

## ASX Announcement

24 June 2021

# PROMINENT 2.5KM IP ANOMALY LOCATED AT DIBETE, BOTSWANA

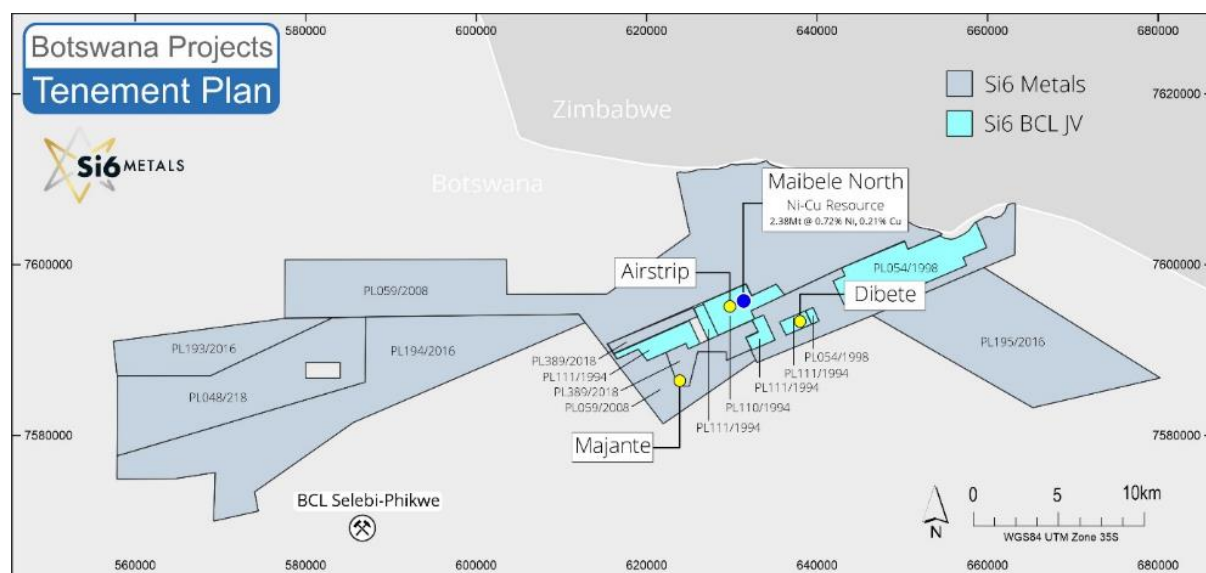
## Highlights

- Gradient Array and Pole Dipole Survey completed at Dibete Prospect, Botswana
- 2.5 km long Gradient Array anomaly confirmed by Pole Dipole IP
- Anomaly is coincident with existing drilled Cu-Ag mineralisation
- Strong potential for deep-seated mineralisation
- Airstrip & Maibele survey results pending

Si6 Metals Limited (ASX: **Si6** or the **Company**) is pleased to provide an update on the Induced Polarisation (IP) survey recently completed at the Dibete Prospect in Botswana. 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 Botswana portfolio contains an advanced Ni-Cu-Co-PGE resource at **Maibele North** and drilled high-grade Cu-Ag discoveries at **Airstrip** and **Dibete**. Si6 is currently undertaking a multi-faceted exploration campaign, employing a variety of ground geophysical techniques designed to target deeper mineralisation for follow-up drill testing.

**Si6 Executive Chairman, Patrick Holywell stated, "The Dibete IP surveys have illustrated strong target areas along strike of the known mineralisation and confirmed a 2.5km anomaly. Interpretation of surveys at the Airstrip and Maibele prospects are also nearing completion with results to be reported shortly. Planning for reverse circulation and diamond drilling will then take place."**





## DIBETE PROSPECT

Si6 completed a Gradient Array IP survey across the Dibete prospects during December 2020 (see ASX announcement on 6 January 2021). The Gradient Array IP detected numerous anomalous chargeability zones across Dibete. In order to facilitate the design for deeper drilling, the survey has been followed up with discrete N-S lines of Pole-Dipole IP surveys across priority anomalies to further map the accurate locations of potential sulphide mineralisation.

