**ASX Announcement**

**16 May 2022**

# REGIONAL EXPLORATION PROGRAM UNDERWAY IN BOTSWANA

## Highlights

- **Exploration of regional targets on 100%-owned tenure has commenced**
- **Initial work will include soil and rock sampling as well as geological mapping**
- **The program aims to define targets for follow-up ground geophysics and/or drill testing**
- **A technical collaboration with the University of Botswana to undertake a regional review of Si6's portfolio for pegmatite-hosted mineralisation such as lithium is also underway**
- **Recent corporate activity adjacent to Si6's tenure confirms prospectivity and potential**

Si6 Metals Limited (ASX: Si6 or the Company) is pleased to report that exploration groundwork across its 100%-owned portfolio in Botswana has commenced. The program has been designed to define targets on the 100%-owned tenure following a recent review (see ASX Announcement 09/03/2022).

Si6 is exploring for base and precious metals within the Limpopo Mobile Belt in Botswana, a district known for hosting major nickel and copper producing operations. The Company's portfolio contains an advanced Ni-Cu-Co-PGE resource at Maibele North and drilled high-grade Cu-Ag discoveries at Airstrip and Dibete (Figure 1).

The Maibele North, Airstrip and Dibete prospects are located on joint venture tenements (JV Licences). The JV Licences (Si6 60%, BCL Limited 40%), where Si6 has generated a number of high-quality drill targets at all three prospects, only cover ~143km$^2$, or less than 10%, of Si6's ~2,000km$^2$ tenement package in Botswana (see ASX Announcements 21/12/2021, 25/11/2021 and 09/11/2021). The Company eagerly anticipates drilling of these targets once relevant approvals are received, noting that the JV partner is currently reviewing proposals.

Premium Nickel Resources recently announced that it has acquired the Selebi and Selebi North nickel-copper-cobalt mines and related infrastructure from BCL Limited (Si6's joint venture partner) with work programs expected to begin immediately. Selebi is adjacent to tenure controlled by Si6 and the joint venture between Si6 and BCL Limited.

In the lead up to drilling on the JV Licences, Si6 has been conducting geological reviews on Non-JV, 100%-owned licences and is committed to generating further targets where numerous high quality, early-stage base and precious metal exploration prospects exist (see ASX Announcement 09/03/2022). Prospectivity for pegmatite-hosted mineralisation such as lithium, tin and tantalum as well as possible rare earth element mineralisation were also evident as part of this review.

Si6 Executive Chairman, Patrick Holywell stated, *"With this exploration program now underway we are well placed to continue building momentum at our Botswanan assets following the completion of our latest geological review. This program will further define the key target areas across our 100%-owned tenure and prepare the Company for the next phase of exploration work which may include drill testing. Nickel and copper prices have enjoyed strong periods and the demand outlook for both looks increasingly positive. We look forward to providing shareholders with updates on how the Botswana exploration program is progressing in the coming months."*

