

Drilling hits 13.0% Copper and 281g/t Silver at Dibete, Botswana

Key Highlights

- **High-grade assays received from Si6's drilling program at the Dibete Project:**
 - **6.15m @ 7.20% Cu + 182g/t Ag** from 24.85m (DBRD149)
incl. **0.5m @ 10.8% Cu + 281g/t Ag**
and **1.0m @ 13.0% Cu + 168g/t Ag**
 - **1m @ 3.94% Cu + 161g/t Ag** from 33.50m (DBRD149)
- **Results exceed recent intersections** (ASX release 14 November 2023) reported on the same drill section:
 - **2m @ 4.20% Cu + 269g/t Ag** from 52m (DBRD142)
incl. **0.5m @ 10.8% Cu + 281g/t Ag**
- **First trench assays also received** demonstrate potentially economic oxide grades at surface:
 - **8m @ 0.62% Cu + 28.3g/t Ag** at surface (DBT001)
- **Dibete Cu-Ag drilling is part of a ~10,000m staged program** across the Company's 3 advanced Projects including Airstrip Cu-Ag and Maibele North Ni-Cu-PGE

Si6 Metals Limited ("Si6" or "the Company", ASX: Si6) is pleased to announce further assay results from drilling at the high-grade Dibete Cu-Ag Project in Botswana. The drilling is part of a ~10,000m staged campaign covering the Company's three flagship projects of Dibete, Airstrip and Maibele North in Botswana.

Managing Director, Jim Malone commented,

"These results further demonstrate the high-grade and shallow nature of the Dibete Cu-Ag deposit, with an exceptional intercept of 6.15m @ 7.20% copper and 182g/t silver from 25m. It is very encouraging that these latest results exceed the very high grades recently reported from the current drill campaign. Si6 looks forward to reporting the next round of results from additional drilling at Airstrip and Maibele North later this quarter."



Dibete Drilling Program

Stage 1 drilling at Dibete comprised 9 RC and diamond core holes for 1,590m testing conductors identified in AMT and IP surveys in the fresh sulphide zone below the limits of historical drilling, over a 4.5km long x 1.0km wide area (refer ASX announcements 9 November 2021, 31 August 2023, 20 September 2023 and 14 November 2023).

High-grade Cu mineralisation intersected in DBRD149 occurs as the Cu-rich mineral chalcocite within strong weathered biotite schist (Figure 1).



Figure 1: Chalcocite disseminations and veinlets (metallic grey) in weathered biotite schist DBRD149 between 39.55 – 41.47m down hole.

Stage 1 results have confirmed the high-grade Cu-Ag supergene discovery zone and primary copper sulphides chalcopyrite and chalcocite at the margins of the AMT anomaly (Figure 2).

