



Exploration Update – Alta Floresta Gold Belt Geophysical Results 10 October 2012

Cougar Metals NL is a Perth based exploration company listed on the Australian Securities Exchange (ASX:CGM).

The Company is focused on exploring the highly prospective Alta Floresta gold belt in central west Brazil, where it holds tenements covering an area in excess of 883km² and where past production is estimated at five million ounces of gold. Much of the immediate focus is centred on the Ze Vermelho Gold Prospect where the Company has received numerous highly encouraging high grade gold assay results and where it is currently undertaking trial mining. This is providing important information about the structure and grade of mineralisation, whilst at the same time generating strong cash-flows from the treatment of the ore.

The Company also operates a growing mineral drilling business in South America, providing surface diamond, reverse circulation, and RAB drilling services to the rapidly growing South American mineral resource industry. The Company currently operates a fleet of 9 rigs.

In addition, the Company also holds the mineral rights to the Pyke Hill Measured plus Indicated Resources of 14.7mt @ 0.9% Ni (March 2008) located in Australia.

Directors

Roger Hussey – Chairman
Randal Swick – Managing Director
Jeff Moore – Director
Paul Hardie – Director

Senior Management

Randal Swick – Managing Director
Michael Fry – CFO & Company Secretary
Jayme Leite – Exploration Manager

Capital Structure

Shares on Issue: 462,211,076
52 week range: \$0.02 - \$0.11
Last Price (9/10/12): \$0.032
Market Capitalisation: \$14.8 million

Substantial Shareholders

Savvy Capital Management – 29.44%
Marcia Swick – 17.36%

EXPLORATION HIGHLIGHTS

- Re-interpretation of gradient induced polarization (I.P.) geophysical survey results indicate a distinct chargeability and resistivity anomaly over a 210 metre strike length associated with the known mineralisation at Ze Vermelho and extending over the Pedra Branca prospect.
- The I.P. survey also identifies a very encouraging similar anomaly with a similar trend over a 180 metre strike length located northwest and offset to the Ze Vermelho mineralised body.
- A number of other similar I.P. anomalies along parallel trends within the survey area warrant follow up investigation.
- Electromagnetic (EM) geophysical test surveys were completed over known gold bearing sulphide mineralisation at the Ze Vermelho and Filao do Meio targets. The surveys included borehole EM, fixed loop EM and moving loop EM methods.
- The EM surveys were affected by the presence of a conductive weathered zone near to surface and this is likely to have impacted results. Nonetheless the EM test results did indicate a positive response from the borehole EM and moving loop EM methods. The fixed loop EM method did not identify the known mineralisation likely due to the interference of the conducted weathered zone at surface.
- Immediate investigation of the I.P. anomalies will include prospecting and soil geochemistry.
- Further use of the EM and I.P. methods and RC drilling is contemplated to define specific targets for diamond drilling.

Electromagnetic (EM) surveys were conducted over known pyrite associated gold mineralisation at the Ze Vermelho and at the Filao do Meio gold prospects. The main objective was to determine the viability of these EM methods as a drill targeting tool in the ongoing exploration for similar mineralization. Three survey configurations were tested;

- (i) borehole EM (BHEM) using a 200 metre square double turn transmitter loop;
- (ii) fixed Loop EM (FLEM) using a 200 metre square double turn transmitter loop; and
- (iii) moving Loop EM (MLEM) using 100 and 80 metres square loops. Inside loop and outside loop reading were obtained.

The EM surveys were conducted at both 3hz and 30hz frequencies. Surveys were carried out by Fugro Brasil and quality control was performed by Resource Potential in Perth.

The main challenges for the EM methods used were the presence of a conductive weathered zone limiting the penetration of the primary current, the narrow and/or low sulphide content of the mineralisation at Ze Vermelho and Filao do Meio, and complexities caused by multiple conductors. The weathered zone overlying the region varies to 50 metres in depth with significant clay content. The known gold mineralisation at Ze Vermelho and Filao do Meio is dominantly pyrite associated along narrow veins and in disseminated bodies. The volume of sulphide is low with local semi-massive to massive bands occurring associated with disseminated bodies along a number of distinct trends within a regionally interpreted host structure.

It is likely that due to the above factors, the EM survey was not as beneficial as it may otherwise have been.

Nonetheless, the EM surveys did provide subtle responses correlating to the mineralisation at Ze Vermelho and at Filao do Meio using the BHEM and MLEM techniques. The FLEM configuration did not provide any significant response most likely due to the presence of a conductive weathered zone as referred to above.