### Gradient Array IP

The gradient array data shows a prominent IP high chargeability anomaly corresponding with an IP low resistivity anomaly, indicating a high metal factor over 2.5 km of strike length on the Dibete Prospect (see Figure 1). The IP gradient data corresponds well with mineralisation intercepted by drilling to date, warranting further work along strike and at depth.

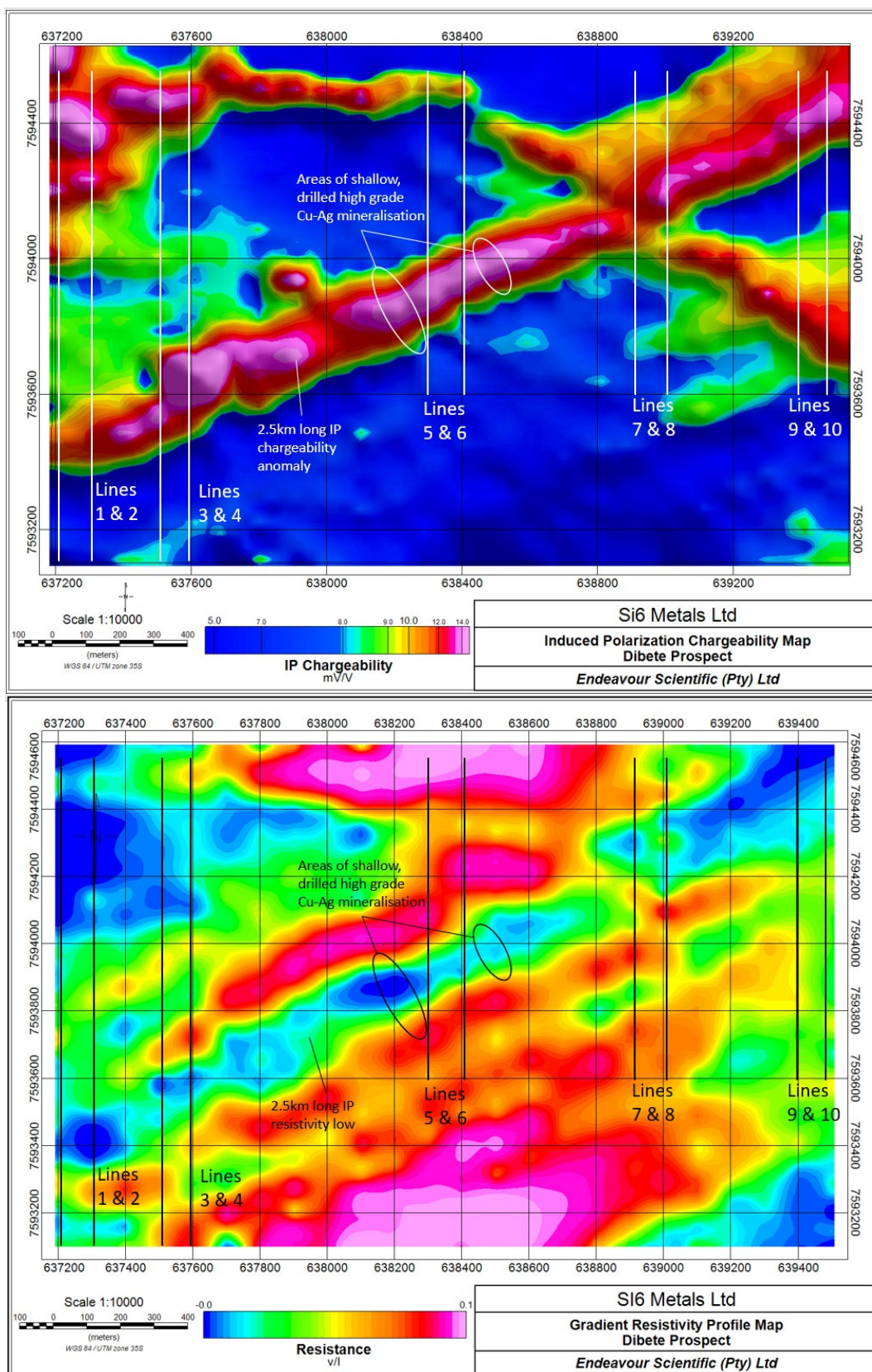
Previous magnetic surveys indicate an E-W trending dolerite dyke across the northern part of the Dibete IP anomaly. Dolerite dykes have been noted to be associated with Cu-Ag mineralisation at both the Dibete and Airstrip prospects. Additional work to the north of this dyke, along to the Dibete IP anomaly is also warranted.