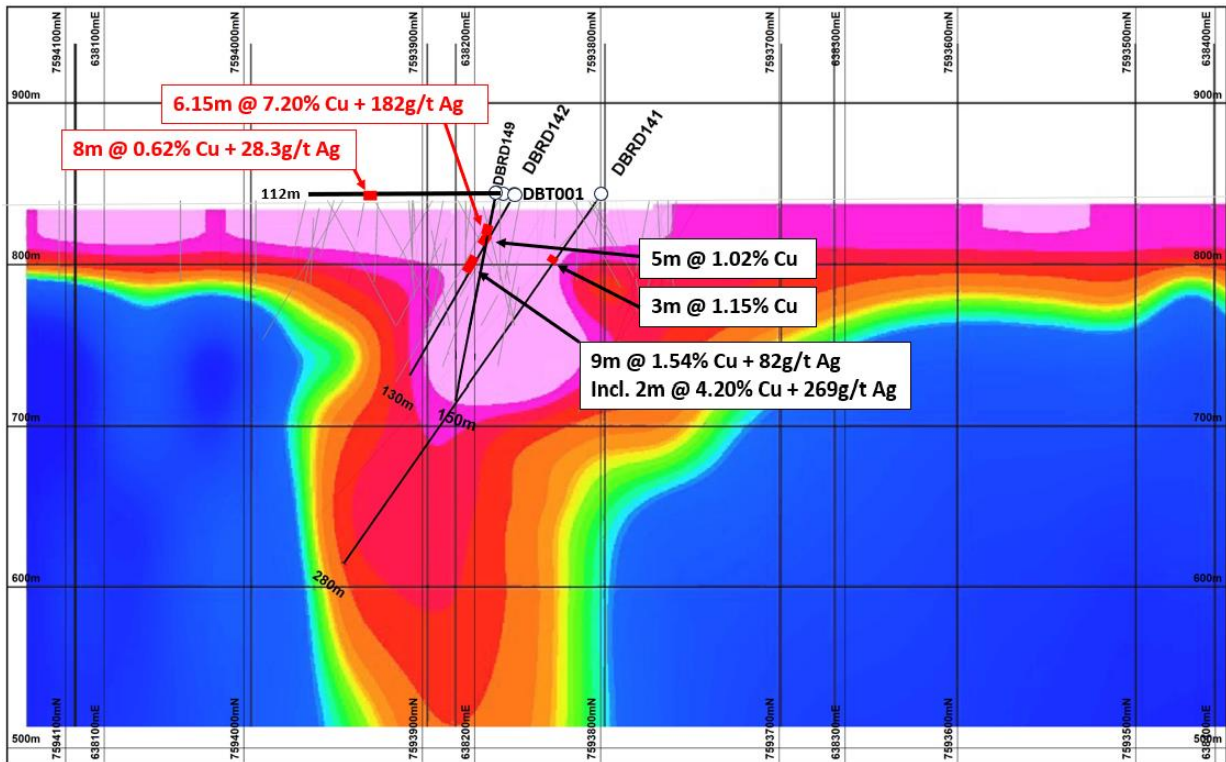


Figure 2: Cross section of Dibete intersections. Note DRBD149 was drilled towards the northeast (into the page). Latest intersections highlighted in red from DBRD149 & DBT001. Hot colours reflect AMT conductive anomaly.

