

2 February 2017

# OF IP SURVEY AT SERRA MISTERIOSA GOLD PROJECT

Excellent preliminary results with final report expected in coming weeks ahead of maiden drilling

#### **Key Points:**

- Induced Polarisation (IP) completed at the Serra Misteriosa Gold Project over a continuous 2.4km long, high-grade gold-in-soils anomaly (+50ppb Au). Reconnaissance survey lines also completed within a broader +5km long gold geochemical anomaly (+25ppb Au) that is up to 500m wide.
- Encouraging results from the first three sections highlight multiple priority one drill targets where positive geophysical, geochemical, geological and structural features are coincident.
- Final survey QAQC and interpretation work is underway by an experienced US-based geophysicist final report expected within the fortnight.
- Additional field mapping and soil sampling currently underway ahead of the Company's maiden drill program at Serra Misteriosa, which is planned for March/April 2017 towards the end of the regional wet season.
- Serra Misteriosa is part of the highly prospective Pará Exploration Package in Northern Brazil, secured last year, which includes +750km<sup>2</sup> of ELs and EL applications in the State of Pará, located between the world-class Carajás IOCG province and the 5Moz Volta Grande gold deposit.
- The extensive gold anomaly is associated with highly altered diorites and displays remarkably similar geological and structural characteristics to the Volta Grande Gold Project, owned by Belo Sun Mining Ltd.

Centaurus Metals (ASX Code: **CTM**) is pleased to report highly encouraging initial results from a recently completed Induced Polarization (IP) survey at its highly prospective **Serra Misteriosa Gold Project** in Northern Brazil, with the preliminary sections revealing multiple quality geophysical targets coincident with high-grade surface gold-in-soils anomalies.

The results are considered to be significant for this stage of exploration and support the Company's view of the prospectivity of the Serra Misteriosa Gold Project and its potential to host multiple strong gold drilling targets, which will be tested later this quarter.

The Serra Misteriosa tenement package covers 30km of strike extensions of a WNW-ESE trending highly altered suite of intrusive diorites and granodiorites. The primary target is delineated by a continuous **2.4km long, high-grade gold anomaly (+50ppb Au)** within a broader +5km long gold geochemical anomaly (+25ppb Au) that is consistently up to 500m wide (see Figure 1).

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The maiden ground-based Induced Polarisation (IP) survey was completed last week covering the area of the continuous 2.4km long +50ppb Au anomaly, with two additional reconnaissance lines also completed covering satellite targets further to the east of the main anomaly (see Figure 1). Initial QAQC of the survey data indicated that the data quality is excellent with depth of investigation exceeding 250m.

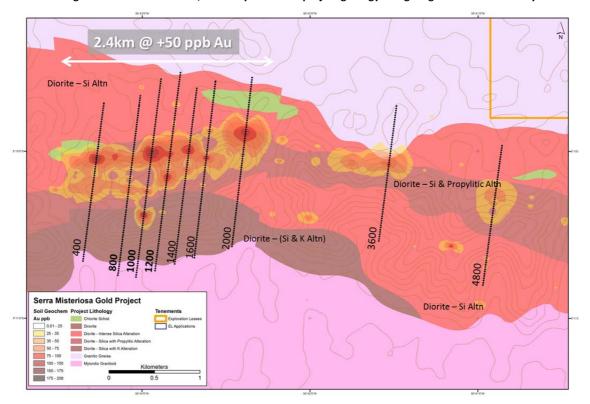


Figure 1 - Serra Misteriosa, IP survey lines with project geology and gold geochemical anomaly

Centaurus' Managing Director, Mr Darren Gordon, said the Company was highly encouraged by the initial results from the survey, which had already revealed a number of high-quality, walk-up drilling targets.

"It's really exciting to have such a large scale continuous high-grade soil anomaly lining up so well with the IP and project geology, this makes for some compelling early drill targets," he said. "We should have the remainder of the IP survey results finalised in the next few weeks and, with this information to hand, we plan to spend February and March improving our understanding of the mineralisation with the assistance of a number of local and international specialist consultants.

