advance the 3KEL Target in the March 2022 quarter.
- Successful capital raise of \$5.6 million to accelerate drilling at the Doradilla Project.

The Board of Sky Metals Limited ('SKY' or 'The Company') is pleased to provide a Quarterly Activities Report outlining SKY's aggressive exploration program during the December 2021 quarter. SKY's exploration program has continued into the March 2022 quarter with SKY accelerating exploration activities at the Doradilla-3KEL tin-polymetallic target as per below:

#### MARCH 2022 QUARTER – PROPOSED WORK PROGRAM

- Diamond drilling at the 3KEL Target, Doradilla Tin-polymetallic Project
- Large infill RC drilling program at the 3KEL Target
- Evaluation of the tin mineralisation and oxide copper potential at the 3KEL Target
- Further metallurgical work on the 3KEL Target
- RC drilling at the Tallebung Tin Mine aiming to define a shallow bulk tonnage resource
- Diamond drillhole at the Hume Target, Cullarin Project with DHEM
- RC drilling of the Christmas Gift workings, Iron Duke Project

## **DORADILLA PROJECT: TIN- COPPER (EL 6258, SKY 100%)**

### **3KEL TARGET – RC AND DIAMOND DRILLING**

Additional results from the RC and diamond drilling at 3KEL completed by SKY in August 2021 has confirmed further wide, strong, tin-copper mineralisation and established strong continuity over 2.5km long strike length in the primary zone.

Highlight new results include:

**3KRC007: 42m @ 0.41% tin from 37m including,  
7m @ 1.31% tin & 0.22% copper from 63m**

**3KRC009: 14m @ 0.46% tin from 106m including,  
7m @ 0.77% tin from 108m and,  
11m @ 0.26% tin from 90m**

These results complement the previously announced results from the drilling program in the last quarter and the December 2019 results from SKY which included:

**3KRC002: 6m @ 1.11% tin & 1.48% copper from 105m**

**3KRC010: 4m @ 1.10% tin & 0.21% copper from 135m**

**3KRC011: 32m @ 0.42% tin & 0.1% copper from 66m including,  
9m @ 0.99% tin & 0.31% copper from 81m**

**3KRC012: 37m @ 0.31% tin from 91m including,  
1m @ 4.23% tin & 0.20% copper from 121m**

The consistency of the width, strike extent and high-grades of the mineralisation intercepted in the first phase exploration program demonstrates the very large potential scale of the tin-polymetallic mineralisation at the 3KEL Target.

The first drill hole in the follow up diamond drilling program to expand the large 3KEL tin-polymetallic Target intercepted strong visual zinc mineralisation over at least a 12m interval from approximately 145-157m (**Figure 1**). This mineralisation represents a 500m extension along strike of the large 3KEL Target to the northeast. Assays were received in January 2022 and confirmed a strong zone of zinc mineralisation, currently open in all directions:

**3KDD013: 11.2m @ 3.09% zinc from 144.9m including,  
1m @ 6.54% zinc from 150m**

Zinc sulphide (sphalerite) mineralisation is typical in large and zoned tin systems such as the 3KEL discovery. The sphalerite in hole **3KDD013** occurs as bands, stringers and zones of semi-massive sulphides (**Figure 1**).



*Figure 1: 3KEL Target – Top: Diamond drill core in trays from first hole 3KDD013, 144.1-151.6m DH. Bottom: Close up of drill core from 150.3-150.4 with pale honeycomb coloured semi-massive sphalerite – Assays are pending.*

The Second drill hole in the ongoing diamond drilling program at the large 3KEL tin-polymetallic Target intercepted strong visual UV fluorescent potential tin mineralisation over at least a 30-40m interval from approximately 151-189m in 3KDD014 (Figure 2). This visual mineralisation represents at least an 80m extension down dip at depth of the large 3KEL Target below 3KRC007. Assays were received in January 2022 and confirmed the extension of tin mineralisation at depth:

**3KDD014:** 18.2m @ 0.16% tin from 150.8m including,  
 4.2m @ 0.38% tin from 150.8m and;  
 14.5m @ 0.13% tin from 175.5m.

