

1 September 2017

# CENTAURUS COMPLETES FIRST PHASE OF DRILLING AT SERRA MISTERIOSA, ACCELERATES MOBILISATION TO SALOBO WEST

Mobilisation of Pará field crew to Salobo West Copper-Gold Project to commence in September in parallel with review of results received to date from Serra Misteriosa

#### **Key Points**

- The first phase of the Serra Misteriosa maiden drill program has been completed with 9 holes drilled to date for a total of 2,450m.
- Drilling indicates the presence of a large, shear-hosted hydrothermal system where multiple zones
  of weak gold mineralisation have been intersected along a strike length of some 1.6km.
- While assays results from the first six holes are sub-economic grade (with best intersection to date of 6m at 0.7g/t Au including 2m at 1.4g/t Au in Hole SRM-DD-17-002), they are encouraging and the Company will now undertake a detailed structural geological review to help understand the structural controls on the mineralisation before undertaking further drilling.
- The Company has engaged the services of well-respected independent geological consultants Mr Grant "Rocky" Osborne and Dr Roberto Vizeu to carry out a detailed assessment of the geological, geochemical and structural data. Dr Vizeu has worked on many of the world-class projects in the Pará region, including the 5Moz Volta Grande Gold Project and Vale's giant Salobo Cu-Au Mine.
- With the first phase of diamond drilling completed, the Company is set to accelerate the mobilisation of the exploration team to the Salobo West Cu-Au Project in the coming weeks to start preparing for non-ground disturbing field activities.
- Centaurus recently secured the grant of a key environmental licence for the Salobo West tenement, which is located just 12km along strike from Vale's world-class Salobo Copper-Gold Mine. This will allow the Company to start non-ground disturbing exploration activities.

Centaurus Metals (ASX Code: **CTM**) is pleased to advise that it has completed the initial phase of diamond drilling at the Serra Misteriosa Gold Project in northern Brazil. While a number of assays are still awaited, the Company has decided to suspend drilling for the time being while it undertakes a detailed review of the results to date before moving on with the next round of exploration.

This decision has the dual benefit of allowing the Company to refine its exploration targeting approach before drilling re-commences while at the same time freeing up its exploration field team to mobilise to the highly prospective Salobo West Copper-Gold Project, where it recently secured the grant of a key environmental licence, ahead of schedule.

**BRAZIL** 



Results from the drilling to date continue to indicate the presence of a large, shear-hosted hydrothermal system at Serra Misteriosa with drilling intersecting multiple zones of weak gold mineralisation along a strike length of + 1.6km. The Company is encouraged by these initial results and will now undertake a detailed structural geology review to determine structural controls on the mineralisation ahead of the next phase of exploration.

While this review is being undertaken, the majority of the field team will mobilise to Salobo West, which is located in the Carajás Mineral Province, less than 150km to the south of Serra Misteriosa. The early mobilisation will allow the Company to maximise the field time available before the annual wet season, which starts towards the end of the year.

The suspension of diamond drilling at Serra Misteriosa follows the completion of nine holes for a total of 2,450m with drill results being received for the first six holes (see Figure 1). The majority of the drill holes were designed to test coincident geochemical and geophysical (IP/Resistivity) targets to depths of up to 300m below surface along a strike length of approximately 2.0km.

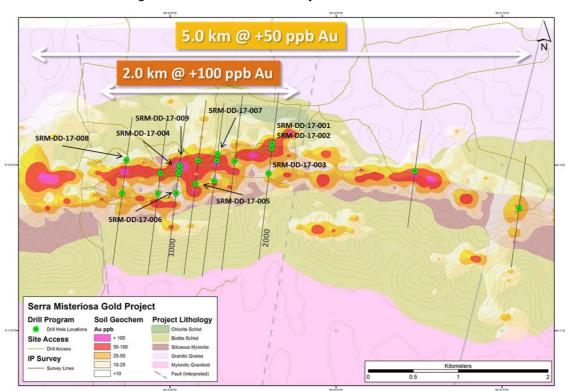


Figure 1 - Serra Misteriosa Gold Project - Drill-hole locations

Assay results from the first six holes include the following continuous intersections (see attached Table 1 for a full list of the drill results):