"This will clear the way for us to begin drilling as soon as the wet season has passed – which we anticipate should be around the end of the March Quarter. In the meantime, we will be providing regular updates on the balance of the IP results and the exploration work currently underway, ahead of our maiden drill program."



#### **Detailed Discussion of Preliminary IP Results**

The association of sulphides (arsenopyrite and pyrite) with the gold mineralisation identified in surface samples at Serra Misteriosa makes the IP survey an important tool in drill targeting. High chargeability (IP) anomalies that extend from surface to depths below the saprolite layer may indicate sulphides introduced along structures that can be associated with gold mineralisation.

High resistivity anomalies can indicate the presence of silica alteration and quartz veining whilst low resistivity anomalies may identify structures with associated hydrothermal (argillic) alteration, particularly where associated with high chargeability signatures. Both present interesting drill targets.

Section 1200 (see Figure 2) was the first section completed. Interestingly there is a chargeability high close to surface coincident with a +100 ppb Au in soils anomaly. This anomaly appears discontinuous with the deeper IP anomalies to the north, indicating there may be some structural displacement of the conductive unit at depth.

The resistivity model for Section 1200 indicates a sub-vertical nature of the intrusive units below the saprolite horizon (marked by the sub-horizontal chargeability low seen in all sections (see Figures 2-4)).

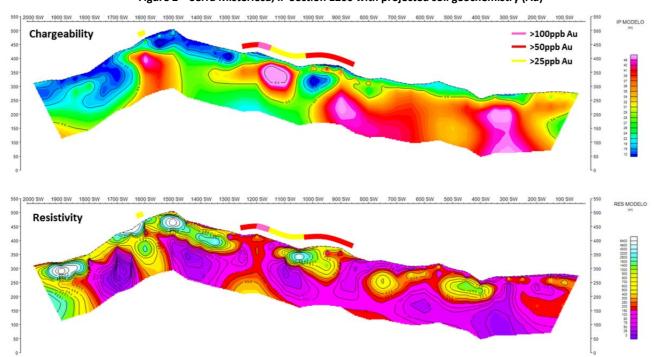


Figure 2 – Serra Misteriosa, IP Section 1200 with projected soil geochemistry (Au)

This near-surface IP anomaly, coupled with a high-grade gold geochemical result, represents an excellent, high priority drill target.

Section 1000 in Figure 3 below, displays another interesting feature in the form of a vertical, extremely high resistivity anomaly that extends to depth. This feature may represent feeders of more intense silicification alteration and a structure that has allowed mineralising fluids to rise up and then form a resistive cap, becoming variably silicified and mineralised closer to surface.



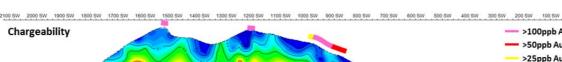
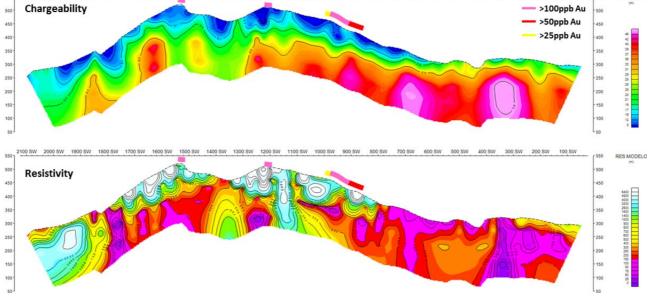
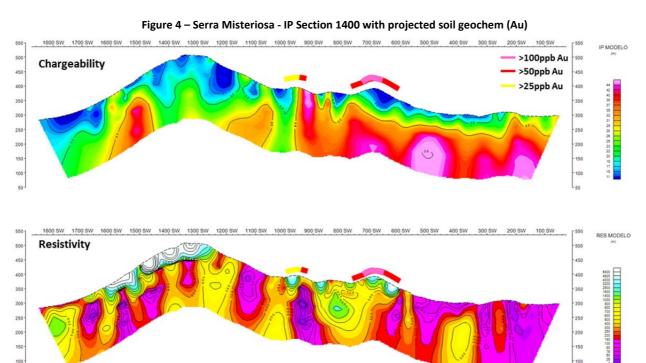


Figure 3 - Serra Misteriosa, IP Section 1000 with projected soil geochemistry (Au)



Gold mineralisation may then have leaked out along this sub-horizontal cap to create the geochemical anomalies found to the north of the high resistivity zone. These anomalies present excellent targets for higher grade gold mineralisation.