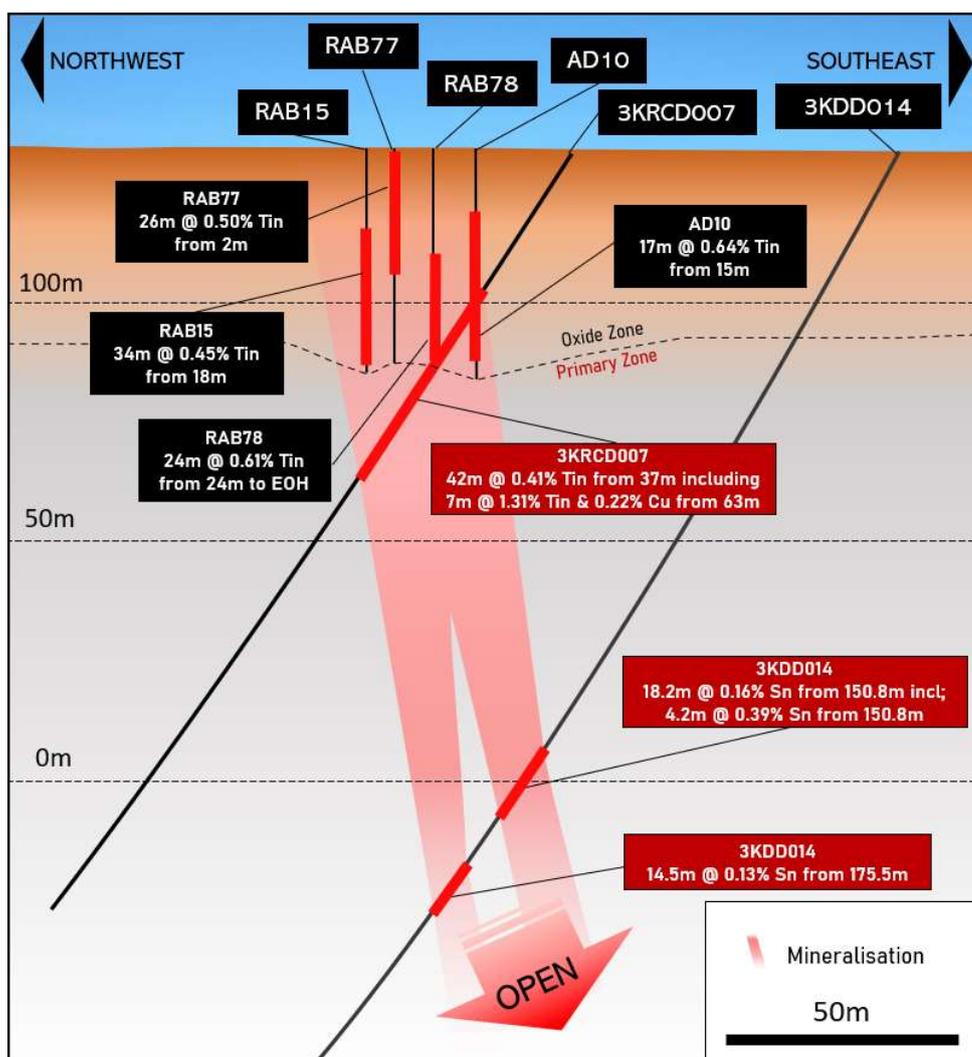


Figure 2: 3KEL Target - Cross section of 3KRCD007 and 3KDD014 extending mineralisation down plunge at depth.

Drilling has also been completed on a third hole, **3KDD015**, to further extend the strike to the southwest and test under a previous high-grade tin intercept from historic aircore drilling which intercepted **42m @ 1.02% tin from 0m (3KAC020)** (Figure 3). This hole is over 200m further along strike from any previous drilling by SKY and aims to increase the already established and extensive strike at 3KEL – assays are pending.

Diamond drilling to expand the strike and depth extents of the 3KEL mineralisation has been temporarily suspended due to flooding in the Project area, however, drilling will recommence as soon as conditions allow. In addition to this current program, planning for a large infill RC program has commenced, currently anticipated to begin in early March.

When drilling recommences, diamond drillholes are planned to test depth extents to the high-grade tin mineralisation intercepted in **3KRC012**, results include:

**3KRC012:**        **37m @ 0.31% Sn from 91m including,**  
                         **1m @ 4.23% Sn & 0.20% Cu from 121m**

Drillholes **3KRC005, 6 and 8** will be redrilled as these holes failed reach the target depth in the previous program due to poor drilling conditions. A large diameter hole is planned to be drilled in the proximity of **3KRCD007** and **3KDD014** to provide sample for further metallurgical test work over the next few months.

