

30 October 2017

## STRONG EARLY EXPLORATION PROGRESS AT SALOBO WEST

*Key copper-gold prospects identified and 2D magnetic modelling highlights similarities to neighbouring world-class Salobo Copper-Gold Mine*

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### Key Points

- **Field activities advancing ahead of schedule at Salobo West on key copper-gold prospect areas with first results from mapping, soil sampling and rock chip sampling expected by mid-November.**
- **Initial work focused on the SW1-B Prospect, a distinct 4.5km long Cu-Au-Fe(-Co-Ag) geochemical signature that is locally over 600m wide and coincident with a strong east-west magnetic anomaly.**
- **The SW1-B Prospect has a favourable structural orientation and is truncated by the north-west trending Banded Iron Formation (BIF) unit of the SW1-A Prospect, presenting an outstanding structural target.**
- **Exploration activities now focussing on the SW1-A Prospect, which is a 3.5km long Cu-Au-Fe geochemical signature coincident with a strong magnetic anomaly located in the same stratigraphic sequence as Vale's giant Salobo Copper-Gold Mine.**
- **2D magnetic modelling by independent geophysical consulting group, Southern Geoscience, demonstrates that the SW1-A Prospect has a magnetic susceptibility of 0.65 SI, which corresponds well with the Salobo Mine (0.66 SI) as well as having similar geometry.**

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Centaurus Metals (ASX Code: **CTM**) is pleased to advise that field exploration activities at its 100%-owned Salobo West IOCG Project are advancing ahead of schedule with the first assay results from initial soil and rock chip sampling work targeting the copper-gold potential expected by mid-November.

The exploration team's initial focus was on the **SW1-B Prospect**, a distinct 4.5km long Cu-Au-Fe(-Co-Ag) geochemical signature that is locally over 600m wide and coincident with a strong east-west magnetic anomaly.

Exploration work is now focusing on mapping and sampling over the **SW1-A Prospect** area, where a 3.5km long Cu-Au-Fe geochemical signature has been identified and where 2D magnetic modelling by Southern Geoscience has shown a magnetic susceptibility very similar to that of Vale's massive Salobo Copper-Gold Mine, which is located only 10km along strike.

Centaurus' Managing Director, Mr Darren Gordon, said the Company was very encouraged by the initial phase of field exploration in the world's premier large-tonnage IOCG province.

"Salobo West continues to surprise us on the upside, with initial field work already completed over the SW1-B prospect and now in progress over a second key prospect area, SW1-A," he said.

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“These target areas define potentially world-class exploration opportunities for the Company, and we’re really happy with how the field work is advancing,” Mr Gordon said.

“We have brought in a specialist geologist who has over 15 years of copper-gold exploration experience in the Carajás with Vale. He is telling us that the Salobo West targets look very similar to a number of the IOCG deposits he has mapped during his time in the Carajás Mineral Province”

