



ASX Announcement – 29 August 2011

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## COMPANY EXPLORATION ACTIVITIES UPDATE

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- **Land Access Agreements executed over 5,700ha in the Paranaita and Peixoto districts of Mato Grosso state in Brazil.**
  - **Commencement of a 3,000m drilling program at the Cidinha Gold Prospect in the Peixoto district to test the down-dip extension and grade of a high-grade vein identified in mid 2010 extending over 650 metres, and open in both directions.**
  - **The identification of a new prospect - the “Tamandua Gold Prospect” a high-grade gold vein extending over 300 metres (and remaining open) within 2.3 kilometres of the Company’s Ze Vermelho Prospect.**
  - **Commencement of an initial five (5) hole drilling program at the Tamandua Gold Prospect in the Paranaita district to test the down-dip extension and grade of the prospect.**
  - **Ze Vermelho Gold Prospect cyanide treatment circuit on track for commissioning in September 2011.**
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Cougar Metals NL (ASX Code: CGM) is pleased to provide the following update with respect to operations within its gold exploration business.

### **Land Access Agreements**

As part of the Company’s increased exploration focus in the Paranaita and Peixoto districts of Cougar Metals’ Alta Floresta Gold Project (which is located in Mato Grosso state in western Brazil), the Company is pleased to report that it has secured access agreements with landholders covering an area in excess of 5,700ha (aggregated).

These Land Access Agreements allow the Company the right to undertake mineral exploration activities and pave the way for first-time exploration to commence in the area immediately surrounding the Company’s Ze Vermelho Gold Prospect in the Paranaita district, and the Cidinha Gold Prospect in the Peixoto district.

The attainment of a Land Access Agreement over the Cidinha Gold Prospect has been the catalyst for the commencement of a maiden drilling program at Cidinha in recent days (refer further below).

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## Cidinha Gold Prospect

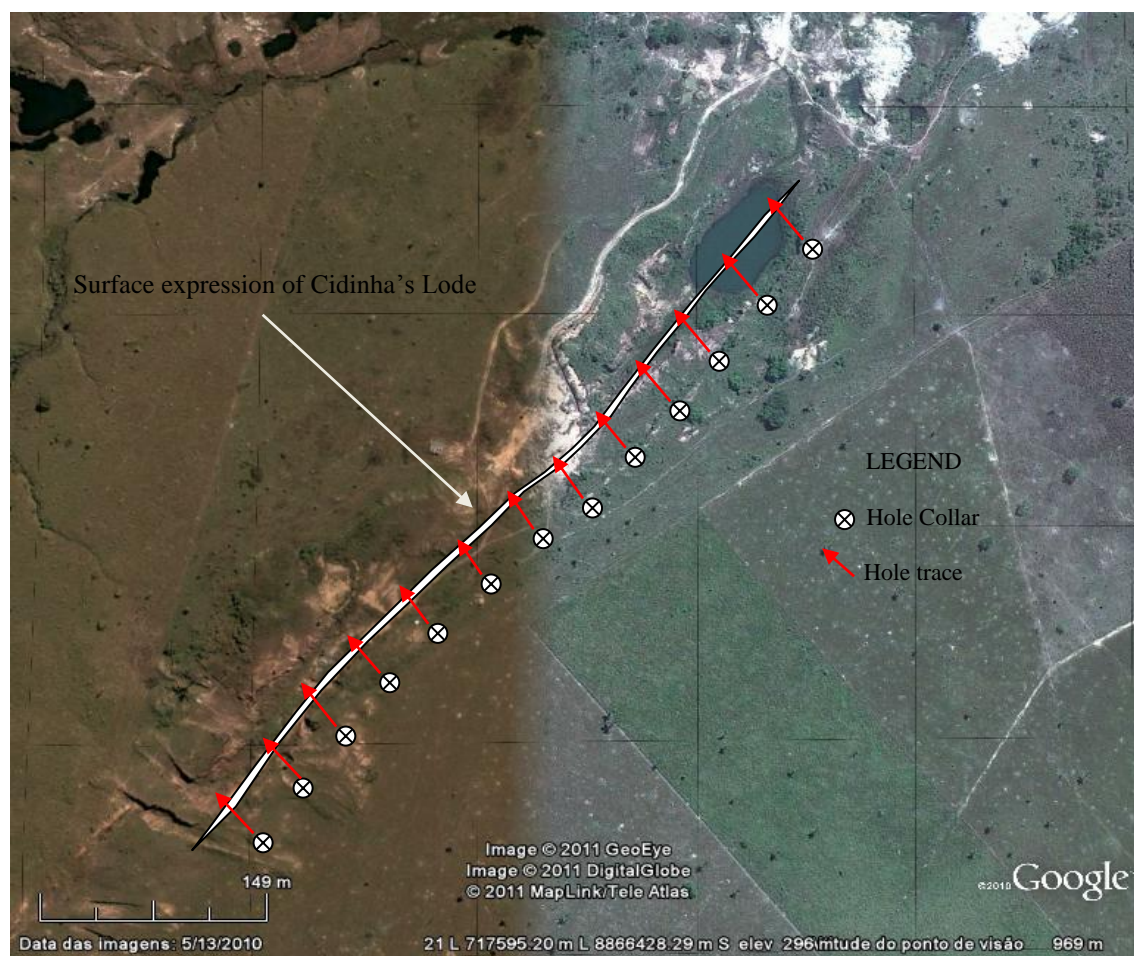
The structure was mined by artisanal miners during the early 1990's to a depth of between 15 metres and 40 metres over a length of approximately 180 metres, with a reported mean ore grade of 200 g/t of Gold.