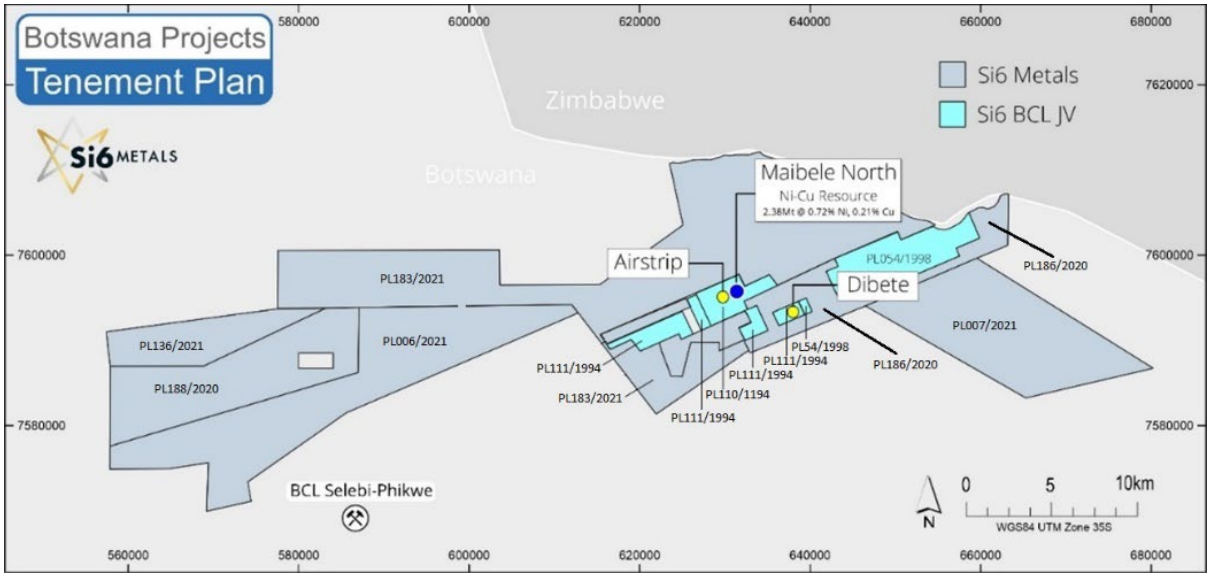


*Figure 1: Si6 tenement portfolio in Eastern Botswana*

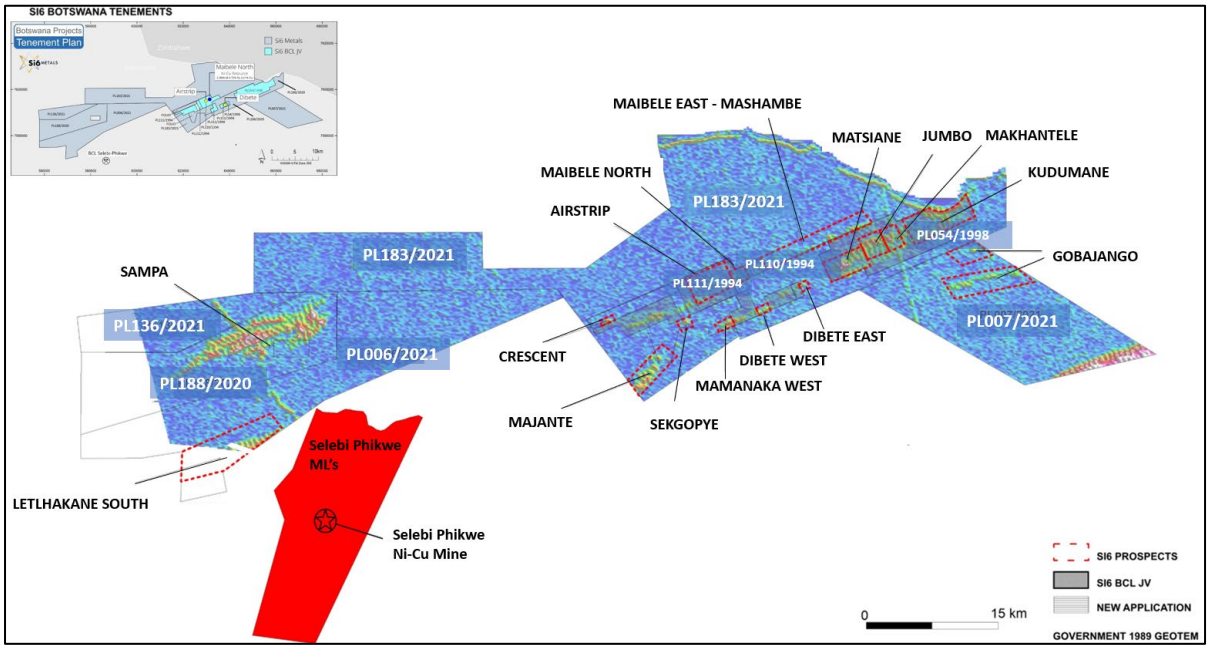


*Figure 2: Si6 regional prospects over the 1989 GEOTEM data. Red outlines indicate prospect area extents*

## Regional Exploration Program

Regional exploration will commence at the **Maibele East** and **Mashambe** Prospects which both lie along strike to the northeast from the Maibele North Ni-Cu-Co-Pd resource. Both prospects are located on Si6's 100%-owned tenure (Figures 1, 2 & 3) and have been identified as priority, early-stage targets requiring field exploration such as mapping, sampling and ground geophysics to generate drill targets.