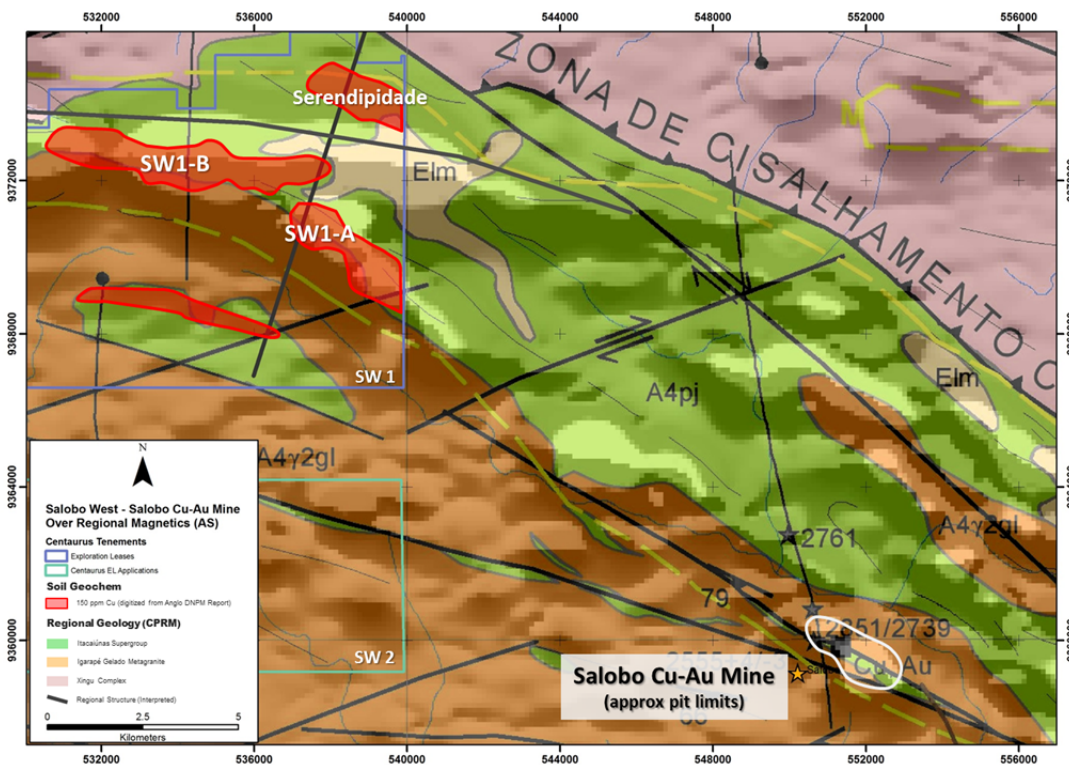
**SW1-B Prospect**

Data extracted from the Anglo American Mines Department (DNPM) report<sup>1</sup> shows the SW1-B Prospect is a distinct 4.5km long Cu-Au-Fe(-Co-Ag) geochemical signature that is locally over 600m wide and coincident with a strong east-west magnetic feature (Figure 1 below).

The Prospect has a favourable structural orientation and is truncated by the north-west trending Banded Iron Formation (BIF) unit of the SW1-A Prospect, which is interpreted to be part of the north-west extension of the Itacaiúnas Supergroup that hosts the Salobo Mine. The intersection of these two regionally significant structures is a priority area for exploration.

The SW1-B geochemical signature continues beyond the western end of the coincident magnetic signature. The low magnetic response at the western end of the SW1-B Prospect may be caused by the demagnetisation of the BIF host, either due to the formation of hematite or sulphides and this therefore presents another strong target within the SW1-B Prospect.

**Figure 1 – Salobo West Project, soil geochemistry digitized from Anglo American Mines Department Report showing +150ppm Cu anomaly (red) over CPRM Regional geology with Regional Magnetics (AS) in the background.**



<sup>1</sup> Refer to [ASX announcement on 5 October 2017](#) for more detail on Anglo American Mines Department Report information.