- o 6.0m at 0.66g/t Au in drill hole SRM-DD-17-002 from 84.0m, including 2.0m at 1.35 g/t Au from 84.0m;
- 28.5m at 0.14 g/t Au in drill hole SRM-DD-17-004 from surface; and
- o **18.0m at 0.13g/t Au** in drill hole SRM-DD-17-006 from 51.0m.

Assays results are awaited for the final three holes, all of which intersected similar hydrothermal zones to those observed in the mineralised zones in the holes reported above. Results from the last three holes are expected by mid-September.



The target model was successful in identifying weak gold mineralisation that is associated with significant amounts of sulphides (pyrite and arsenopyrite) found within an intense hydrothermal sheared and often brecciated structural zone. This zone is consistently found at the sub-vertical contact between the muscovite-sericite altered schist and a highly siliceous mylonite.

The shear zone correlates very well with the 1<sup>st</sup> order gold-in-soils anomaly (+100 ppb Au) as well as the IP anomalies (sulphides). Weak gold mineralisation is consistently present within the shear zone and correlates well down-dip and along a strike length of at least 1.6km, demonstrating continuity of the mineralisation within the hydrothermal zone. While these first intersections may not be economically significant, they are certainly encouraging and may represent structural indicators to more robust lodes located in favourable structural and lithological settings.

In order to further explore this potential, the Company has engaged the services of Mr Grant "Rocky" Osborne to carry out an in-depth assessment of the geological and geochemical data and Dr Roberto Vizeu to complete a detailed structural geology review of the project in conjunction with the Company's own geological team.

Dr Vizeu is a lecturer at Pará University and has carried out detailed structural reviews of many of the world-class projects in the region including the 5Moz Volta Grande Gold Project and Vale's giant Salobo Cu-Au Mine. From this geological and structural assessment, the Company will plan the next stage of exploration.

Centaurus' Managing Director, Mr Darren Gordon, said the pause in drilling would provide an opportunity to assess the geological and structural setting at Serra Misteriosa and fully evaluate the context of the weak mineralisation intersected in the first six drill-holes.

"Having visited our team on site earlier this week, it is clear that, while we are dealing with a very large mineralised system at Serra Misteriosa, we need to re-evaluate our targeting approach in order to ensure that we are spending shareholders' funds in the most prudent and effective manner.

"The results to date indicate that there could be something quite significant at Serra Misteriosa, but we have to be pragmatic and manage our exploration costs to deliver greatest potential benefit for our shareholders. In the short term, this means putting the drilling on hold and bringing in two highly qualified consultants to help us understand what we have and assist in planning the next phases of work.

"This also has the significant benefit of freeing up the majority of our field team to mobilise to the Salobo West Project earlier than previously planned and commence exploration at this very exciting project area. We are very excited about getting on the ground at Salobo West and we will be updating the market further on our exploration program there in the near future."

-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.