### Pole Dipole IP

Pole Dipole IP (PDP) surveys were completed along 10 N-S lines perpendicular to the general strike direction of the Dibete gradient array anomaly and coincident Cu-Ag mineralisation. Results from the PDP surveys indicate two prominent chargeability anomalies corresponding to the IP gradient array data.

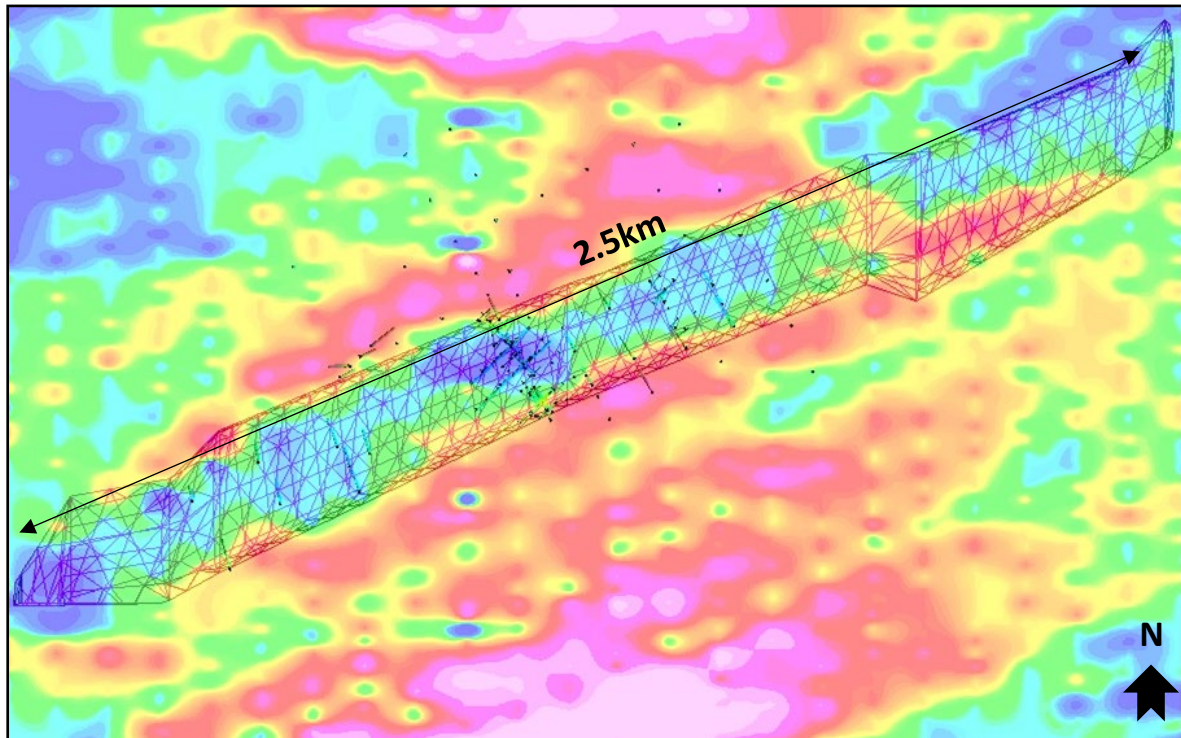
The southern anomaly, which is 2.5km in extent, has been modeled to be spatially associated within the known mineralisation from the historical drilling at Dibete. This southern chargeability anomaly lies beneath and along strike of the drilled mineralisation and is the main target area at the prospect (see Figure 2). The northern anomaly is possibly a response from clays associated with a dolerite dyke.