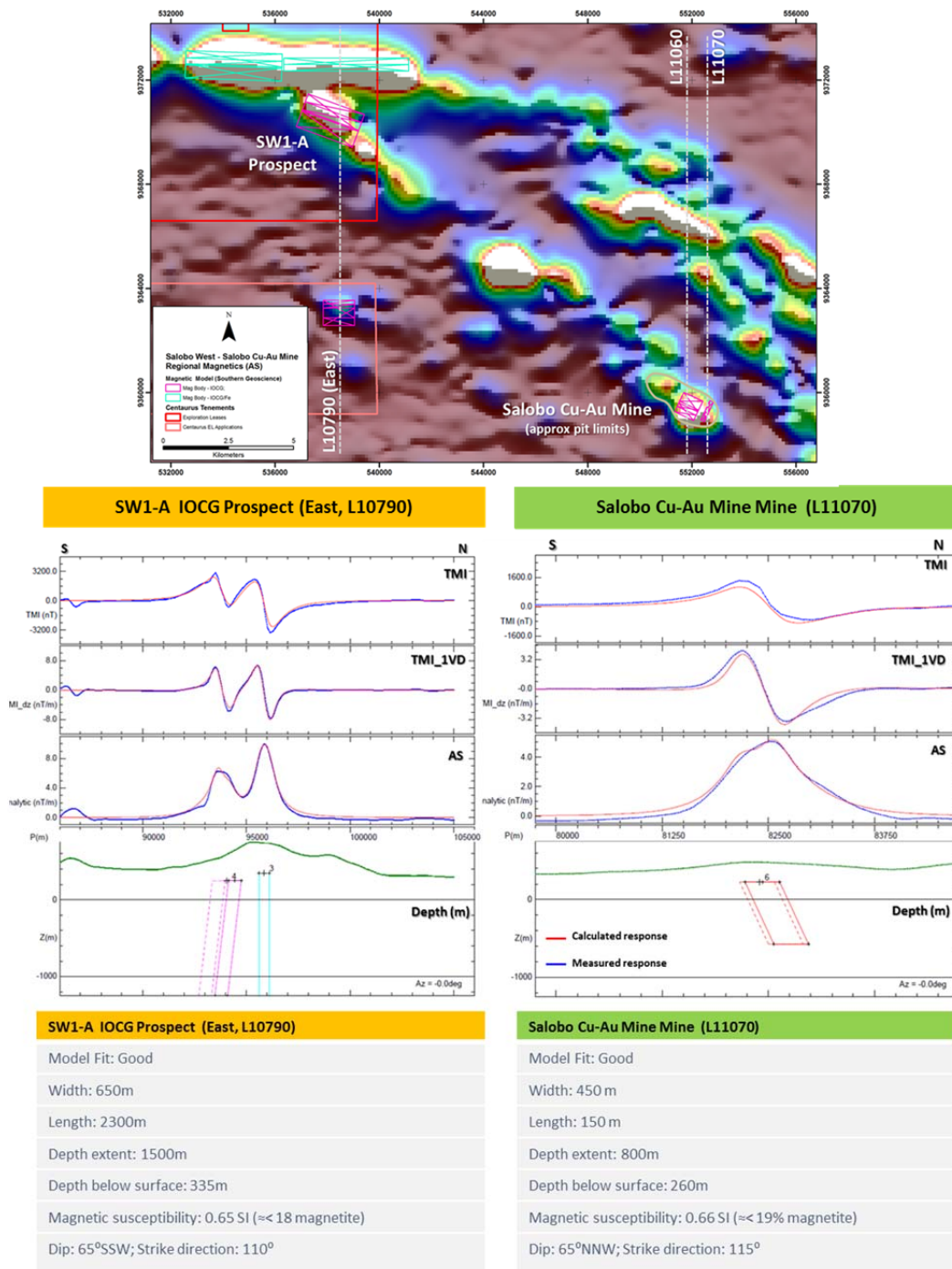


**SW1-A Prospect**

The SW1-A Prospect has also been identified as an excellent high priority IOCG prospect within the Salobo West Project area. A distinct magnetic anomaly is roughly 3.5km long (Figure 1) and coincident with a Cu-Au-Fe soil geochemical signature identified from historical Anglo American DNPM reports.

Work carried out on the regional aeromagnetic data by respected independent geophysical consulting group, Southern Geoscience, demonstrates that Centaurus' SW1-A Prospect has a magnetic susceptibility of 0.65 SI that compares very favourably with the magnetic susceptibility of Vale's giant Salobo Cu-Au Mine (0.66 SI), in addition to having a similar geometry (Figure 2).

**Figure 2 – Salobo West 2D Magnetic Modelling of Aeromagnetic Data – SW1-A Prospect compared to Salobo Cu-Au Mine, from Southern Geoscience report, note that the Eastern profile crosses the SW1-A Prospect (pink) and the Canga Fe Prospect (cyan).**



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The magnetic susceptibility levels indicate the magnetite content of the rock. Given that the SW1-A Prospect is hosted in the same stratigraphic sequence as the Salobo mine, it is reasonable to consider that the SW1-A Prospect features the same host rocks and potentially similar mineralisation. This concept will be tested during exploration.