Both prospects lie along an interpreted linear geological trend that passes through Maibele North and is possibly a preferential horizon for hosting Ni-sulphide deposits (Figures 1, 2, 3 & 4). The proposed program will consist of soil sampling along 40 x 2km lines perpendicular to the regional lithology strike in order to cover the extents of the linear trend across, and in between, both prospects. The lines will be spaced 200m apart and can later be infilled at 100m spacing in areas of interest. It is envisaged ground geophysics followed by drill testing will be undertaken at any priority target areas.

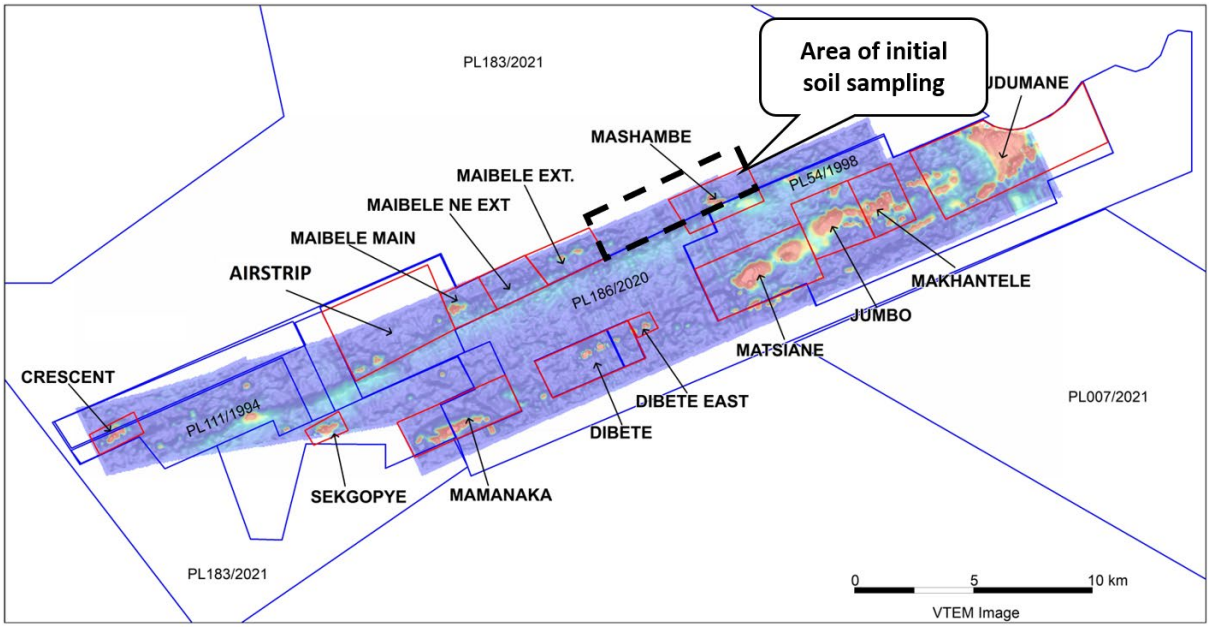


***Figure 3:*** *Si6 regional prospects in relation to Maibele North, Airstrip and Dibete over the Company's VTEM data. Red outlines indicate prospect area extents*