Table 1 - Serra Misteriosa - Significant Drill Intersections

							Significant Intersections			
Drill Hle	East	North	mRL	Dip	Azi	EOH	From	То	Interval	Au g/t
SRM-DD-17-001	532,537	9,429,139	345	-60	187	309.0	241.7	262.0	20.3	0.05
SRM-DD-17-002	532,531	9,429,087	360	-55	187	297.0	8.0	11.0	3.0	0.36
							84.0	90.0	6.0	0.66
						Including	84.0	86.0	2.0	1.35
							131.0	142.0	11.0	0.08
							152.3	153.0	0.7	0.76
							223.0	225.0	2.0	0.17
							241.0	246.0	5.0	0.12
SRM-DD-17-003	532,496	9,428,809	421	-55	187	215.9	104.0	118.0	14.0	0.07
							129.8	132.0	2.2	0.09
							140.0	145.0	5.0	0.25
						Including	142.8	144.0	1.3	0.84
SRM-DD-17-004	531,507	9,428,901	378	-55	187	228.6	0.0	28.5	28.5	0.14
						Including	18.1	20.2	2.1	0.29
						and	26.3	28.5	2.2	0.44
							82.0	86.0	4.0	0.10
							135.0	139.0	4.0	0.06
SRM-DD-17-005	531,683	9,428,692	387	-55	187	211.0	36.5	58.1	21.6	0.09
						Including	36.5	38.5	2.0	0.32
							96.0	99.0	3.0	0.09
SRM-DD-17-006	531,468	9,428,589	492	-55	187	272.4	40.0	42.0	2.0	0.27
							51.0	69.0	18.0	0.13
						Including	57.0	58.0	1.0	0.54
						and	67.0	69.0	2.0	0.44
							88.0	91.0	3.0	0.11
							99.0	103.0	4.0	0.07

<sup>\*</sup>Significant Intersections are down hole width, with Au greater than 0.05 g/t  $\,$ 



#### The Carajás Mineral Province and Salobo West

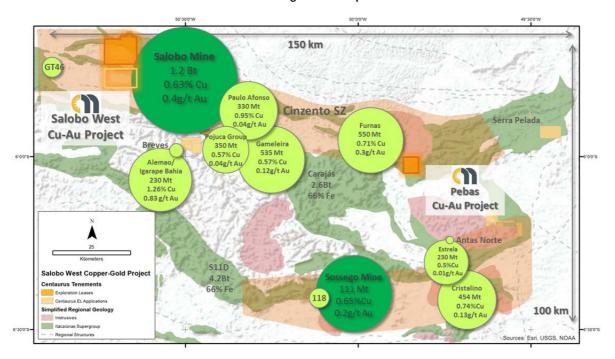
Centaurus' Salobo West Copper-Gold Project is located in the Carajás Mineral Province ("CMP"), which is considered one of the world's premier mining addresses. A total of fifteen (15) world-class mineral deposits lie within an area of just 150 x 100km, including nine IOCG deposits with resources of +100 million tonnes of copper-gold ore.

The resources and reserves of these (predominantly Vale-owned) IOCG deposits – in addition to several other IOCG prospects that are under exploration – collectively contain resources of more than 4.0 billion tonnes of copper-gold ore (see Figure 2 below).

Vale's giant Salobo Copper-Gold Mine is one of these deposits, and is arguably the second-biggest IOCG in the world behind BHP's Olympic Dam Mine. Salobo has Reserves of 1.2 billion tonnes at 0.63% Cu and 0.4g/t Au and produced approximately 176kt of copper and 317koz of gold in calendar year 2016<sup>1</sup>.

Centaurus' Salobo West Cu-Au project includes multiple distinct targets that display similar geophysical characteristics and are located in the same geological context as the Salobo mine, just 12km along strike.

Figure 2 – The Carajas Mineral Province with Schematic of Reserve Estimates (dark green) and Resource Estimates (light green) of the Nine Largest IOCG Deposits.



Centaurus is now only one of two companies that have significant tenement holdings within the main Cinzento Shear Zone – the other being leading global miner Vale.

For detailed information on the Salobo West Cu-Au project refer to ASX announcement on 25 July 2017.

<sup>&</sup>lt;sup>1</sup> Vale Data sourced from "Vale Production in 4Q16" Report, its 20-F Annual Report for 2016 and other public reports