In addition to conducting the EM surveys, the I.P. survey data over the Ze Vermelho target were re-interpreted and show a distinct anomaly associated with the region of the mineralisation. Similar anomalies were identified within the survey area and in the vicinity of the known mineralisation. These anomalies will undergo follow up exploration and maybe EM surveys for targeting purposes.

Filao do Meio

Two diamond drill holes were subjected to BHEM surveys. A single FLEM and single MLEM traverse were conducted over the known mineralisation intersected in drill hole and previously trenched by artisanal miners. Preliminary interpretation of the BHEM data indicates that the disseminated mineralised zone intersected in hole FM_DD013 between 100.00 and 106.75 metres was identified.

Ze Vermelho

Re-interpretation of the gradient I.P. surveys shows very encouraging results for immediate follow up investigation in close proximity to the Ze Vermelho operations summarized as follows:

- (i) a coincident chargeability and resistivity anomaly along the known mineralised trend of the Ze Vermelho and Pedra Branca prospects in excess of 210 metres strike is distinct to the surveyed area. The I.P. anomaly is the location of the current trial mining operations;
- (ii) a very similar anomalous trend northwest of Ze Vermelho extends for 180 metres along the same direction but is offset to the southwest by 70 metres. This highly prospective target was drilled in hole ZV_DD075 which intersected two narrow zones of sulphide mineralization; and
- (iii) a number of additional I.P. anomalies with similar coincidence in chargeability and resistivity to that over Ze Vermelho are identified in parallel trends.

Follow up exploration directed towards definition of specific drill targets to test the I.P. anomalies will include field prospecting, soil surveys and may include additional geophysical surveys. Priority will be given to the “NW anomaly” whose characteristic I.P. signature is similar to that over the Ze Vermelho and Pedra Branca prospects. Depending on the results of this planned work, RC drilling is contemplated to refine the source of the I.P. anomalies prior to diamond drilling.

Addition gradient I.P. is under consideration to extend the survey coverage along strike to the northwest to the Filao do Meio prospect where sampling from the historic pit and diamond drilling has yielded high grade gold values.



Figure 1: Ze Vermelho and Pedra Branca prospects area showing the location of diamond drill holes and main I.P. anomalies; apparent resistivity in blue and chargeability in yellow. The figure also shows location of transmitter loops used for BHEM and FLEM test surveys, location of MLEM and FLEM survey lines, and the location of drill holes surveyed using BHEM.

At the Ze Vermelho prospect three diamond drill holes were subjected to BHEM test surveys and successfully resolved the known mineralization in holes ZV_DDHO77 and ZV_DDHO78. These surveys identified a weak response in hole ZV_DDHO77 at 135 metres depth which is interpreted to be associated with the mineralisation intersected between 131.26 and 131.40 metres. BHEM surveys in hole ZV_DDHO78 showed a possible off hole conductor at 140 metre depth which is interpreted to represent the extension of mineralisation intersected at a depth of 146 metres in this hole.

Hole ZV_DD075 was drilled to test the I.P. anomaly located along an interpreted northwestern extension of the Ze Vermelho mineralised zone and intersected weak pyrite mineralisation.

A single FLEM and single MLEM traverse was conducted over the main ore zone. MLEM results indicate a subtle conductive response associated with the mineralized zone but the FLEM results did not resolve the known mineralized zone.

For further information please contact the undersigned via email at r.swick@cgm.com.au or alternatively contact Michael Fry (CFO & Company Secretary) on +61 8 9381 1755.

Yours sincerely
COUGAR METALS NL



RANDAL SWICK
Managing Director

Competent Persons Statement

The information in this release that relates to Exploration Results is based on information compiled by Mr Paul Nagerl who is a member of the Association of Professional Geoscientists of Ontario. Mr Nagerl is an executive of Cougar Metals NL and 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 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Nagerl consents to the inclusion in this report of the matters based on information provided by him and in the form and context in which it appears.

APPENDIX 1: BACKGROUND TO ZE VERMELHO MINE

The Company's Alta Floresta Gold Project is located in the northern portion of Mato Grosso State in central west Brazil. The Project comprises three exploration districts; Apiacas, Paranaita, and Piexoto distributed over 280 kilometres in an east-west direction and centered on the town of Alta Floresta. These districts lie above what is referred to as the Juruena magmatic ark, a setting in which both high-grade quartz-sulphide vein systems and bulk tonnage, disseminated gold systems are known to occur.