The Company mapped and trenched the prospect in mid-2010 and that activity revealed a NE-SW striking shear-related ore structure consisting of a quartz-vein (of between 0.35 metres and up to 1.2 metres in width), hosted in or close to the contact between a granite and a dolerite dike.

The structure identified from the mapping and trenching program has a confirmed minimum length of 650 metres and remains open to both the NE and SW. Assays of grab and bulk samples have confirmed the high-gold grade nature of this prospect with results varying between 10g/t and 800g/t of gold.

The proposed diamond drilling program (refer Figure 1 below), will initially consist of 18 drill holes, and aims to test the down dip extension and gold grade of the vein. The drill holes will be located 50 metres apart along the strike (25NE), with 3 drill holes at each collar dipping 45, 65 and 85 degrees to the NW. This initial 18 hole program is expected to total approximately 3,000 metres and take in excess of 2 months to complete.

The first drill hole (CDDDH001) commenced on August 16<sup>th</sup>, and intersected a band of disseminated sulphide plus a series of milimetric fractures filled with massive pyrite hosted by a reddish medium-grained granite at a depth of 98 metres, of approximately 1 metre in thickness. Samples have been taken and dispatched for assay.



**Figure 1. Proposed drilling program at the Cidinha Gold Prospect.**

## Tamandua Gold Prospect

The Company has recently begun to explore the area immediately surrounding the Ze Vermelho prospect. The first target currently being tested is named “Tamandua” in reference to an animal native to the area, and is located approximately 2.3 kilometres to the NE of Ze Vermelho (see Figure 2 below).

Cougar’s geological field team has de-watered and trenched an old artisanal open pit at Tamandua, which in the mid 1990’s was mined to a depth of approximately 15 metres, along a strike of approximately 135 metres. The prospect reportedly contained high grade gold mineralisation, but work is rumoured to have finished due to safety concerns over steep and dangerous pit walls.