### APPENDIX A – TECHNICAL DETAILS OF THE SERRA MISTERIOSA GOLD PROJECT, JORC CODE, 2012 EDITION – TABLE 1

#### **SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	Commentary
Sampling techniques	<ul> <li>Soil samples were collected at 25m and 50m intervals along 100 or 200m spaced grid lines along the strike of the project. Surface material was first removed and sample holes were dug to roughly 30cm depth. A 4-5kg sample was taken from the subsoil. The sample was placed in a plastic sample bag with a sample tag before being sent to the lab.</li> <li>Centaurus has collected 505 soil samples to date.</li> <li>All 1,105 historical samples were collected by Terrativa.</li> <li>Stream sediment samples were collected at selected points and sieved down to 1.0-1.5 kg samples using a 100 mesh sieve. 41 stream sediment samples were collected.</li> <li>60 surface rock chip/soil samples were collected from in situ outcrops and rolled boulders for chemical analysis.</li> </ul>
Drilling techniques	All drilling was carried out with a wireline LY-44 hydraulic rig, drilling NQ and HQ core
Drill sample recovery	<ul> <li>For diamond drilling, core recoveries were logged and recorded in the database for all Centaurus diamond holes. Overall recoveries are &gt;90% and there are no core loss issues or significant sample recovery problems.</li> </ul>
	• To ensure adequate sample recovery and representivity a Centaurus geologist or field technician was present during drilling and monitored the sampling process.
Logging	<ul> <li>Outcrop, stream sediment and soil sample points were registered and logged in the Terrativa and Centaurus geological mapping point database.</li> <li>All drill holes have been logged geologically and geotechnically by Centaurus project geologists.</li> <li>Logging for drilling is qualitative and quantitative in nature.</li> <li>All Centaurus diamond core has been photographed.</li> </ul>
Sub-sampling	All rock chip and soil samples were sent to the laboratory without any field preparation.
techniques and sample preparation	<ul> <li>Stream sediment samples were sieved down to 1.0-1.5kg using a 100 mesh sieve.</li> <li>Diamond Core (HQ) was cut with a specialized sampling tool where friable or using a core saw where compact (HQ and NQ), half core was sampled.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>Analysis of the soil samples was completed at SGS Geosol Laboratories. Samples are dried at 100°C and crushed and screened to 80 mesh. The pulp is quartered and an aliquot of 50g is sent for chemical analysis.</li> <li>Drill core samples were prepared and analysed at SGS Geosol Laboratories. Samples are dried at 100°C crushed to 70% &lt;2mm then pulverized and screened to 85% &lt; 75µm being homogenized and quartered between each step.</li> <li>Chemical analysis for drill core, soil and stream sediment samples was completed for gold by fire assay and ICP for limit of 0.001ppm as well as multi element using ICP.</li> <li>SGS Geosol Laboratories insert their own standards at set frequencies and monitor 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>Stream sediment samples are first dried in an oven at 60°C and then homogenised before crush and screening to 80 mesh. The pulp is quartered and an aliquot of 50g is sent for chemical analysis.</li> <li>Centaurus inserted standard samples every 20 samples (representing 5%). Mean grades of the standard samples are well within the specified 2 standard deviations.</li> <li>Laboratory procedures are in line with industry standards.</li> </ul>



Verification of sampling and assaying	<ul> <li>All recent soil samples (since November 2016) were collected by Centaurus field geologists. All assay results were verified by alternative Company personnel and the Competent Person before release.</li> <li>All historical samples were collected by Terrativa field geologists. All assay results were verified by alternative Terrativa personnel.</li> <li>No twin holes have been completed to date.</li> <li>All primary data is stored in the Centaurus Exploration office in Brazil.</li> <li>No adjustments were made to the assay data apart from resetting the below detection level values to half of the detection limit.</li> </ul>
Location of data points	• The survey grid system used is SAD-69 22S. This is in line with Brazilian Mines Department requirements. All sample and mapping points were collected using a Garmin hand held GPS.
Data spacing and distribution	<ul> <li>Soil samples were collected on 25m or 50m spacing on section with distance between sections of 100m, 200m and 400m depending on location.</li> <li>Stream sediment samples were collected at sample points planned by Terrativa geologists to represent catchment areas of between 500-1,000ha.</li> <li>Drill holes reported in this announcement were surveyed using hand held GPS. Final surveypick up will be completed once the drill program is complete.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>The extent and orientation of the mineralisation was interpreted based on field mapping. Sample orientation is perpendicular to the main geological features sequence along which mineralisation exists.</li> <li>During drilling the core orientation tool (ACT II) was sued to allow for orientation of the drill core.</li> </ul>
Sample security	<ul> <li>All samples were placed in pre-numbered plastic sample bags and then a sample ticket is placed within the bag as a check. Bags are sealed and placed in larger bags (10 samples per bag) and then transported by courier to the SGS Geosol laboratories in Parauapebas, PA. 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>
Audits or reviews	No audit or review has been conducted on the project to date.