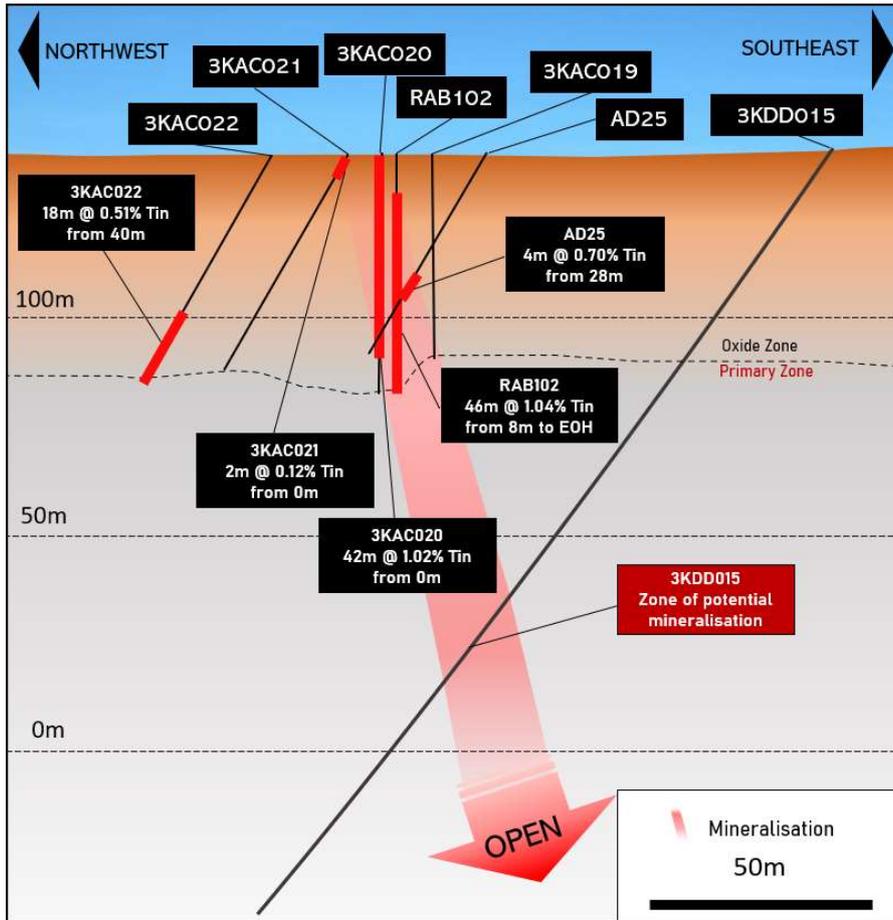


Figure 3: 3KEL Target – Cross section of historic drilling in oxide zone and 3KDD015 aimed at extending mineralisation down plunge at depth.

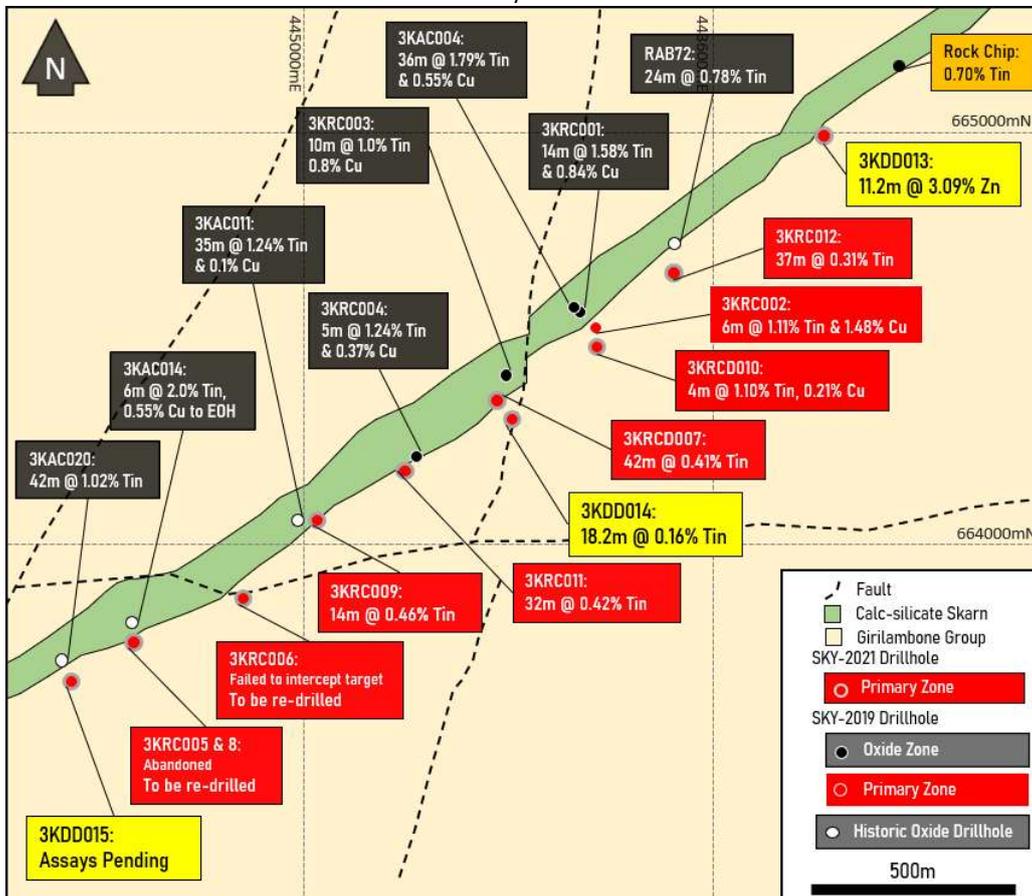


Figure 4: 3KEL Target – Plan View with drillhole and rock chip locations overlying the geological map of the 3KEL Target.