Cross sections of the modelled IP data show coincident chargeability anomalies and resistivity low zones extending to depth along the 2.5 km extent of the Dibete zone (see Figures 3).

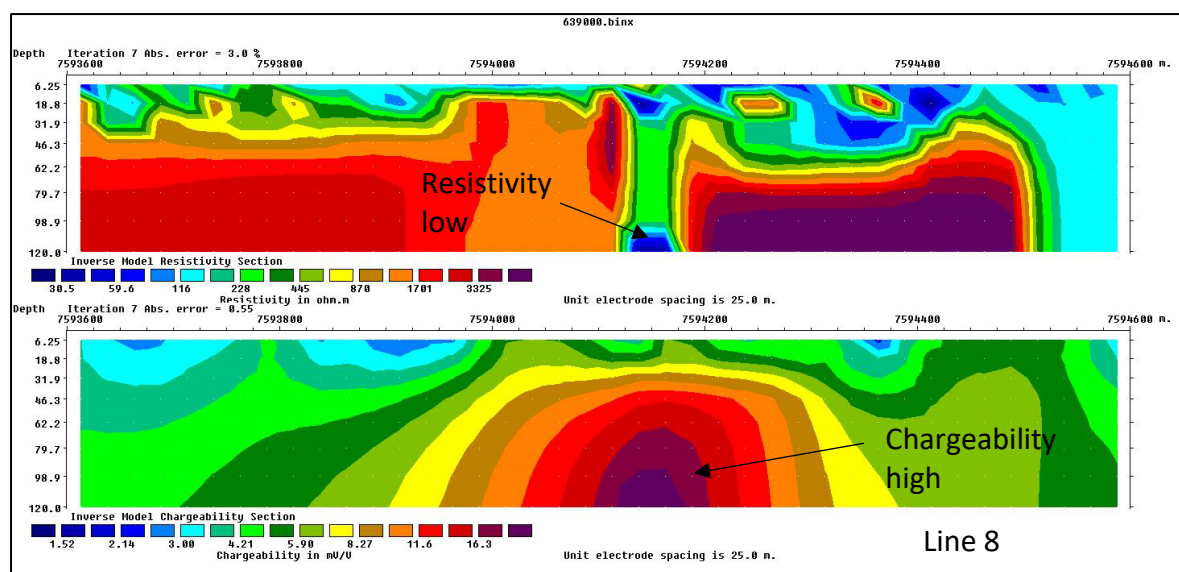
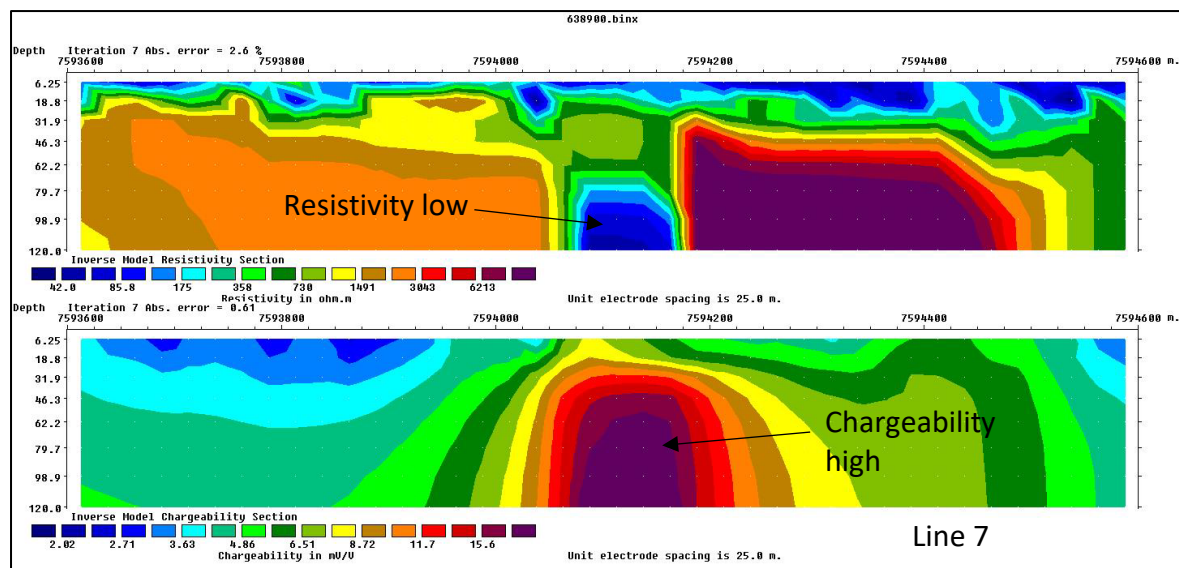