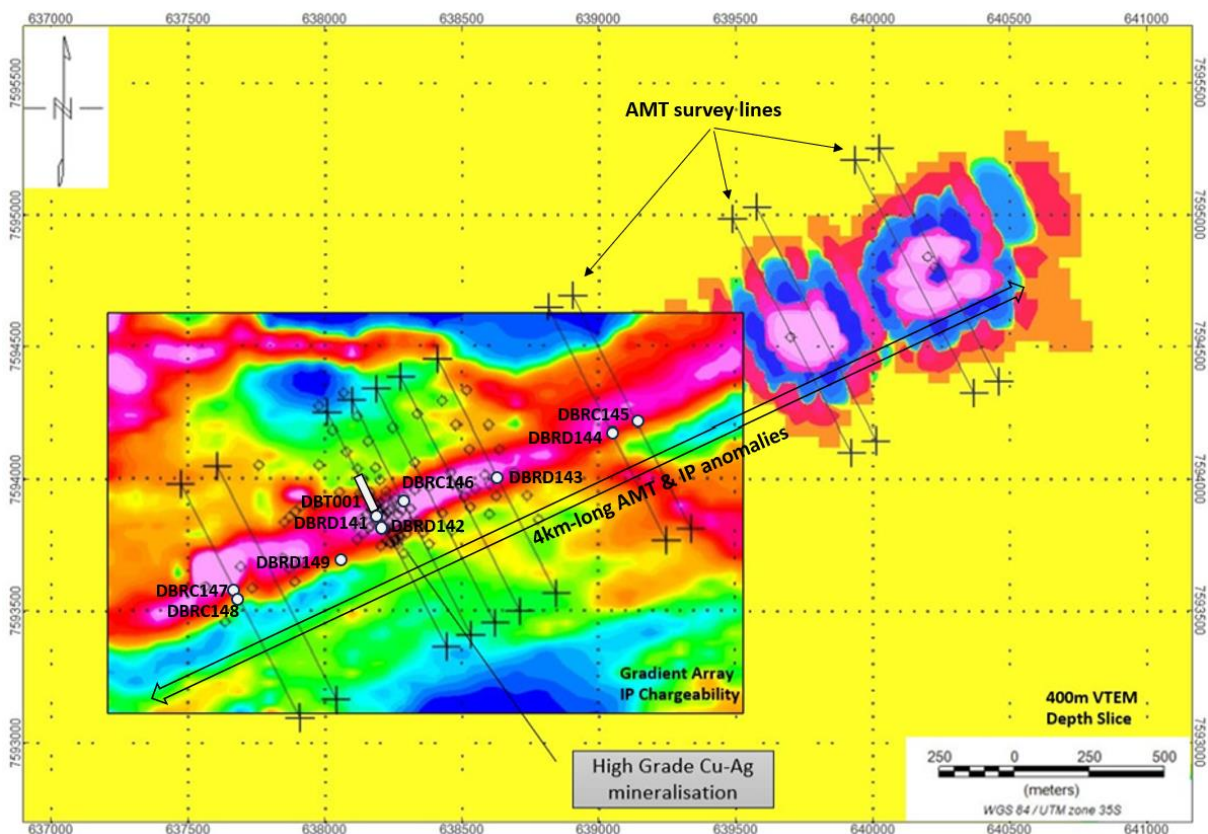


Figure 3: Collar plan showing location of completed Dibete drill holes targeting the IP chargeability and AMT geophysical anomalies and trench DBT001.



Previous drilling highlights at Dibete have been from the “supergene zone” – a zone of thickening and enrichment of Cu and Ag grades:

- 38m @ 1.72% Cu, 119.5g/t Ag from 16m (DBRC014) ¹
 - 17m @ 2.7% Cu, 40.5g/t Ag from 16m (DBRC081) ¹
 - **11m @ 4.5% Cu, 229.9g/t Ag from 33m (DBRC028) ¹**
 - **10m @ 3.9% Cu, 110g/t Ag from 43m (DBRC108) ¹**
 - 25m @ 2.17% Cu, 77g/t Ag, from 27m (DBRC124) ²
 - 13m @ 2.11% Cu, 37.8g/t Ag from 37m (DBRC129) ³
 - 13m @ 1.9% Cu, 61.9g/t Ag from 41m (DBRC130) ³
 - **6m @ 4.46% Cu, 162 g/t Ag from 38m (DBRC131) ³**
 - 10m @ 2.04% Cu, 15.6g/t Ag from 7m (DBRC133) ³
 - 9m @ 1.54% Cu, 82g/t Ag from 45m (DBRD142) ⁴
- Incl. 2m @ 4.20% Cu, 269g/t Ag from 52m**

Regional Exploration Program

Si6 controls >2,000km² in the highly prospective Limpopo Belt in eastern Botswana, centrally located 20km from the world-class Selebi-Phikwe Ni-Cu-Co-PGE mine (Premium Nickel Resources Ltd) and 80km from the Tati Ni-Cu mine (Norilsk Nickel Ltd).

Numerous coincident geochemical and VTEM anomalies across the project tenure are interpreted to reflect sulphide mineralisation at depth similar in style to Dibete, Airstrip and Maibele (Figure 4).

¹ ASX Release 16 April 2012 “Dibete drilling confirms additional High-Grade Copper-Silver of up to 15.5% Copper and 1220 g/t Silver (or over 30 ounces/t Ag) from 30m”.

² ASX release 16 November 2017 “Thick High-Grade Copper and Silver – Initial Holes at Dibete”.