The preliminary results from Section 1400 can be seen in Figure 4 below. Again, sub-vertical resistivity highs and lows appear coincident with IP highs and geochemical gold anomalies at surface, presenting additional quality drill targets.





Additionally, it is important to highlight some significant regional geophysical signatures that led to the initial targeting of the prospect. The regional radiometric data highlights a potassium high located on the north side of the main gold-in-soils anomaly and a linear magnetic low that trends directly through the gold anomaly in regional airborne data, as shown in Figures 5 and 6. The linear magnetic low follows the silicified and propylitically altered diorite and potentially identifies significant structure or alteration.

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 is being undertaken by highly experienced US-based geophysicist, Mr Robert B. Ellis. Mr Ellis specialises in South American gold and base metals projects and has previously worked with AngloGold, Kinross, Codelco and Barrick (amongst others) and has extensive experience in Brazil working with Yamana.

The exploration team is currently carrying our additional detailed mapping and soil geochemistry programs. A number of Brazilian and international gold and structural specialists are also being engaged to support the team ahead of the maiden drill program.

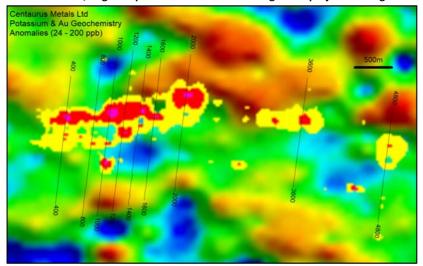
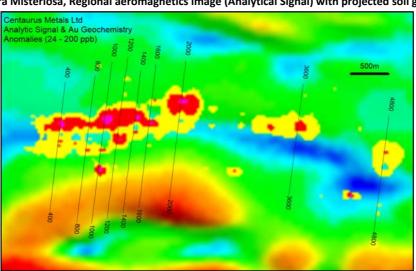


Figure 5 - Serra Misteriosa, Regional potassium radiometric image with projected soil geochemistry (Au)







#### The Pará Exploration Package

The Serra Misteriosa Gold Project forms part of the +750 km<sup>2</sup> Pará Exploration Package ("Pará EP") of tenements located in Brazil's mineral-rich State of Pará<sup>1</sup>. The extensive tenement package is located between several world-class mineral deposits – the 5Moz Volta Grande Gold Project, owned by Belo Sun Mining, to the north and the giant Carajás IOCG province to the south (see Figure 7).

The Pará EP group of tenements include prospective gold targets for both Volta Grande-style gold and Carajás-style copper-gold deposits. The Serra Misteriosa Gold Project is the most advanced project where the Company is able to leverage off the quality preliminary exploration work already completed by its strategic partner, Terrativa, to define its preferred targets for drilling in Q1 2017.