## **Serendipidade Prospect**

The Serendipidade Prospect was identified from the archived Anglo American DNPM reports and has a 2.5km long and up to 700m wide Cu-Au-Ag-Mo(-U-Fe-Mn-Co-As) geochemical signature which is a similar geochemical signature of the nearby massive Salobo Copper-Gold Mine.

The Serendipidade Prospect displays no magnetic signature, however, which may indicate that it is a hematite rich zone or that the target is not an IOCG target but rather another deposit type (VMS/Sedex). Geological mapping and sampling is underway to better define the nature of the deposit type.

The Serendipidade copper-in-soils anomaly (+250ppm Cu) has the highest copper (861 ppm) and gold (145ppb) soil samples collected by Anglo from the SW1 project area.

## **Canga Iron Ore Prospect**

Whilst the focus of the current field exploration program at the SW1-B Prospect has been on the copper-gold mineralisation, the exploration team has also taken the opportunity to map the source of the extensive magnetic anomaly that is found in the same area to help determine the extent of the BIF associated with the high grade Canga Iron Ore Prospect.

The Canga Iron Ore Prospect is represented by a regional magnetic signature that runs east-west for a continuous strike length of some 7km and discontinuously for up to 10km. Within the anomaly, a high-grade iron canga outcrop has been mapped over a strike length of >900m and width of up to 150m with surface rock chip assays grading 62-69% Fe with low impurities.

**-ENDS-**

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## **Competent Person Statement**

*The information in this report that relates to Exploration Results is based on information compiled by Roger Fitzhardinge who is a Member of the Australasian Institute of Mining and Metallurgy. Roger Fitzhardinge is a permanent employee of Centaurus Metals Limited. Roger Fitzhardinge 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'. Roger Fitzhardinge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*



**APPENDIX B – TECHNICAL DETAILS OF THE SALOBO WEST IOCG PROJECT, JORC CODE, 2012 EDITION – TABLE 1**

**SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	Commentary
<b><i>Sampling techniques</i></b>	<ul style="list-style-type: none"> <li>There is no historical sampling for the Salobo West Project mentioned in this report.</li> <li>9 surface rock chip samples were collected from outcrops for chemical analysis. Rock chip samples were taken and have been submitted to SGS Geosol laboratory in Parauapebas, Brazil.</li> </ul>
<b><i>Drilling techniques</i></b>	<ul style="list-style-type: none"> <li>There is no historical drilling on the Salobo West Project mentioned in this report.</li> </ul>
<b><i>Drill sample recovery</i></b>	<ul style="list-style-type: none"> <li>No drill results are included in the release.</li> </ul>
<b><i>Logging</i></b>	<ul style="list-style-type: none"> <li>All outcrop and sample points were registered and logged in the Centaurus geological mapping points database.</li> </ul>
<b><i>Sub-sampling techniques and sample preparation</i></b>	<ul style="list-style-type: none"> <li>All geological samples were received and prepared by SGS Geosol Laboratories in Parauapebas, Brazil as 0.5-1.5kg samples. They were dried at 105°C until the sample was completely dry (6-12hrs), crushed to 90% passing 3mm and reduced to 200-300g. The samples were pulverised to 95% passing 150µm and split further to 50g aliquots for chemical analysis.</li> </ul>
<b><i>Quality of assay data and laboratory tests</i></b>	<ul style="list-style-type: none"> <li>Chemical analysis is completed at SGS in Belo Horizonte. Metal Oxides are determined using XRF analysis (XRF79C). Fusion disks are made with pulped sample and the addition of a borate based flux. Analysis at ALS is for a 10 element suite. FeO is determined using titration and LOI using loss determination by thermo-gravimetric analysis at 1000°C.</li> <li>The SGS lab inserts its own standards at set frequencies and monitors the precision of the XRF analysis. These results reported well within the specified 2 standard deviations of the mean grades for the main elements. Additionally the labs perform repeat analyses of sample pulps at a rate of 1:20 (5% of all samples). These compare very closely with the original analysis for all elements.</li> <li>Laboratory procedures are in line with industry standards and are appropriate for iron ore.</li> <li>To date no QAQC samples were inserted by Centaurus for this project.</li> </ul>
<b><i>Verification of sampling and assaying</i></b>	<ul style="list-style-type: none"> <li>Samples were collected by Centaurus field geologists. All assay results are verified by alternative Company personnel and the Competent Person before release.</li> </ul>
<b><i>Location of data points</i></b>	<ul style="list-style-type: none"> <li>The survey grid system used is SAD-69 22S. This is in line with Brazilian Mines Department requirements.</li> </ul>
<b><i>Data spacing and distribution</i></b>	<ul style="list-style-type: none"> <li>Not Applicable.</li> </ul>
<b><i>Orientation of data in relation to geological structure</i></b>	<ul style="list-style-type: none"> <li>The extent and orientation of the canga mineralisation was based on field mapping and regional magnetic anomalies.</li> </ul>
<b><i>Sample security</i></b>	<ul style="list-style-type: none"> <li>All samples are placed in numbered plastic sample bags and then a sample ticket is placed within the bag as a check. Sample request forms are sent with the samples and via email to the labs. Samples are checked at the lab and a work order is generated by the lab which is checked against the sample request.</li> </ul>
<b><i>Audits or reviews</i></b>	<ul style="list-style-type: none"> <li>No audit or review has been conducted on the projects to date.</li> </ul>