The current main exploration focus is in and around the Company's Ze Vermelho Gold Mine in the Paranaita District. Ze Vermelho consists of an historic open pit from which four shafts were sunk; reportedly abandoned due to plummeting gold price in the 1990s. Records reveal that gold production from these workings was approximately 70,000 ounces.

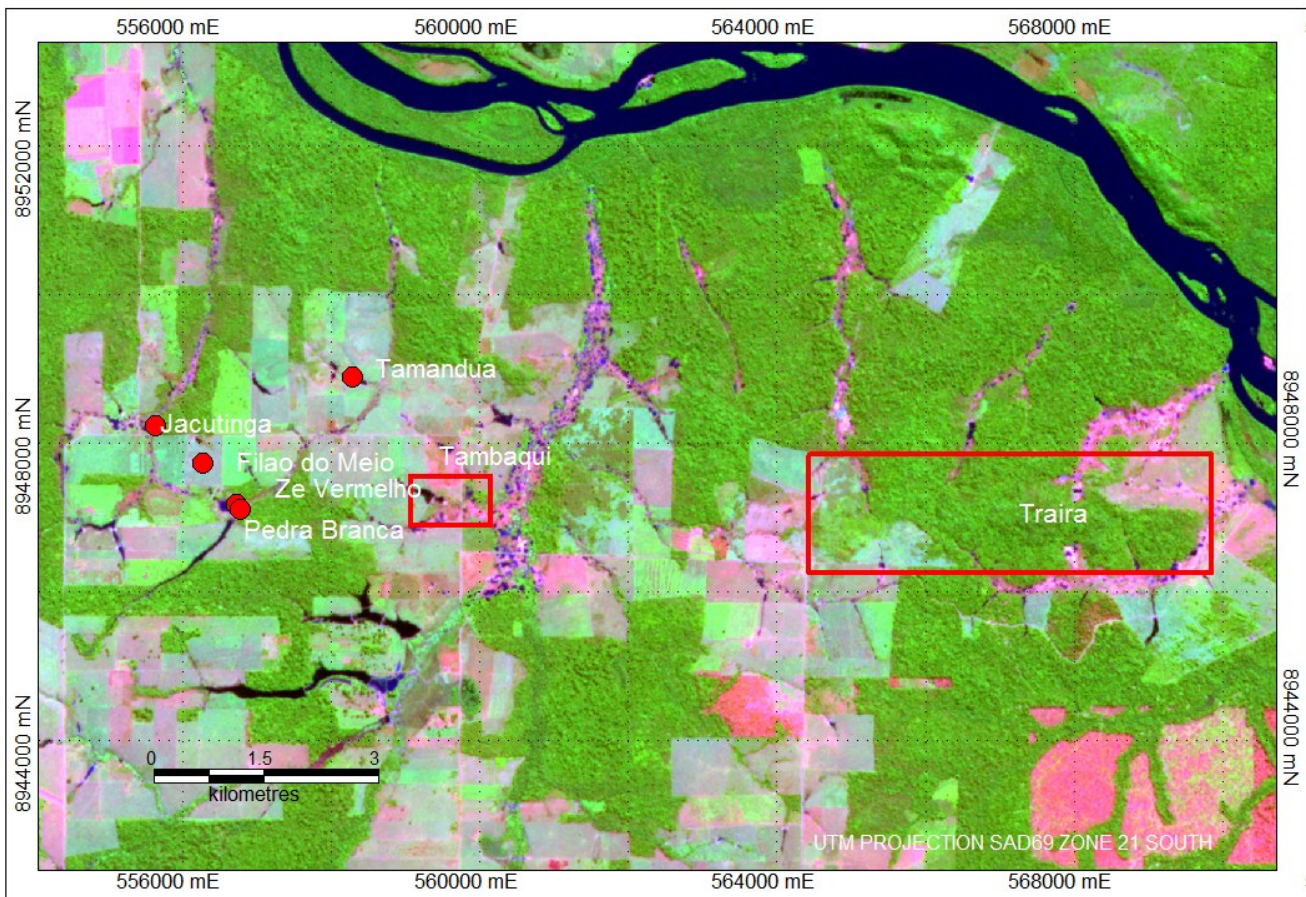


Figure: Location map of the Paranaita District gold targets.