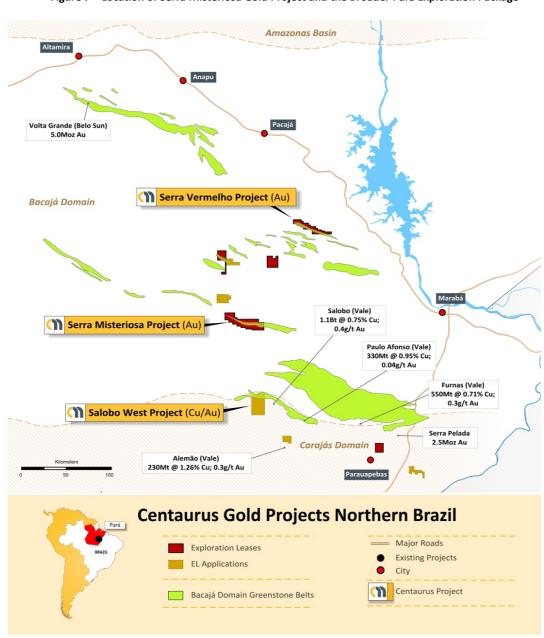


Figure 7 – Location of Serra Misteriosa Gold Project and the Broader Pará Exploration Package

<sup>&</sup>lt;sup>1</sup> Refer to ASX announcement on 5 October 2016 for details of Serra Misteriosa Gold Project and the Pará EP agreement terms.



The package also includes the Salobo West Copper-Gold Project. Salobo West comprises a group of EL applications that cover +140 km<sup>2</sup> of highly prospective ground located in the heart of the world-class Carajás IOCG province. The project is located just 12km along strike from Vale's massive Salobo copper-gold mine which hosts mineral resources of over 1.1 billion tonnes at 0.7% Cu and 0.4g/t Au<sup>2</sup>. The Company is currently working with the National Department of Mines (DNPM) to try to expedite these EL applications.

-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 Australasia 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.

<sup>&</sup>lt;sup>2</sup> For additional information on the Salobo Mineral Reserves and Resources please refer to www.vale.com.



### 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>All historical sampling was completed 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>Soil samples were collected at 50m intervals along 200m or 400m 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. 994 soil 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	There is no historical drilling on the Serra Misteriosa Project.
Drill sample recovery	No drilling was conducted.
Logging	• All outcrop, stream sediment and soil sample points were registered and logged in the Terrativa geological mapping point database.
Sub-sampling	All rock chip and soil samples were sent to the laboratory without any field preparation.
techniques and sample preparation	Stream sediment samples were sieved down to 1.0-1.5kg using a 100 mesh sieve.
Quality of assay data and laboratory tests	<ul> <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>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>Chemical analysis for 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>Laboratory procedures are in line with industry standards.</li> <li>To date no QAQC samples have been inserted by Terrativa for this project.</li> </ul>
Verification of sampling and assaying	All historical samples were collected by Terrativa field geologists. All assay results were verified by alternative Terrativa personnel.
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 with a section spacing of 400m and 200m x 50m.</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>Sample spacing was deemed appropriate for geochemical studies but should not be considered for Mineral Resource estimations.</li> <li>No sample composting has been applied.</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.</li> <li>Sample orientation is perpendicular to the main geological features sequence along which mineralisation exists.</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 Belo Horizonte. 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 (851548/2011 and 850258/2013) 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 1% on gold revenue (less taxes).</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	
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 5km x 600m Au (+25ppb) anomaly. Within this anomaly there is a 2.4km x 250m +50ppb Au zone, with a number of smaller +150ppb Au zones. The Au geochem anomaly is associated with a sheared contact of diorite with host greenstones and granites. The diorite has been intensively silicified +/- sericite and propylitic alteration.</li> </ul>



Criteria	Commentary
Drill hole Information	No drilling has been conducted on the project.
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	No drilling was conducted.
Diagrams	Refer to Figures 1 -7.
Balanced reporting	All Exploration Results received by the Company to date are included in this report.
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 includes +20km of survey lines and will utilise 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 be undertaken by Centaurus's geophysical consultant, Mr Robert B. Ellis.</li> </ul>
Further work	<ul> <li>The Company is in the process of completing a detailed data review ahead of further detailed geological and structural mapping and soil sample programs.</li> <li>This announcement refers to the preliminary results from the geophysical study (Induced Polarization). Final results are expected within 2-3 weeks.</li> <li>The Company continues to work to secure land access and environmental permitting for drilling in late Q1 2017. Based on targets generated from these programs, the Company will commence the maiden exploration drilling program at the start of the dry season towards the end of Q1 2017.</li> </ul>