³ ASX Release 18 December 2017 “Drill Results from Dibete Prospect in Botswana”.

⁴ ASX Release 14 November 2023 “Dibete Drilling Hits High Grade Copper and Silver”



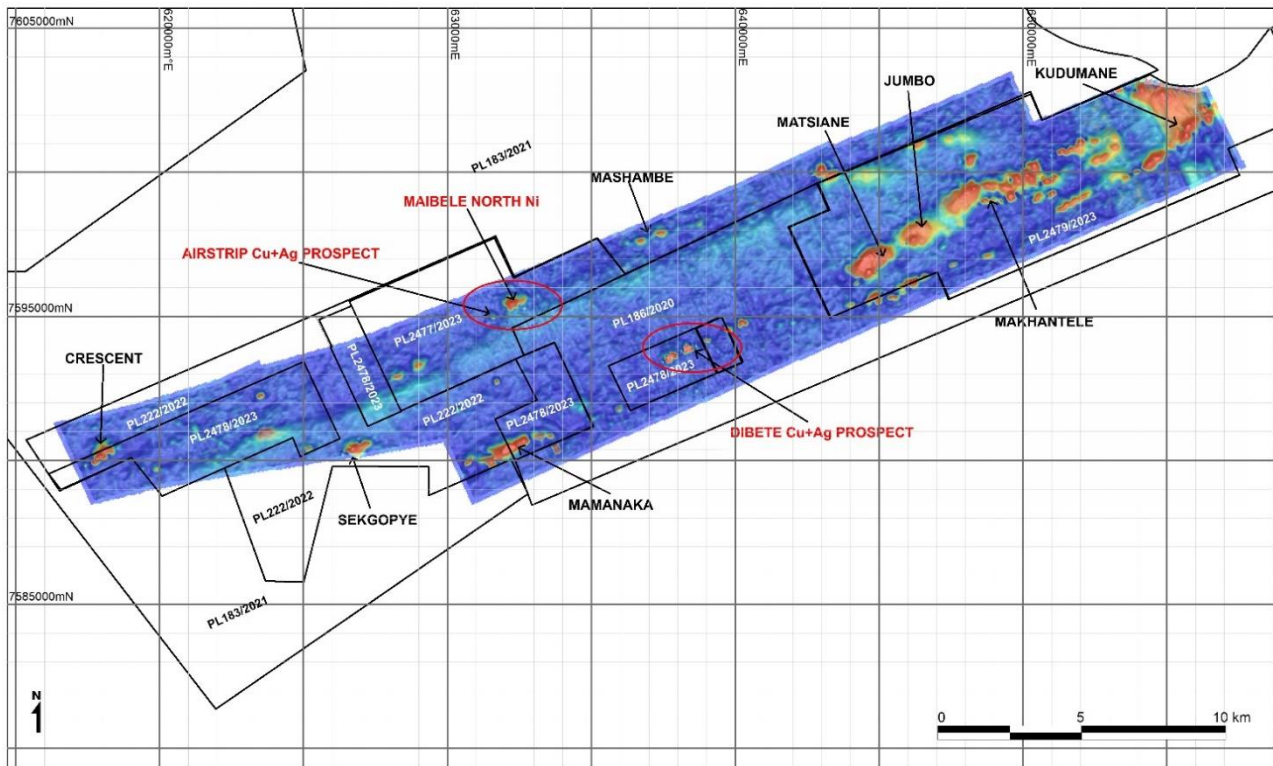


Figure 4: Airstrip, Dibete and Maibele North Projects overlaid on regional VTEM. Numerous early-stage prospects and multiple VTEM anomalies are future exploration targets.