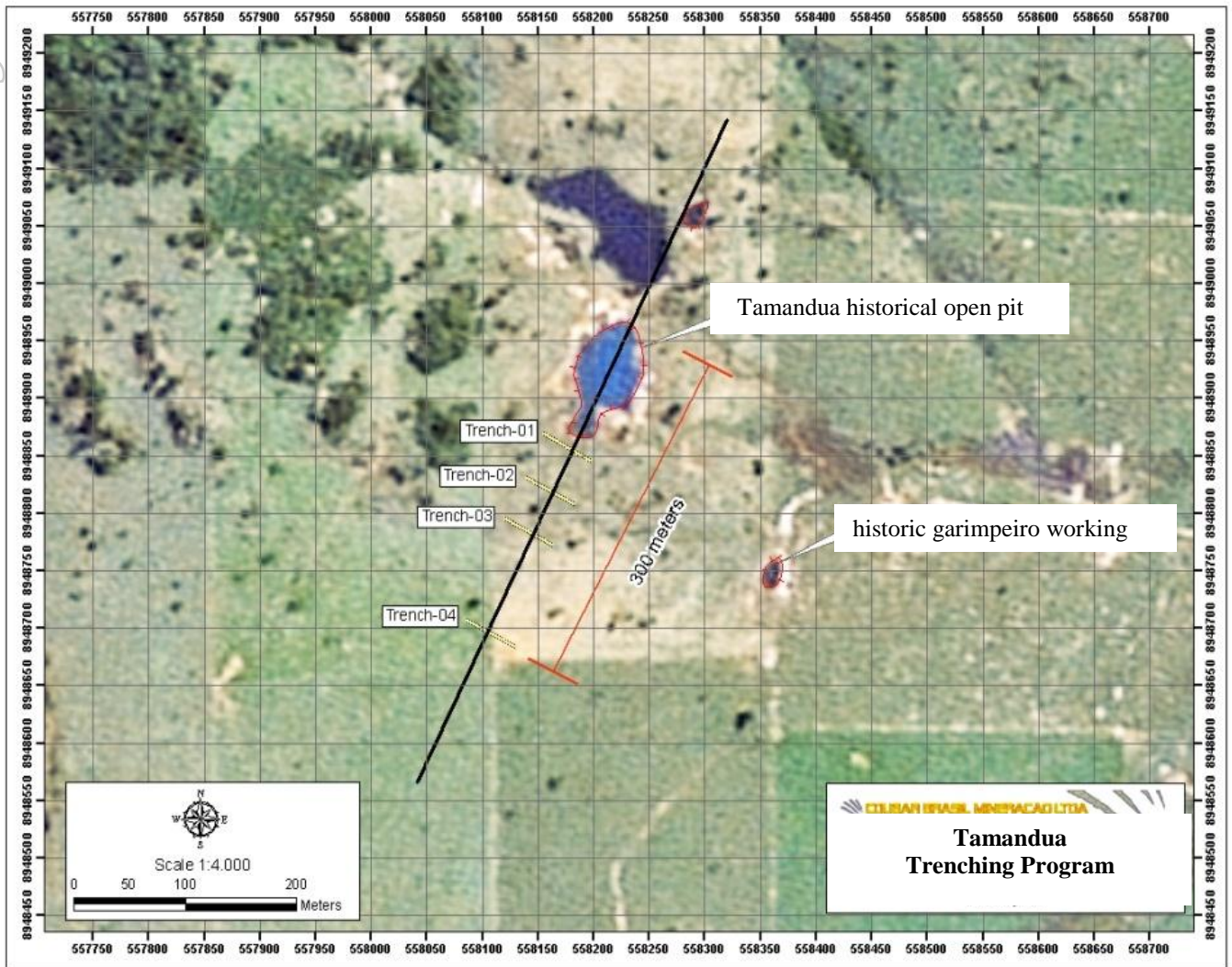


**Figure 2: Ze Vermelho and surrounding area including the Tamandua Target**

The geology of the Tamandua Gold Prospect consists of a granitic gneiss cut by a mylonitic shear zone, similar to that at Ze Vermelho, but with a strike of N10E.

### Tamandua Gold Prospect (continued)

As part of the exploration program at the Tamandua Gold Prospect, a series of four trenches (see Figure 3 below) were opened, mapped and sampled, and have so far confirmed an extension of the structure to the SW of over 300 metres. The extension remains open.



