



# Exploration Update – Tambaqui Gold Prospect

## ASX Announcement

### 19 July 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 883km<sup>2</sup> 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

Randal Swick – Chairman  
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 (17/07/12): \$0.042  
Market Capitalisation: \$19 million

#### Substantial Shareholders

Savvy Capital Management – 29.44%  
Marcia Swick – 17.36%

## TAMBAQUI GOLD PROSPECT - EXPLORATION UPDATE

- Identification of a new prospective area lying approximately 3km east of Ze Vermelho; referred to as “Tambaqui Gold Prospect”.
- Tambaqui Gold Prospect consists of a series of shallow pits over a strike length in excess of 500 metres.
- Dewatering of the western most pit at Tambaqui and analysis of four bulk samples have yielded promising assay results:
  - 8.19 g/t Au for Sample 1;
  - 8.63 g/t Au for Sample 2;
  - 3.94 g/t Au for Sample 3; and
  - 1.99 g/t Au for Sample 4;

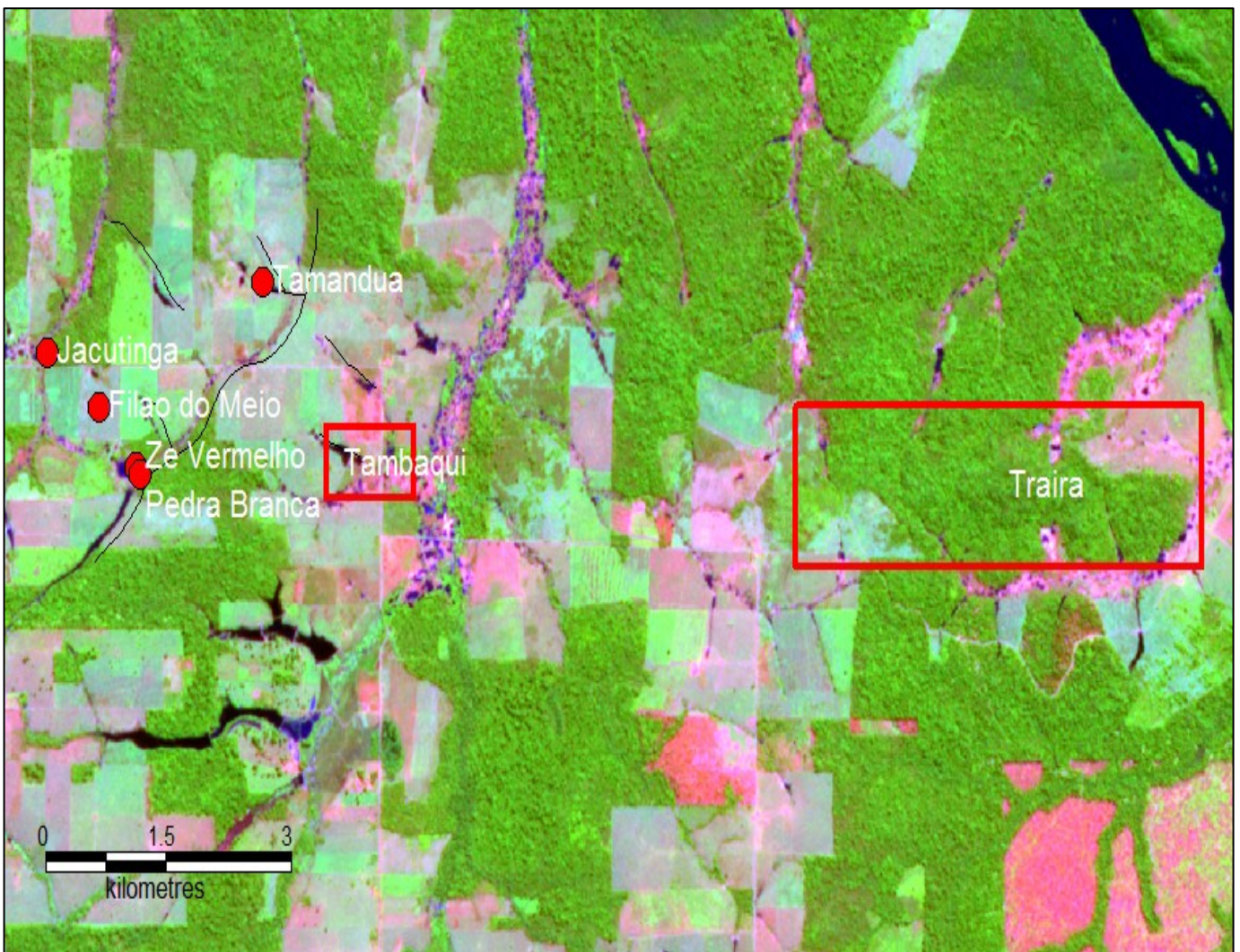
with a weighted average grade of 4.89 g/t Au.