Next Steps

The Company is continuing a comprehensive exploration campaign to advance its flagship projects at Dibete, Airstrip and Maibele North. Further updates will be provided to the market on the following steps of this campaign:

- Ongoing drilling at Airstrip Cu-Ag and Maibele North Ni-Cu-PGE to test geophysical targets beneath and along strike of known mineralisation
- Receipt of assays from drilling at each target and sampling of oxide mineralisation in trenches at Airstrip and Dibete
- Updated Mineral Resource Estimate (MRE) for Maibele North Ni-Cu-PGE to include US\$5 million spent on historical drilling that has not been incorporated into the current MRE
- Undertake a review of open pit mining at Maibele North and on-site concentrate production
- Planning for 2024 regional exploration program to advance the Company's pipeline of exploration targets across the Botswana Project



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About Si6

Si6 is a diversified critical metals and minerals explorer with a portfolio of flagship projects in Botswana, Brazil and Western Australia.

The Company's Botswana portfolio contains three flagship projects where high-grade Cu-Ag (Airstrip and Dibete) and a Maiden JORC Inferred Resource (Maibele North) have been discovered. Maibele North currently hosts a JORC (2012) inferred resource of 2.4Mt @ 0.72% Ni and 0.21% Cu + PGE's + Co + Au and is located within 50km of the Selebi mine recently acquired by TSX-listed Premium Nickel Resources Ltd (TSX-V:PNRL).

Si6 has also entered a joint venture (subject to shareholder approval) to acquire 50% of a portfolio of critical metals exploration assets from Foxfire Metals Pty Ltd, predominantly focused on rare earth elements and lithium in Brazil including projects amongst known discoveries in the Lithium Valley (North Minas Gerais) and Poços de Caldas (South Minas Gerais).

Botswana

- **Dibete Project** – high grade copper-silver
- **Airstrip Project** – high grade copper-silver
- **Maibele North Project** – Ni-Cu-PGE JORC Inferred Resource 2.38Mt @ 0.72% Ni + 0.21% Cu + PGE + Au

Brazil (50% Joint Venture)

- **Lithium Valley Projects**, North Minas Gerais (Lithium, Rare Earth Elements)
- **Caldera Project**, South Minas Gerais (Rare Earth Elements)
- **Apuí Project**, Amazonas (Rare Earth Elements, Gold)
- **Pedra Branca Project**, Ceara (Lithium, Gold)



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 Cain Fogarty, who is a Competent Person and a Member of the Australian Institute of Geoscientists. Mr Fogarty is a Non-Executive Director of Si6 Metals Limited. Mr Fogarty 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 Fogarty 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.



Appendix 1 - JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

CRITERIA	JORC Code Explanation	Commentary
Sampling techniques	<p>- Nature and quality of sampling (eg 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.</p> <p>- Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p> <p>- Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>- 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.</p>	<ul style="list-style-type: none"> RC and DD drilling and trenching. For RC drilling, samples were taken from each 1m interval off the cyclone, washed and logged. Bulk 1m samples weighed approximately 15-20kg, and "A" and "B" splits were taken for assay weighing approximately 2kg. <p>DD drilling at HQ and NQ diameter.</p> <p>Trenches were treated as horizontal drillholes, measured with tape and logged for geology and mineralisation. Samples of approximately 1-2kg were collected along the tape line in 1m intervals and bagged for assay.</p> <p>Assays were completed at ALS Johannesburg, a renowned laboratory, where 1-2kg samples were weighed, crushed to <2mm, pulverised to <75microns, and assayed using ME-ICP61a (High-grade four-acid digest ICP-AES) up to 1% Cu, with high grades > 1% Cu and >200g/t Ag re-assayed with ME-OG62 and Ag-OG62 respectively.</p> <p>Each 1m sample was analyzed in the SI6 Field office using a portable XRF analyzer (INNOV-X Delta Premium and VANTA). Industry standards and blanks are used to monitor the calibration of the instrument.</p> <p>The XRF analysis is a preliminary result only and will be confirmed by proper wet chemistry analysis. Concentrations are approximate only.</p>
Drilling techniques	<p>- 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).</p>	<ul style="list-style-type: none"> Reverse circulation drilling with 3.5-inch diameter face-sampling hammer. <p>Diamond core NQ and HQ diameter. Core is oriented with the mechanical spear method.</p>