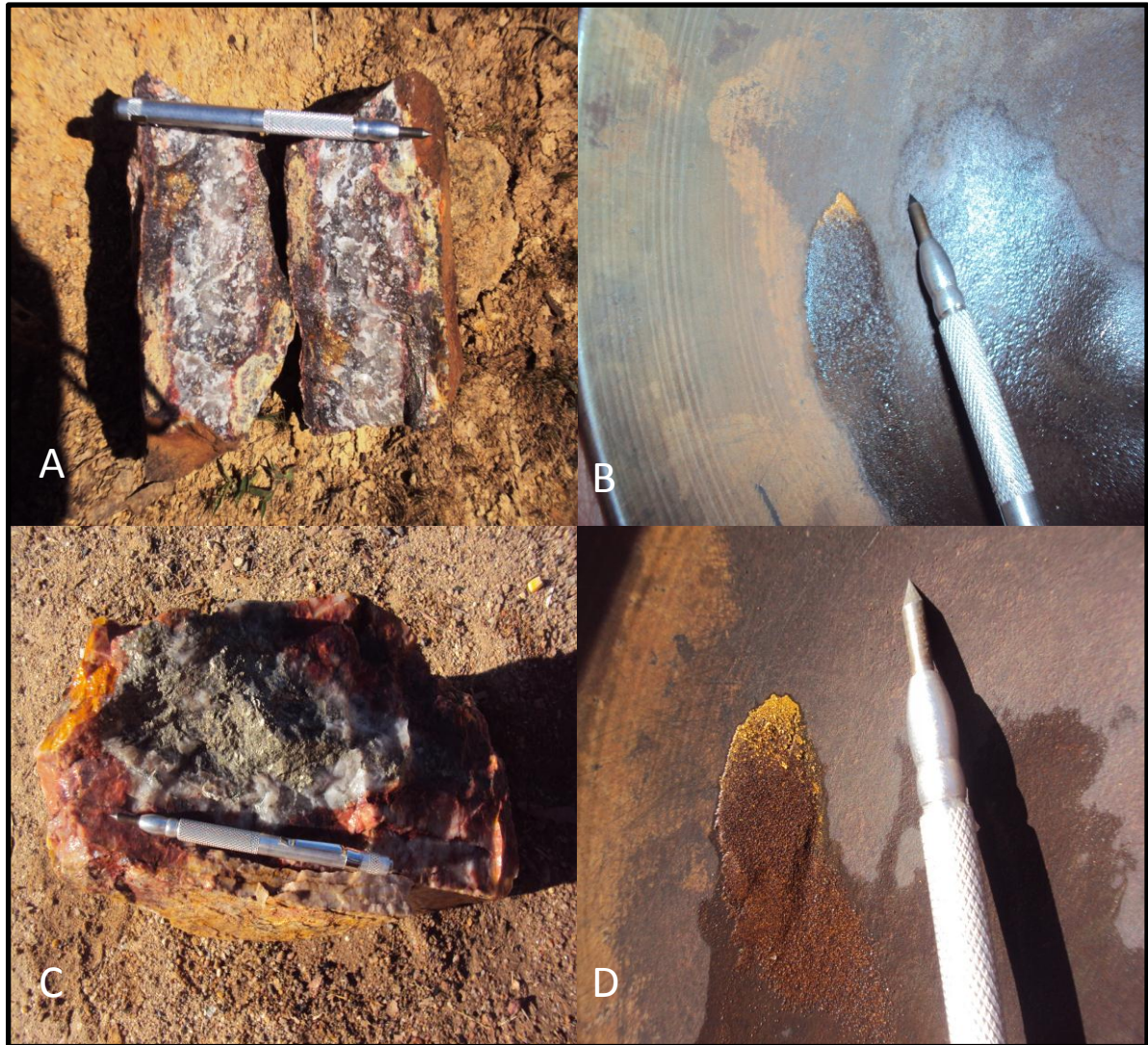
**Figure 3. Location map of the trenching program.**

Based on trench results, mineralisation at Tamandua consists of a narrow, iron stained quartz vein hosted by altered mylonite. The zone of quartz veining varies between 0.25 metres and 0.65 metres in width.

The mineralisation comprises both fine-grained free gold and gold within disseminated to massive blebs of pyrite.

### Tamandua Gold Prospect (continued)

Samples from the ore zone found in each trench were crushed and manually panned for an initial evaluation of their gold content. Panning of samples returned gold counts greater than 100 for most of the samples, which is indicative of high grade gold mineralisation based on Cougar's experience in the region.



**Figure 4. Samples from Trenching at Tamandua**

**Key:**

- A) Iron-stained quartz vein samples with free gold;**
- B) Corresponding colours of gold (>150 counts)**
- C) Massive pyrite bleb in quartz vein; and**
- D) Corresponding colours of gold (>300 counts).**

### Tamandua Gold Prospect (continued)

The Company is commencing an initial diamond drill program at Tamandua to test the down dip extension and gold grade of the mineralised structure. Five holes will be drilled, one beneath the old pit and four others aimed to intersect the structure beneath each trench as shown in Figure 5 below.

The first drill hole (TADDDH001) commenced on August 13<sup>th</sup> and intersected a 1.1 metre wide quartz vein containing low levels of pyrite starting at a depth of 87 metres. Samples have been taken and dispatched for assay.