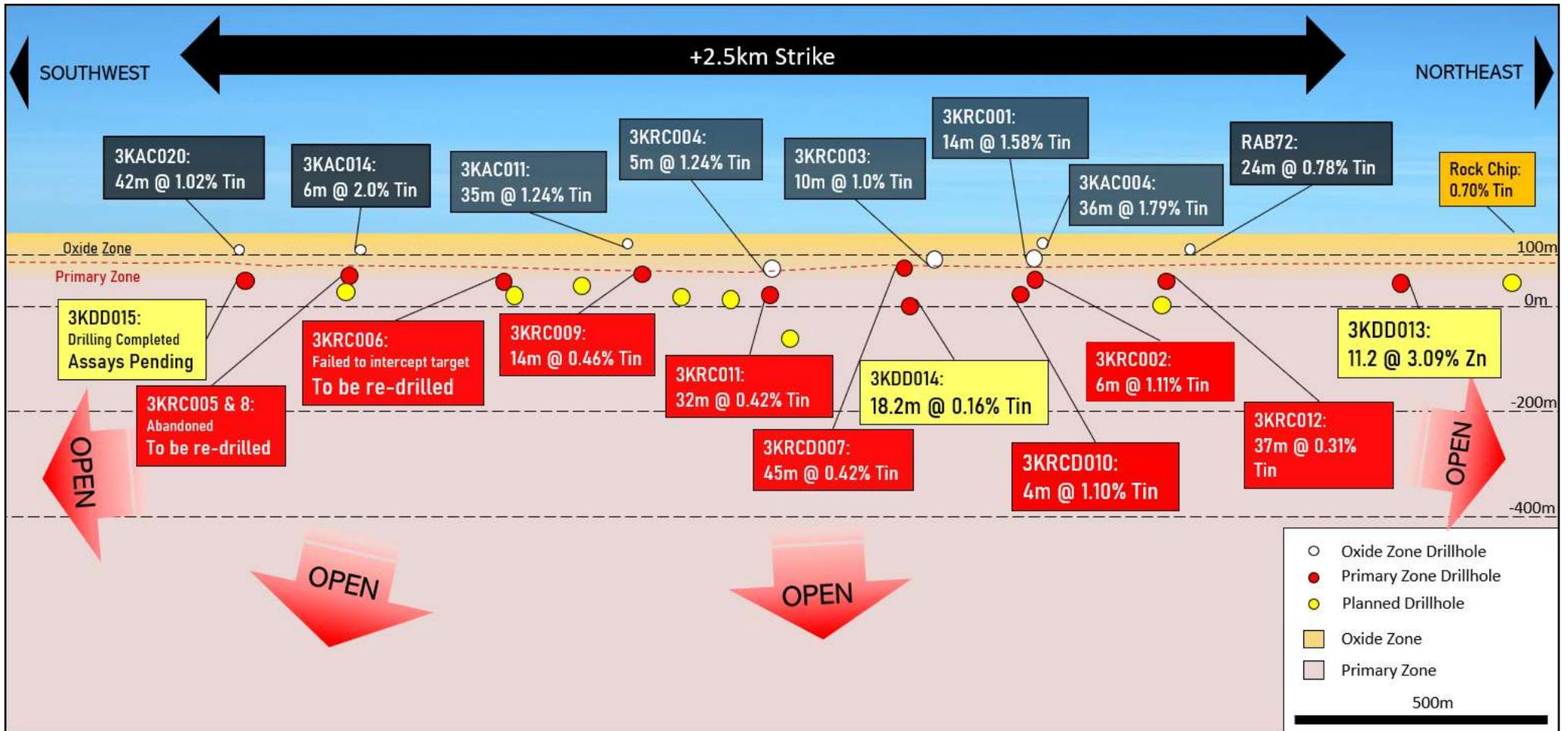


Figure 5: 3KEL Target - Schematic Long Section.