		<p>Trenches are treated as horizontal drill holes and were excavated using a Back hoe.</p>
<p>Drill sample recovery</p>	<p>- Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>- Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>- 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.</p>	<ul style="list-style-type: none"> • RC sample recoveries were tested for consistency by weighing the bulk samples with scales at the rig, recoveries were generally excellent. • RC samples were split using a riffle splitter at the rig to ensure sample representivity. • Core recovery is recorded by drillers and field assistants and logged digitally. • Trench samples were taken 'blind' along the measuring tape. • There is no known relationship between sample recovery and grade.
<p>Logging</p>	<p>- 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.</p> <p>- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p> <p>- The total length and percentage of the relevant intersections logged.</p>	<ul style="list-style-type: none"> • Samples have been geologically logged to support their use in future resource estimates and mining studies. • Logging is qualitative in nature for geological parameters, and quantitative for mineral percentages. • Drill holes and trenches were logged in full.



<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> - If core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. - For all sample types, the nature, quality and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - 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. - Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> • Core samples are sawn with half core taken for assay. • RC samples were riffle split to obtain splits for assay. • Trench samples were collected using a geological pick along the measuring tape. • The sampling techniques are considered appropriate and in accordance with industry best-practice to ensure sample representivity. • RC “B” samples were collected from the riffle splitter for use as field duplicates and future assay checks. Duplicates have performed within 20% acceptance limits. • Sample sizes of 1-2kg are considered appropriate for the sampled material.
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> - The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. - 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. - 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. 	<ul style="list-style-type: none"> • ICP61a and OG62 are considered total digest methods. CRM’s, blanks and field duplicates were inserted at 1:20 ratios, with results returned within acceptance limits. One outlier blank result at 40ppm Cu, instead of below the detection limit of 10ppm Cu, was acceptable given this is well below the level of economic interest. • An Olympus Innov-X Delta Premium portable XRF analyzer was used with a Rhenium anode in soil and mines mode at a tube voltage of 40kV and a tube power of 200µA. The resolution is around 156eV @ 40000cps. The detector area is 30mm2 SDD2. A power source of Lithium ion batteries is used. The element range is from P (Z15 to U (Z92). A cycle time of 180 seconds Soil Mode was used and beam times were 60 seconds. Selected high samples were analysed in Mineplus Mode. A propylene3 window was used. No calibration factors were applied. <p>The XRF analysis is a preliminary result only and will be confirmed by proper wet</p>



		<p>chemistry analysis. Concentrations are approximate only.</p>
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> - The verification of significant intersections by either independent or alternative company personnel. - The use of twinned holes. - Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. - Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> • Assays have been reviewed by field staff and the Competent Person. • No twinned holes were drilled as not required at this stage of exploration. • The primary data were audited and verified and then stored in a SQL relational data base. • No data have been adjusted.
<p>Location of data points</p>	<ul style="list-style-type: none"> - 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. - Specification of the grid system used. - Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> • A handheld GPS was used to locate each sample point. Accuracy of +/- 5m is considered reasonable. • The grid system for the project WGS 84 / UTM zone 35S. • Company procedure is to obtain DGPS collar surveys for accurate topographic control following completion of each drilling campaign.
<p>Data spacing and distribution</p>	<ul style="list-style-type: none"> - Data spacing for reporting of Exploration Results. - 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. - Whether sample compositing has been applied. 	<ul style="list-style-type: none"> • RC and DD holes have targeted geophysical anomalies along 4km of strike length at Dibete, and have not been drilled on a set grid pattern. On some drill sections, 2 holes have been drilled to establish the dip of mineralisation. • The spacing is deemed appropriate for testing the mineralisation along strike, and drillholes may be used in future resource estimation. • Samples have not been composited.
<p>Orientation of data in relation to geological structure</p>	<ul style="list-style-type: none"> - Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. - 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. 	<ul style="list-style-type: none"> • Drillholes and trenches were oriented perpendicular over geological strike to reduce any potential sampling bias due to the orientation of mineralised structures, and so that intersection widths are close to true widths.