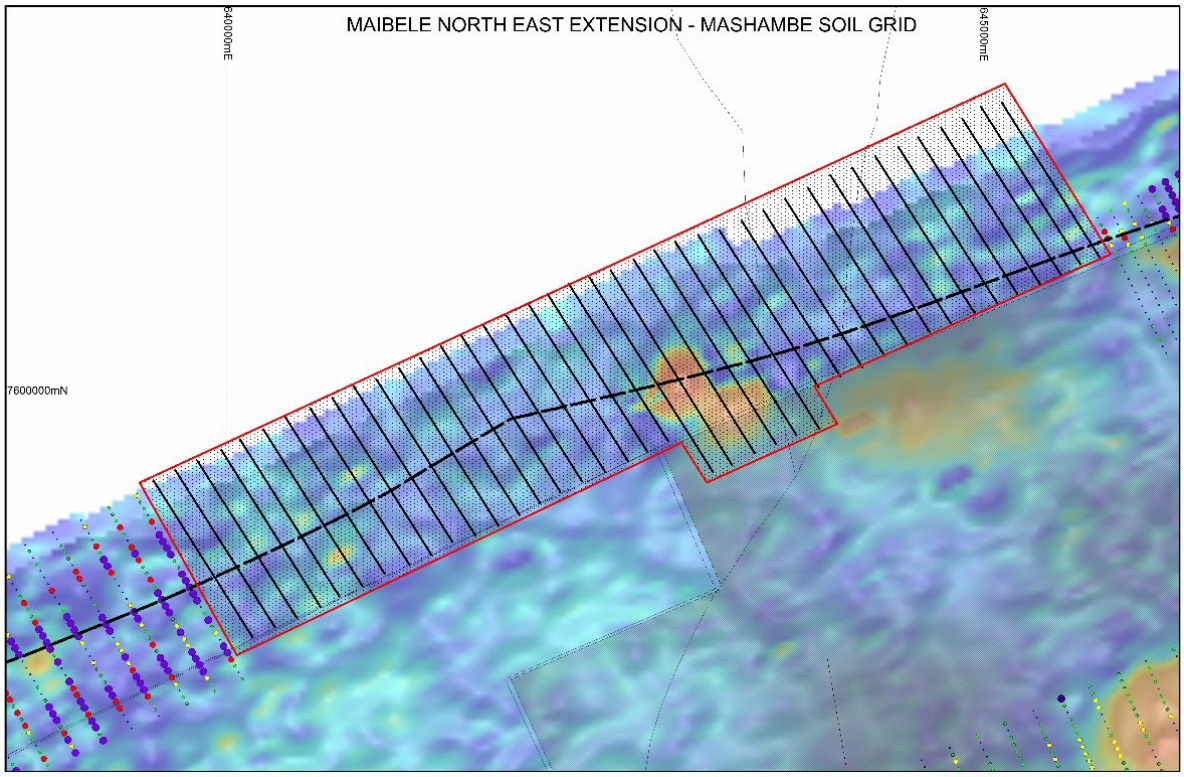


*Figure 4: The soil sampling grid will run from the eastern boarder of PL110/1994 up to Mashambe prospect*

Further groundwork will also be undertaken at the **Gobjango Prospect** (Figures 2 & 5). This area lies on PL007/2021 and contains a GEOTEM anomaly and a dyke that transect the tenement. The first pass mapping has revealed that the dyke cuts across gneisses and a gabbroic body. Two historic soil test lines were sampled to test the Gobajango anomaly and the results showed elevated geochemical responses over the geophysical highs (Figure 5). Further mapping and first pass soil sampling as outlined in Figure 5, below, is required to further assess the prospectivity of the prospect.

Ground-based geophysical programs such as EM or AMT are being considered for the **Majante** and **Sekgopye** projects. Both targets show outcropping ultramafic rock types, strong historic Ni and Cu soil geochemistry and significant historical EM responses. Both prospects are worthy of drill testing once new geophysical surveys verify the location of conductive bodies.