- Mapping of the pit reveals pyrite related gold mineralisation as disseminations in syneclitic granite, in cross cutting veins, as fracture filling, and within mylonite.
- Sampling of a narrow sulphide vein at the base of the pit returned high-grade assay results; best being: 149.53 g/t Au and 101.13 g/t Au.
- Drilling program currently underway at Tambaqui to test for continuation of gold mineralisation below historical workings.
- Concurrent with this exploration program, the Company is exploring a number of other areas near the Ze Vermelho operations including the Jacutinga, Filao do Meio, Pedra Branca, Tamandua, and Traira gold prospects.

## Background

The 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 1: Location map of the Tambaqui and other nearby targets.**

The Tambaqui Gold Prospect is located approximately three (3) kilometres east of the Company's Ze Vermelho prospect and encompasses a series of historical workings over a strike length in excess of 500 metres. The area was the subject of alluvial, colluvial and bedrock gold mining operations in the mid 1990's.



**Figure 2: Aerial photograph over Tambaqui**

## Mapping Program

Tambaqui's west pit was dewatered and cleaned during June 2012 in preparation for mapping.



**Figure 3: Tambaqui west pit undergoing dewatering.**

Initial reconnaissance sampling yielded promising results with samples 1 and 2 each returning above 8 g/t gold (refer Table 1 below). The weighted average of the four bulk samples was 4.89 g/t Au.

Sample ID	Weight (t)	Gravity Recovered Gold (g)	Grade (g/t)	Gold Fineness (%)
TBQ-01	24.00	196.69	8.19	85.00
TBQ-02	1.17	10.10	8.63	61.38
TBQ-03	1.07	4.24	3.94	77.50
TBQ-04	28.4	56.62	1.99	81.27