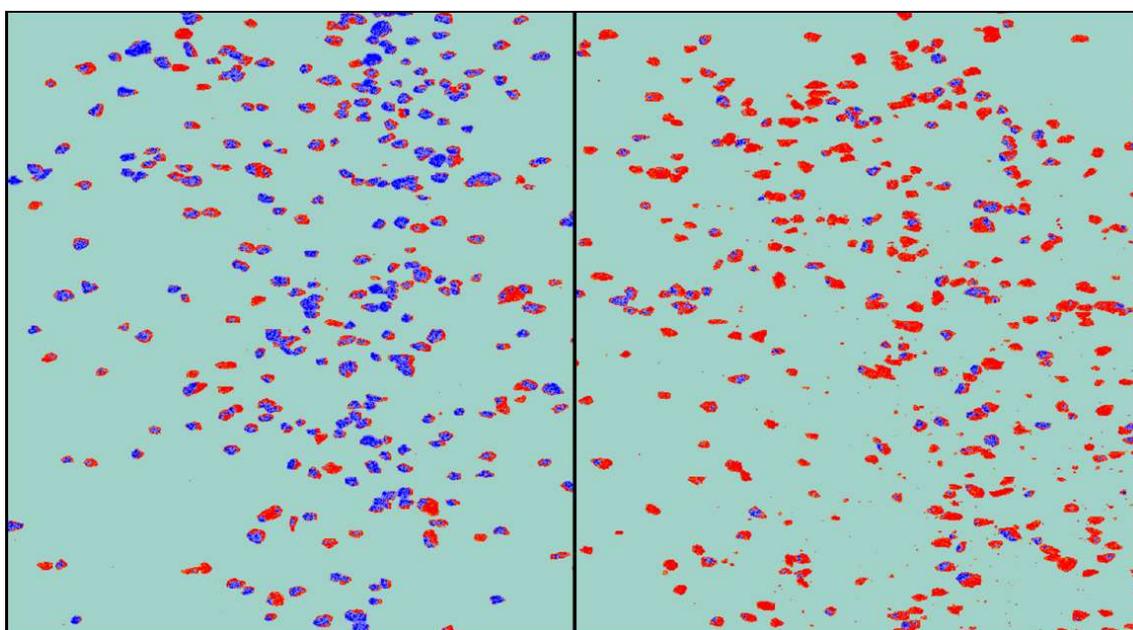
## 3KEL TARGET – TOMRA ORE SORTING

TOMRA Sorting Solutions were engaged by SKY to conduct a preliminary ore sorting trial to assess the effectiveness of X-Ray Transmission (XRT) ore sorting on the tin mineralisation at 3KEL (SKY ASX Announcement 4 November 2021).

SKY provided samples to the TOMRA Sorting facility in Sydney, NSW in September with varying tin grades and grain sizes. The samples were imaged and classified by TOMRA's XRT ore sorter (**Figure 6**).

Preliminary results indicate XRT ore sorting can play an important role in upgrading lower grade material (<0.5% tin) to higher grades (>1%tin) ahead of further tin concentration. This demonstrates the potential for the XRT ore sorting to be applied to the 3KEL mineralisation to significantly reduce tonnages to be processed and upgrade low grade ore to become economic to mine and process.

As mentioned above, a wide diameter metallurgical hole is planned for the next quarter to provide material for a bulk sample to be sent to TOMRA ore sorting to continue this encouraging work and for further metallurgical testwork to develop a pathway to producing a saleable concentrate.



*Figure 6: 3KEL Target – Classified XRT images of the sorted material (left) and the waste (right). The blue, higher density material has been concentrated in the sorted product to increase the tin content and remove waste. Image provided by TOMRA.*

## TALLEBUNG PROJECT: TIN

### 100% SKY (EL6699)

The Tallebung Project is located approximately 70km north-west of Condobolin in central NSW (**Figure 9**). 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-style tin-tungsten mineralisation. Outcropping tin mineralisation is developed over two kilometres as sheeted/stockwork quartz-cassiterite-wolframite sulphide veins above the mineralising granite.

A scoping study of the tin mineralisation at the historic Tallebung Tin Mine was completed over the quarter and has highlighted the strong potential for a large bulk tonnage resource to be present within the shallow tin lodes of the Tallebung Tin Mine. SKY is planning a shallow 1000-2000m RC program to evaluate the potential of this target in the March 2022 quarter.

A review of the potential of the Tallebung Project to host intrusion related gold (IRG) was completed in the December 2020 quarter. This review identified the potential of the Theirman Tin & Whytes Wolfram Mines to host IRG mineralisation. Further work to explore the potential of these workings for IRG mineralisation is also anticipated in the March quarter.