Sample security	- The measures taken to ensure sample security.	<ul style="list-style-type: none"> • Samples are stored in securely closed sampled bags in a fenced storage area at the field office location.
Audits or reviews	- The results of any audits or reviews of sampling techniques and data.	<ul style="list-style-type: none"> • The data collection procedures were examined by the Competent person and deemed appropriate.

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

CRITERIA	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<p>- 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.</p> <p>- 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.</p>	<ul style="list-style-type: none"> • The results reported in this announcement are located in PL2478/2023, and PL2479/2023 which are granted Exploration Licences held by African Metals Limited, a 100% owned subsidiary of Si6 Limited. • The licenses are subject to a Joint Venture agreement (AML 63.1%) with BCL Limited (36.9%, currently in liquidation). • The licenses were granted for an initial 3-year period commencing in 2023.
Exploration done by other parties	- Acknowledgment and appraisal of exploration by other parties.	<ul style="list-style-type: none"> • 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. • Si6 considers all previous exploration work to have been undertaken to an appropriate professional standard.



<p>Geology</p>	<p>- Deposit type, geological setting and style of mineralisation.</p>	<ul style="list-style-type: none"> The Dibete-Airstrip-Maibele Project is hosted within the Magogaphate Shear Zone - a major geological structural feature, generally considered to mark the boundary between the Archaean aged (>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 located within the region lie in the Zimbabwean Craton. The Central Zone of the LMZ comprises variably deformed banded gneisses and granitic gneisses, folded amphibolites and ultramafic intrusions that have the potential to host Ni-Cu sulphide mineralization as at Maibele, and epigenetic structurally-hosted Cu-Ag mineralization as at Dibete and Airstrip.
<p>Drill hole Information</p>	<p>- 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:</p> <ul style="list-style-type: none"> eastings and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. <p>- 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 Competent Person should clearly explain why this is the case.</p>	<ul style="list-style-type: none"> See Table 1 in the report.



<p>Data aggregation methods</p>	<p>- 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.</p> <p>- 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.</p> <p>- The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<ul style="list-style-type: none"> Length-weighted average grades are reported here. Significant intervals are reported above a 0.5% Cu cut-off, with maximum 2m internal dilution.
<p>Relationship between mineralisation widths and intercept lengths</p>	<p>- These relationships are particularly important in the reporting of Exploration Results.</p> <p>- If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>- 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').</p>	<ul style="list-style-type: none"> Holes and trenches have been drilled as close as possible to perpendicular to geological strike, such that the true width of mineralised intervals is believed at this stage to be close to drilled width.
<p>Diagrams</p>	<p>- 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.</p>	<ul style="list-style-type: none"> See body of this report.
<p>Balanced reporting</p>	<p>- 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.</p>	<ul style="list-style-type: none"> Available results have been reported. In places where visual estimates of mineralisation are reported, they may be inaccurate or incomplete, particularly if fine-grained mineralisation is present, and assay results are required to draw conclusions as to the tenor of mineralisation.
<p>Other substantive exploration data</p>	<p>- 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.</p>	<ul style="list-style-type: none"> Relevant interpretation of geophysical results is included in the body of the report, and previous ASX releases referred to in the body of the report.



<p>Further work</p>	<ul style="list-style-type: none"> - The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> • The exploration results presented here are for initial holes as part of a substantial program, further assay results are awaited. The initial drilling and trenching program recently commenced is part of a significant exploration program focussed on the Dibete, Airstrip and Maibele targets to be completed over approximately 4 months. • See the body of this report.
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