**Figure 1** Plan view of the Dibete gradient array survey showing chargeability at top and resistivity on the bottom. The E-W trending northern conductor (on the top image) is potentially a clay response from a dolerite dyke and is therefore not regarded as a high priority target (Endeavour Scientific Pty Ltd).





**Figure 2:** Plan view of the interpreted Dibete 2.5 km IP PDP chargeability model (hatched shape) showing a NE strike direction. Note the association with the gradient low resistivity surface data indicating a high metal factor (high chargeability and low resistivity).



**Figures 3:** Examples of the modelled PDP data showing cross sections through Line 7 (Top) and Line 8 (Bottom) with coincident chargeability and resistivity models. Note the strong correlation between chargeability highs and narrow resistivity lows potentially indicating a sulphide-mineralised structural zone. All PDP IP lines show a similar response across the prospect.



## Status on surveys at Airstrip & Maibele North Prospects

Similar PDP surveys have been undertaken at the Airstrip Cu-Ag prospect.

At Maibele North Ni-Cu-Co-PGE prospect, an Audio magnetotelluric (AMT) technique has been undertaken to detect massive to semi-massive sulphide bodies that might extend the known Maibele North sulphide mineralisation at depth and/or along strike. The Maibele North sulphide resource is open in all directions.

Data for both prospects is currently being processed and interpreted by the Company.

## Future Work Program

The geophysical programs are designed to locate sulphide mineralisation for follow-up drill testing. Quotes from reliable in-country drill companies are being sought, with a view of following up the geophysical targets with a combination of RC and diamond drilling.

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

## For further information please contact:

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## APPENDIX A

### JORC CODE, 2012 Edition

#### Section 1 – Sampling Techniques and Data for historic work

CRITERIA	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>- Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>- Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>- Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>- In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>- Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>- Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>- Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>- Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>- The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>

<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>- If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>- For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>- Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>- Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>- Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>- For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>- Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• n/a</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>- The verification of significant intersections by either independent or alternative company personnel.</li> <li>- The use of twinned holes.</li> <li>- Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>- Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• The Competent Person has reviewed the QAQC data and assay results</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>- Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>- Specification of the grid system used.</li> <li>- Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• A handheld GPS was used to locate each sample point. Accuracy of +/- 5m is considered reasonable</li> <li>• The grid system for the project WGS 84 / UTM zone 35S</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>- Data spacing for reporting of Exploration Results.</li> <li>- Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>- Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Gradient survey completed on 100 m line spacing, 25 m station spacing and 2sec pulse duration.</li> <li>• Pole dipole 25 m station spacing, 25 m dipole length and 4 sec pulse duration.</li> <li>• The spacing is deemed appropriate for testing the mineralisation along strike.</li> </ul>