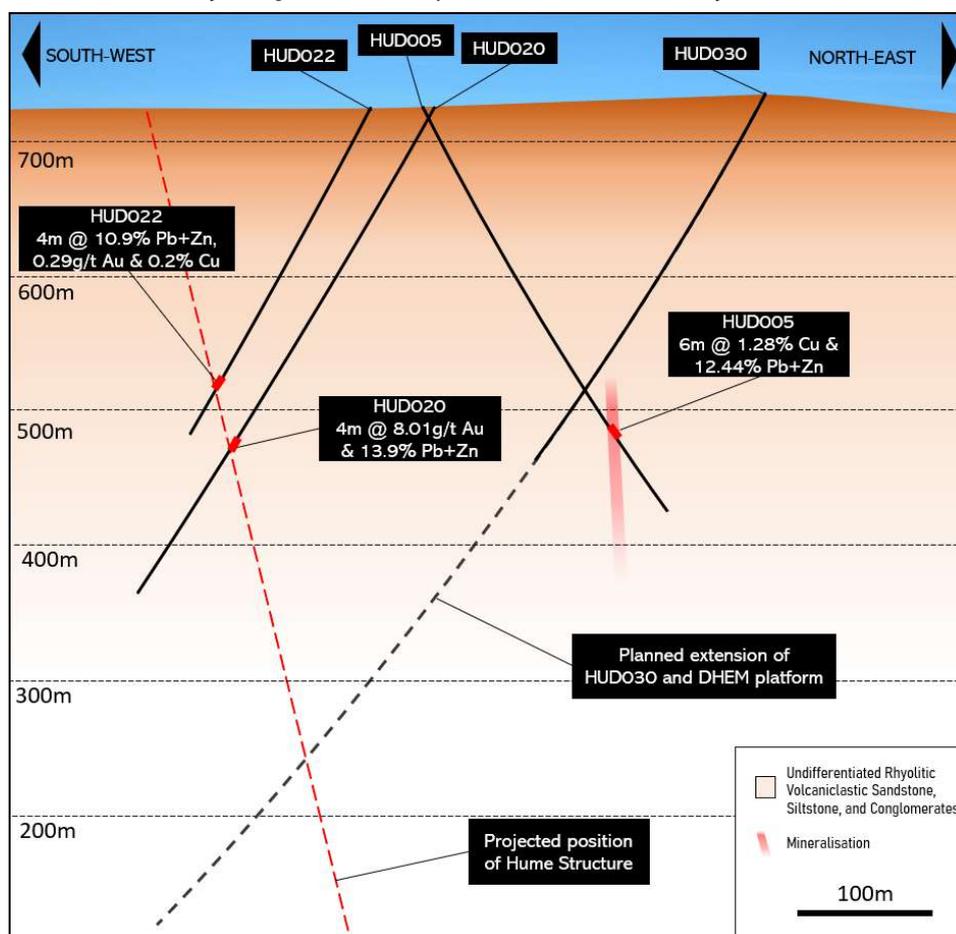
## CULLARIN PROJECT: GOLD-LEAD-ZINC-COPPER (EL 7954, SKY 80%; HRR JV)

### HUME TARGET – DIAMOND DRILLING AND DHEM

Diamond drilling completed at the Hume Target during the previous quarter has 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, extending the known mineralisation by over 80m down plunge, deeper than any previous drilling at Hume. Assays received from **HUD031** show broad intervals of base metal mineralisation at depth (**Figure 8**). 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 is encouraged by these thicker intervals of mineralisation at the Hume Target and the high content of conductive sulphides intercepted in this mineralisation indicate it may effectively be detected by a downhole electromagnetic (DHEM) survey. SKY intends to follow-up these promising results by re-entering **HUD030** and drilling deeper to intercept the Hume Structure approximately 130m below **HUD031**. This will test further extensions of the high-grade mineralisation in **HUD031** and test for any other potential mineralisation by using the hole as a platform for a DHEM survey.