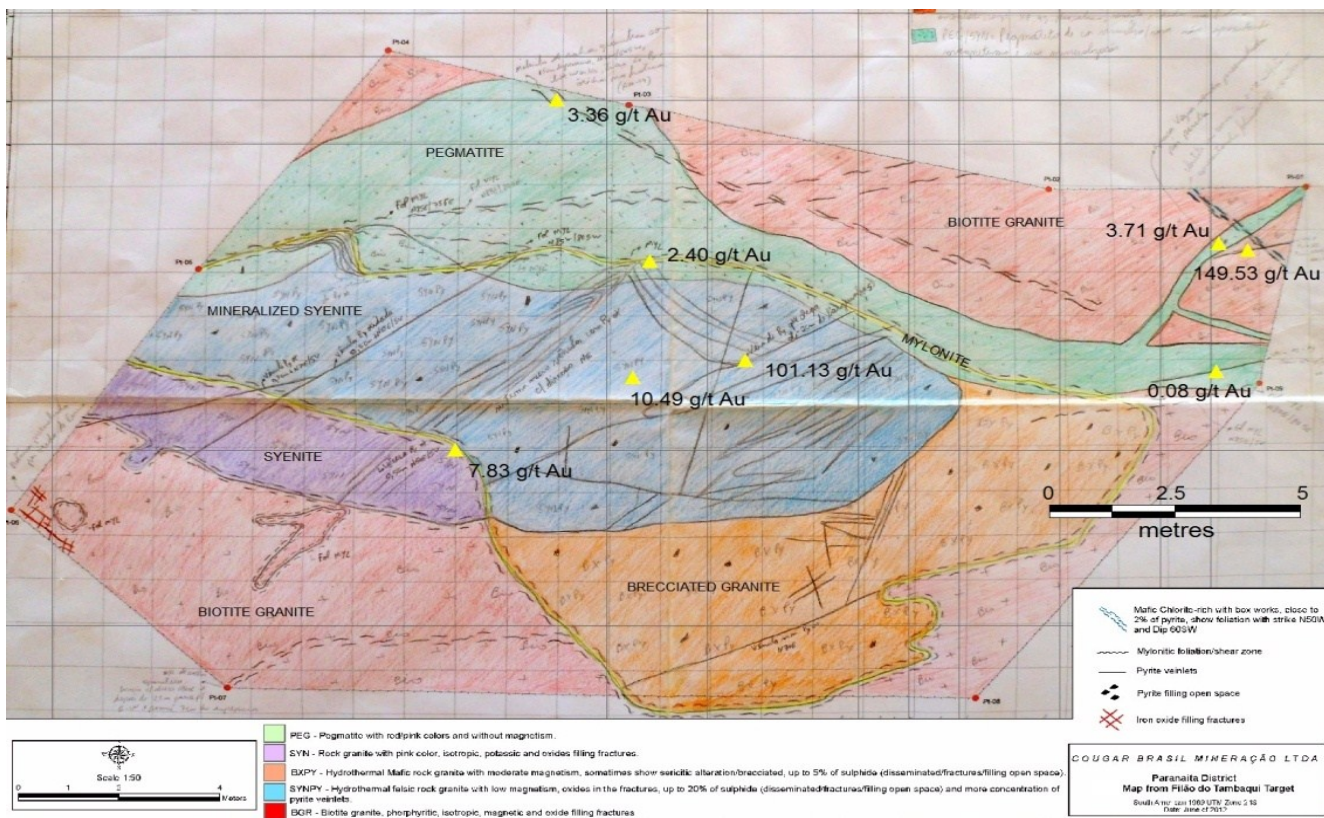
**Table 1: Tambaqui west pit bulk sampling results**

A geologic mapping exercise was then carried out and identified two main zones within the west pit at Tambaqui. The outer zone consists of barren regional biotite granite; whilst the inner zone consists of hydrothermally altered sulphide-disseminated Syenite and and Py-cemented granitic breccia (refer Figure 4 below).

A series of samples were taken to determine the association between gold mineralisation and rock types and the results are shown in Table 2 below with their location depicted in Figure 4 also below. The best results returned were 149.53 g/t and 101.13 g/t gold; both being pyrite related.

Sample ID	Gold Grade (g/t)	Description
140035	10.49	30% disseminated pyrite in fracture potassic altered granite
140036	3.71	10% pyrite disseminated in foliated chlorite altered granite
140037	2.40	Shear zone
140038	149.53	Massive pyrite in narrow quartz vein
140041	7.83	10% pyrite in silicified alteration halo with chlorite and sericite
140042	3.36	box work and fracture filling pyrite in shear zone
140043	101.13	narrow folded massive pyrite vein

**Table 2: Tambaqui targetted sampling results**



**Figure 4: Geological mapping of Tambaqui's west pit inclusive of assay results**

In summary, geological mapping identifies three styles of gold mineralisation: 1) low-grade gold associated with disseminated, fracture and open filling spaces pyrite hosted by the hydrothermally altered syenite, 2) low-grade gold associated to disseminated pyrite hosted by narrow mylonites and 3) high-grade gold associated to late massive pyrite veins.

A drilling program is scheduled to commence in July at Tambaqui to test for gold mineralisation below these historical workings.

For further information please contact the undersigned via email at [r.swick@cgm.com.au](mailto: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**  
*Executive Chairman*

### **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.*