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## SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• The Salobo West project includes the exploration lease (850.430/2016) and an exploration lease application (850.429/2016) for a total of circa 120km<sup>2</sup>.</li> <li>• The tenements are part of an earn-in agreement with Terrativa Minerais SA. Centaurus has now met the minimum earn in obligations under the Agreement and perfected 100% title to the Salobo West tenements. Only the SW1 tenement has been transferred at this stage as the SW2 tenement is yet to be granted. Terrativa retain a production royalty of 2% over any minerals extracted from the tenements. The royalty may be converted to a 25% project interest should it be sold to a third party.</li> <li>• All mining projects in Brazil are subject to a CFEM royalty, a government royalty of 2% on copper and gold revenues and 2-4% on iron ore revenues.</li> <li>• Landowner royalty is 50% of the CFEM royalty.</li> <li>• The project is covered by the Tapirape-aquiri National Forest. Exploration and mining is allowed in the forest with the correct licences. The Company has received the key environmental licences for non-ground disturbing exploration activities.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• Historically the Salobo West tenements have been held by Vale and although it is understood that exploration was carried out, no public exploration data has been found on the tenements to date.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• The Salobo West tenements are located in the Carajás Mineral Province, located in the south-eastern part of the Amazon craton in northern Brazil. The CMP represents an Archean block divided into two distinct tectonic domains. Salobo West is located in the northern Carajás domain within the Cinzento Shear Zone</li> <li>• The Salobo West tenements cover a portion of the Itacaiúnas Supergroup where it is in contact with Xingu basement rock.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• No drilling has been conducted on the Salobo West project.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• No cut-offs have been applied in reporting of the exploration results.</li> <li>• No aggregate intercepts have been applied in reporting of the exploration results.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• No drilling has been conducted on the Salobo West Project.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• Refer to Figures 1-2.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• All Exploration Results received by the Company to date are included in this report or can be referenced in previous ASX announcements.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• The Company is working with the CPRM geological and geophysical regional data sets.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• The Company has engaged Grant “Rocky” Osborne and Southern Geoscience Consultancy to carry out additional work on historical information found in Mines Department Reports.</li> <li>• The Company has started mobilisation of its field team to the Salobo West project to carry out survey line clearing, geological mapping and soils geochemical sampling.</li> </ul>