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

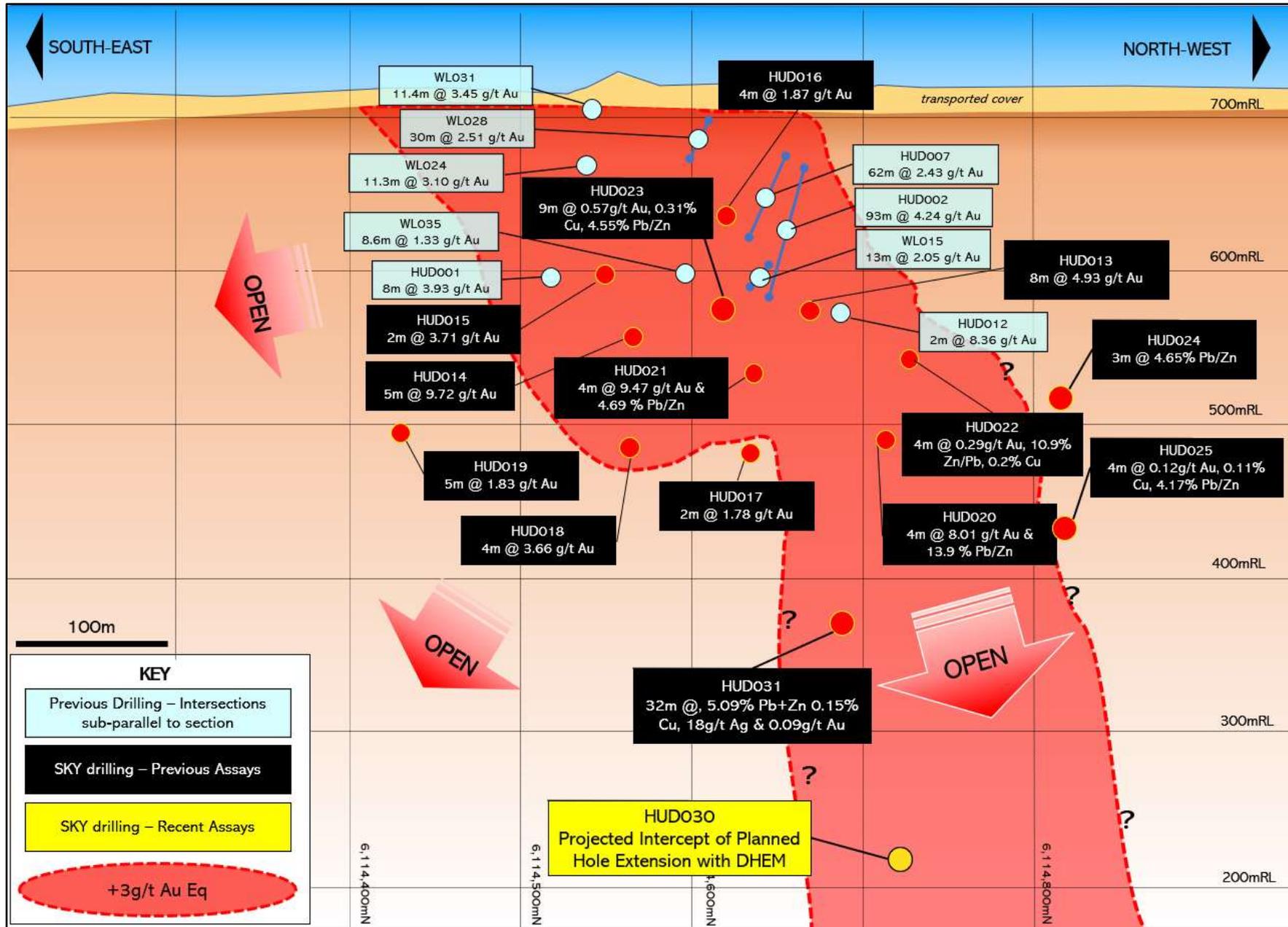


Figure 8: Hume Target – Schematic long-section with significant intercepts.

## IRON DUKE PROJECT: COPPER-GOLD

### BALMAIN OPTION 100% (EL6064), SKY 100% (9191)

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). However, this program has been delayed due to extremely wet ground condition preventing access to the area. Currently, this program is planned for the March quarter 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 (EL 8920, EL 9120, SKY 100%)

### 100% SKY (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 costeaning. Significant ground waters were intercepted by the AC drilling which prevented all but 4 of the 38 holes drilled from reaching refusal. As such, many of the holes were abandoned prematurely and may not have reached target depth to intercept significant mineralisation. 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.

## GALWADGERE PROJECT: COPPER-GOLD

### 100% SKY (EL6320)

In the June quarter, 2021, SKY announced the Galwadgere maiden JORC-2012 Inferred Resource of **3.6Mt at 0.82% Cu & 0.27g/t Au** prepared by H&S Consultants (H&SC). H&S were engaged by SKY to complete the maiden resource using drilling completed by SKY in 2020 and previous drilling completed by Alkane Resources (ALK) and other past explorers. A drilling program at the Galwadgere Target is planned for the next quarters to expand on the maiden JORC-2012 resource.

Soil sampling undertaken along strike from the Galwadgere resource has identified two copper-gold, multielement pathfinder soil anomalies. The northern soil sampling program has delineated a 200m x 100m soil anomaly which is coincident with several historic mine shafts with copper carbonate bearing rocks discovered near these workings. Soil sampling south of the Galwadgere Target has identified another soil anomaly which appears similar in tenor to the anomaly identified at the McDowell's mine. These



anomalies are within 3km of the Galwadgere resource and provide strong support for expanding the copper-gold resource at Galwadgere with along strike exploration. These are priority drill targets to be tested in the following quarters.