<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"><li>- Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li><li>- If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li></ul>	Surveys were completed perpendicular over geological strike.
<b>Sample security</b>	<ul style="list-style-type: none"><li>- The measures taken to ensure sample security.</li></ul>	<ul style="list-style-type: none"><li>• n/a</li></ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"><li>- The results of any audits or reviews of sampling techniques and data.</li></ul>	<ul style="list-style-type: none"><li>• The data were examined by the Competent person, Mr Steve Groves of Sydney in Australia and considered appropriate.</li></ul>



## JORC CODE, 2012 Edition

### Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

CRITERIA	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The results reported in this announcement are located in PL111/94 which is a granted Exploration Licence held by African Metals Limited, a 100% owned subsidiary of Botswana Metals Limited.</li> <li>PL111/94 is subject to a Joint Venture agreement with BCL Limited (currently in liquidation).</li> <li>Due to the liquidation, PL111/94 is in suspension with approximately 18 months of term remaining and is in good standing. Si6 are allowed to continue exploration on PL110/94 during the suspension period.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Interpretations and conclusions in this announcement refer in part to results generated by historic exploration work conducted by Roan Selection Trust, Falconbridge, Cardia Mining and Botswana Metals.</li> <li>Botswana Metals considers all previous exploration work to have been undertaken to an appropriate professional standard.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Dibete Prospect is hosted within the Magogaphate Shear Zone - a major geological structural feature, generally considered to mark the boundary between the Archaean aged (&gt;2.5 billion year old) Zimbabwean Craton and the Limpopo Belt or Limpopo Mobile Zone (LMZ). The nickel-copper deposits of Selebi Phikwe lie within the northern part of the Central Zone of the Limpopo Mobile Belt, whilst the nickel copper deposits of Phoenix, Selkirk and Tekwane lie in the Zimbabwean Craton. The Central Zone of the LMZ comprises variably deformed banded gneisses and granitic gneisses, infolded amphibolites and ultramafic intrusions that have the potential to host Ni-Cu sulphide mineralization. Cu-Ag mineralization at Dibete and Airstrip copper is spatially associated with dolerite intrusion.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>

	Competent Person should clearly explain why this is the case.	
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Plan view and/or cross section maps of the reported results are included in this announcement.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>The results in this announcement are interpreted to lie within the plane of a mineralized trend that has been partially tested by previous drilling.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>There is no other material exploration considered material to the reported mineral estimate</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Should further geophysical surveying prove positive, follow up drilling would be required to further test the mineralisation.</li> </ul>



## Supplementary Information Appendix

### Maibele Base Metals Project, Botswana, 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

### Monument Gold Project, Western Australia, Resource Information

An initial JORC-compliant (2012) Inferred Resource was calculated at Korong by Mining Plus in 2018 (see Table 2) using a 0.5g/t cut-off grade for Korong and 2g/t cut-off grade for Korong Underground. See the ASX announcement on 25 August 2020 “Si6 Secures Exclusive Option to Acquire Western Australian Gold Project” for further information.

Korong Resource			
Deposit	Tonnes	Grade (g/t)	Au Ounces
Korong	650,000	1.6	33,000
Korong UG	205,000	2.5	17,000
Total Resource	855,000	1.8	50,000

Table 2: Inferred Resource calculated by Mining Plus in 2018 to JORC 2012 compliance

### About Si6 Metals Ltd

Si6 Metals is an exploration company operating in Southern Africa specifically targeting projects containing “battery or new world” metals to capitalise on the rising interest in the sector due to recent global technology advances and increasing demand for these commodities.

Si6 Metals recently entered into an option agreement with DiscovEx Resources Ltd (ASX:DCX) to acquire the Monument Gold Project in Western Australia. The Project lies in the world class Laverton Tectonic Zone, which to date has produced more than 30 million ounces of gold and yielded some of Australia’s best-known gold mines.

### Competent Persons Statement

The information in this report that relates to Exploration Targets and Exploration Results is based on 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.



**ASX CODE: Si6**

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