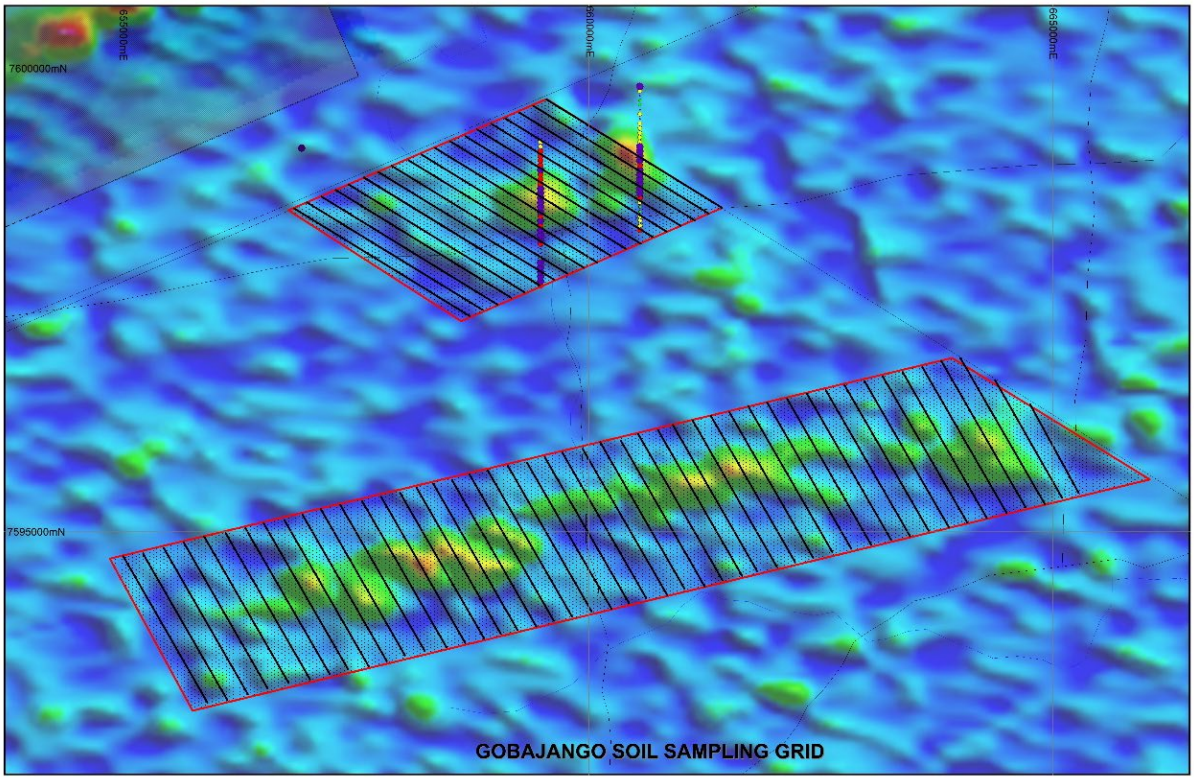


***Figure 5:*** *Plan view of the two planned soil grids targeting the GEOTEM anomalies at the Gobjango prospect on PL007/2021.*

## Pegmatite-hosted mineralisation (lithium, tin and tantalum)

Si6 has previously undertaken a limited review and preliminary soil sampling to test for lithium, tantalum and other LCT pegmatite hosted metals to follow up on historic stream sediment samples that returned elevated tantalum levels (see ASX Announcement 27/02/2017). The work did reveal some anomalism in Li, Ta and Sn but was never subject to a detailed follow-up program and the anomalies remain unexplained. Si6's portfolio contains Archean cratonic rocks as well as re-worked Archean rocks and has been shown to contain outcropping pegmatite dykes throughout. The Company's portfolio abuts the Zimbabwe border where the same belt of Archean geology hosts one of the world's largest lithium pegmatite mines at Bikita.

A more comprehensive desktop review has now commenced, and the Company has entered into a collaboration agreement with the University of Botswana to support a regional study of Si6's portfolio for the potential to host strategic critical minerals such as lithium, tin, tantalum and rare earth elements, all of which are noted to occur in Archean-aged cratonic rocks such as those occurring in Si6's ground. Such an arrangement allows Si6 access to the in-house expertise of the University and also fast-tracks the assessment of the Company's entire portfolio at very little cost.

The exercise will consist of an initial desktop review to confirm areas of interest but will mostly be undertaken in the field with students and staff from the University working in conjunction with SI6 geological staff to map and sample areas of potential mineralisation. If proof of concept is confirmed the areas of interest will be followed up with more rigorous programs such as ground geophysics, trenching and ultimately drilling.