#### **SECTION 2 REPORTING OF EXPLORATION RESULTS**

Criteria	Commentary
Mineral tenement and land tenure status	<ul> <li>The Serra Misteriosa project includes two exploration leases (851.548/2011 and 850.258/2013) for a total of circa 180km². Granted Exploration Leases have three years of exploration rights that may be extended for a further three years.</li> <li>The tenements are part of an earn-in agreement with Terrativa Minerais SA. Under the agreement Centaurus has to meet minimum expenditure of R\$2.5M in 24 months to gain the right to acquire 100% of the tenements via the issue of 30M CTM shares, 90M Performance Shares (3 tranches of 30M with vesting based on certain resource based performance milestones) and a production royalty of 2%. 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 gold revenue.</li> <li>Landowner royalty is 50% of the CFEM royalty.</li> <li>The project is covered by a mix of cleared farm land and natural vegetation. The project is not located within any environmental protection zones and exploration and mining is permitted with appropriate environmental licences.</li> </ul>
Exploration done by other parties	<ul> <li>Historically the Serra Misteriosa tenement area was explored for gold by Terrativa. All data from this exploration has been passed to Centaurus.</li> <li>There has been small scale historical artisanal gold mining undertaken in this area. There is no known evidence of exploration for gold by other modern-day companies other than Terrativa.</li> </ul>



Criteria	Commentary
Geology	<ul> <li>The Serra Misteriosa Gold Project is located in the Southern Bacaja Domain within the Eastern Amazonian Craton. The project is located on a ridge of WNW-ESE trending Upper Proterozoic greenstone between gneissic and granitic complexes that has been intruded by syntectonic dioritic and granodioritic plutons;</li> <li>The project area is covered extensively by a rich red saprolite and fresh rock outcrop is limited. Gold has been identified in panning and diorite fresh rock samples where SEM results demonstrated gold is associated with arsenopyrite/pyrite;</li> <li>The main gold in soils geochem target is a 10km x 600m (+25ppb Au) anomaly. The zone is also anomalous for As, Sb and magnetic soils. Within this anomaly there is a 5.0km x 250m +50ppb Au zone, with a number of smaller +150ppb Au zones. The Au geochem anomaly is associated with a sheared contact of siliceous mylonite with host greenstones and granites.</li> </ul>
Drill hole Information	Refer to Figure 1 and Table 1.
Data aggregation methods	<ul> <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>
Relationship between mineralisation widths and intercept lengths	The results reported in this announcement reflect individual down hole sample intervals and no mineralised widths were assumed or stated.
Diagrams	Refer to Figure 1.
Balanced reporting	• All exploration results received by the Company to date are included in this report or can be referenced in previous ASX announcements.
Other substantive exploration data	<ul> <li>Historical geological mapping was carried out by Terrativa geologists.</li> <li>The IP and resistivity surveys were undertaken by WSL/Geomag. The survey included +20km of survey lines and utilised a pole-dipole array with an electrode spacing of 50m. The survey was designed to measure to a depth of 250m. The QAQC and interpretation of the IP survey was undertaken by Centaurus's geophysical consultant, Mr Robert B. Ellis.</li> </ul>
Further work	The Company will now collate and review all drill data together the completion of detailed structural and geochemical reviews by independent geological consultants. Results of these reviews will determine the next exploration work plans.