## **KANGIARA PROJECT: GOLD**

### **80% SKY (EL8400, EL8573; HERON JV)**

The Kangiara Project (EL8400, EL8573) is located 30km northwest of Yass in the Southern Tablelands of New South Wales (Figure 9). 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 on 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. The follow-up work is planned to be completed in the following quarters.

## **NEW ENGLAND PROJECT: TIN**

### **100% SKY (EL9200 & 9210)**

The New England Projects in the New England Orogen of NSW cover areas of significant historical tin production – Emmaville & Gilgai. These areas were selected as they were considered to have significant potential to host hardrock tin resources and limited modern day exploration has been conducted. A detailed desktop review of previous exploration covering these areas is proposed for the following quarters with field work planned to follow-up any prospective targets which are identified.



## CORPORATE

SKY completed a successful capital raising of \$5.6 million from sophisticated and institutional investors through the issue of 62,882,355 ordinary shares on the 5<sup>th</sup> November 2021.

During the quarter \$617k was spent on the exploration activities outlined in this report.

No mining production and development activities undertaken for the quarter.

During the quarter \$32k was paid as Non-Executive Director fees.

Holder	Equity	Licence ID	Grant Date	Expiry Date	Units	Area	Comment
Tarago Exploration Pty Ltd (HRR sub)	80%	EL7954	19-6-2012	19-6-2022	51	144 km <sup>2</sup>	Cullarin Project, SKY Heron JV
Ochre Resources Pty Ltd (HRR sub)	80%	EL8400	20-10-2015	20-10-2024	52	147 km <sup>2</sup>	Kangiara Project, SKY Heron JV
Ochre Resources Pty Ltd (HRR sub)	80%	EL8573	23-5-2017	23-5-2023	17	48 km <sup>2</sup>	Kangiara Project, SKY Heron 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 - Murrum granted
Aurum Metals Pty Ltd (SKY sub)	100%	EL9048	15-2-2021	15-2-2026	52	147 km <sup>2</sup>	Tirrana Project - granted
Gradient Energy Pty Ltd (SKY sub)	100%	EL6320	12-10-2004	12-10-2026	14	41 km <sup>2</sup>	Galwadgere Project
Balmain Minerals Pty Ltd	Option to Purchase 100%	EL6064	21-3-2003	20-3-2022	5	15 km <sup>2</sup>	Iron Duke Project
Gradient Energy Pty Ltd (SKY sub)	100%	EL9191	8-6-2021	8-6-2021	60	174 km <sup>2</sup>	Iron Duke Project - Albert
Stannum Pty Ltd (SKY sub)	100%	EL6258	21-6-2004	21-6-2026	38	110 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%	EL9210	01-07-2021	01-07-2027	82	244 km <sup>2</sup>	Gilgai Project

**Table 1:** Tenement Summary.

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.

## GOLD PROJECTS

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

Under the HRR farm-in, SKY has now earned an 80% interest in the projects via the expenditure of \$2M (ASX: 9 October 2019). '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. The Cullarin Project contains equivalent host stratigraphy to the McPhillamys deposit with a similar geochemical, geophysical & alteration signature. SKY's maiden drill program was very successful including core hole HUD002 which returned 93m @ 4.2 g/t Au from 56m.

### CALEDONIAN / TIRRAWA 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.

## COPPER GOLD PROJECTS

### GALWADGERE (EL6320, 100% SKY)

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.

### 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 including 13m @ 1.56% Cu & 4.48g/t Au.

## 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 and is considered prospective for lode and porphyry-style tin - tungsten mineralisation.

### DORADILLA PROJECT (EL6258, 100% 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 were considered to have considerable potential to host hardrock tin resources and limited modern day exploration has been conducted.



Figure 9: SKY 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](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 2021 Quarter or referenced in the announcement are listed below:

- 25 October 2021 – SKY ASX Announcement 'Wide Strong Tin Results Continue from 3EKL-Doradilla'
- 29 October 2021 – SKY ASX Announcement '\$5.6m Placement to Accelerate Doradilla Tin-Copper Project'
- 4 November 2021 – SKY ASX Announcement 'Successful Start to Ore Sorting Trial – 3KEL'
- 1 December 2021 – SKY ASX Announcement 'Strong Visual Mineralisation at 3KEL-Doradilla'
- 15 December 2021 – SKY ASX Announcement 'Further Strong Visual Mineralisation at 3KEL-Doradilla'
- 17 January 2022 – SKY ASX Announcement 'New Zinc Zone Confirm Along Strike From 3KEL-Doradilla'
- 27 January 2022 – SKY ASX Announcement 'Tin Mineralisation Extended at Depth at 3KEL-Doradilla'

## 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.