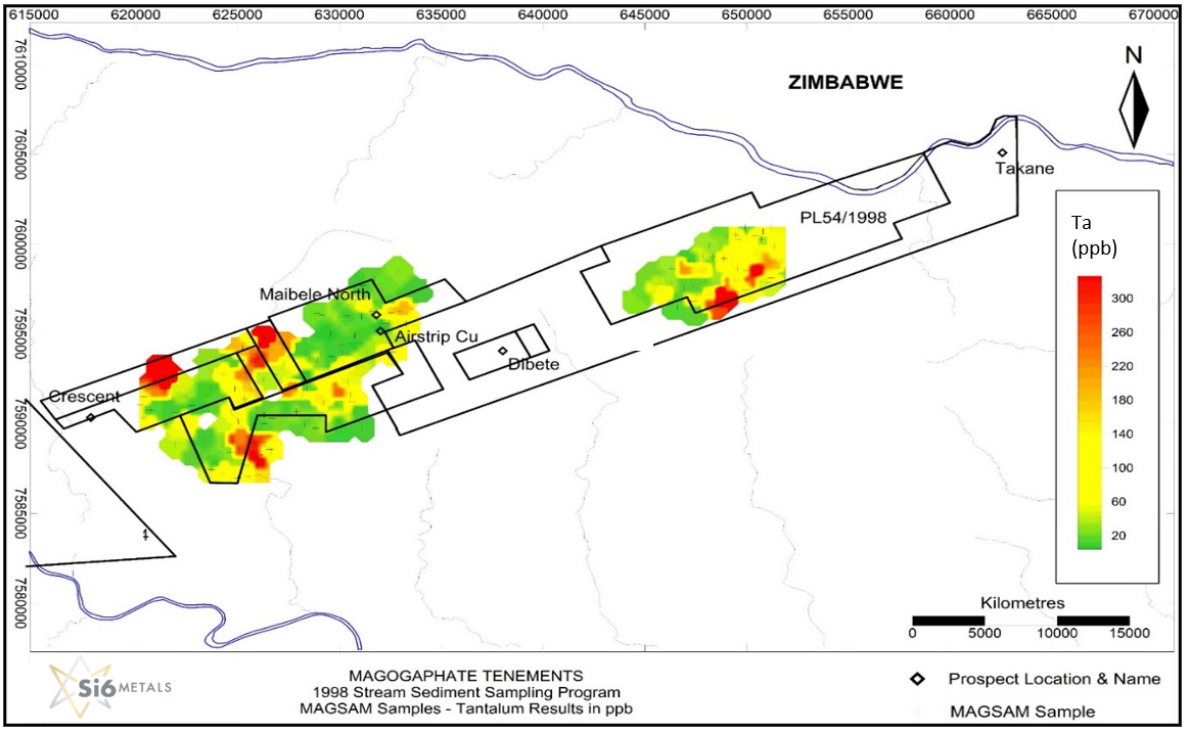


*Figure 6: Coloured gridded image of the 1997/98 MAGSAM Ta results showing several strongly anomalous areas across Si6's historic portfolio (Red colours). Follow up soil sampling in area 1 showed elevation in Li, Ta and Sn (ASX Announcement 18/05/2016) and highlight the potential of Si6's portfolio to contain strategic mineral mineralisation.*

## Future Work Program

The regional work program is focused on progressing the priority targets to drill ready status. Most of the regional targets have undergone historic first past exploration including soil sampling, mapping and some geophysical surveys. Limited drilling has been completed in some areas. All of this data has been reviewed and any gaps in the coverage, or verification work required, will be undertaken. Initial work including soil sampling and mapping has commenced and will be followed by ground geophysics such as EM and/or AMT. Drill programs will be designed and prioritised once targets are generated.

## Maibele Resource Information

An initial JORC-compliant (2012) Inferred Resource was calculated at Maibele North by MSA South Africa in 2015 (see Table 1) using a 0.30% Nickel cut-off grade. See the ASX announcement on 28 April 2015 "Maiden Inferred Resource for Maibele North" for further information.

| Maibele North Resource | | | | | | | |
|---|---|---|---|---|---|---|---|
| Tonnes (Mt) | Ni (%) | Cu (%) | Pt (g/t) | Pd (g/t) | Rh (g/t) | Ru (g/t) | Au (g/t) |
| 2.38 | 0.72 | 0.21 | 0.08 | 0.36 | 0.04 | 0.05 | 0.10 |

Table 1: Inferred Resource calculated by MSA South Africa in 2015 to JORC 2012 compliance

## Competent Persons Statement

The information in this report that relates to Exploration Targets and Exploration Results is based on recent and historical exploration information compiled by Mr Steven Groves, who is a Competent Person and a Member of the Australian Institute of Geoscientists. Mr Groves is a Director of Si6 Metals Limited. Mr Groves has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Groves consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Disclaimer

In relying on the above mentioned ASX announcement and pursuant to ASX Listing Rule 5.23.2, the Company confirms that it is not aware of any new information or data that materially affects the information included in the above announcement. No exploration data or results are included in this document that have not previously been released publicly. The source of all data or results have been referenced.

## Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Si6's mineral properties, planned exploration program(s) and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward looking statements. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

*This announcement has been approved for release by the Executive Chairman of Si6 Metals Ltd, Mr Patrick Holywell.*

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