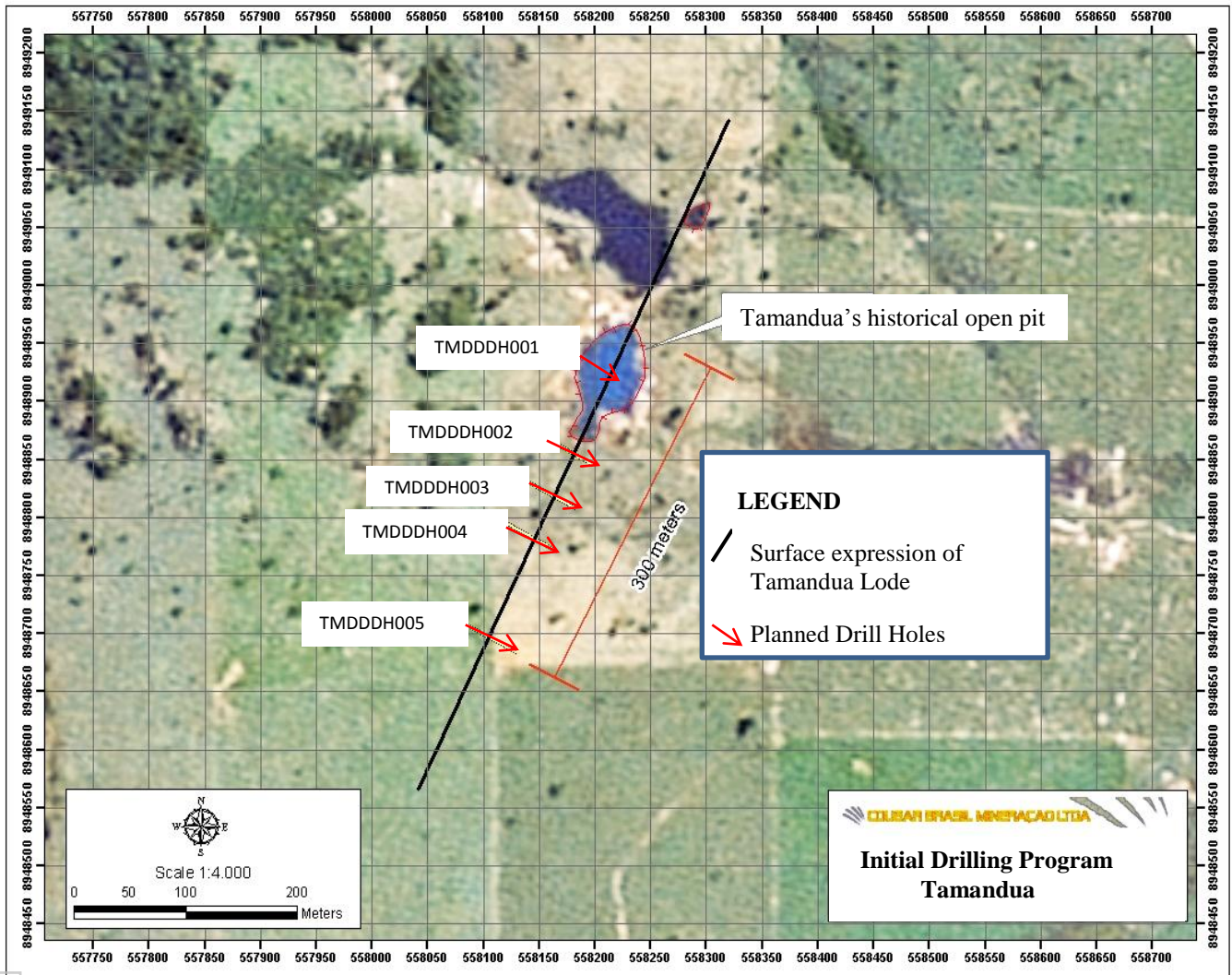


Figure 5. Location of current drilling program at the Tamandua Gold Prospect.

### Ze Vermelho Gold Prospect

In recent weeks, underground workings at the Ze Vermelho Gold Prospect has focused on the development of an up-dip drive (45\_220) to link the -74 level to the -54 level and the development of down-dip drive to link the -74 level to the -84 level (-45\_40). The -54 level was reached at the beginning of August and a horizontal drive to -54SE was immediately commenced.

On 13 August 2011 the -54SE drive reached a one (1) metre wide mineralised zone containing up to 85 cm of massive pyrite (see Figure 6 below). Gravity processing of the drive returned grades of 120 g/t of gold with a waste/ore ratio of 3:1. Channel samples from all advances have been collected and dispatched for assay.



**Figure 6. SE Face of -54 m level showing massive pyrite band.**

## Cyanide Leaching Circuit at Ze Vermelho

The Company has undertaken a series of metallurgical tests, all of which have indicated a recovery of greater than 80% of the gold contained in the gravity plant tailings at Ze Vermelho. The gold grades calculated during the test work confirm previous centrifuge overflow assay results, indicating a tailings head grade of approximately 33 g/t of gold.

The cyanide leaching infrastructure is nearing completion. Leaching and solution vats have been prepared and waterproofed with 1,000 micron membranes and it is expected that loading of the first vat will commence during the first week of September. The first batch to be leached is to be limited to 500 tonnes, with subsequent batches being varied in size according to results obtained.

The electro-winning and associated gold smelting circuit is nearing completion and is expected to be installed by mid-September. The set up and fine tuning of the system is expected to take up to 1 week. The first gold to be recovered from the Cyanide Leaching Circuit is expected in the last week of September.

For further information please call Michael Fry on 08 9381 1755 or email the undersigned at [r.swick@cgm.com.au](mailto:r.swick@cgm.com.au).



**RANDAL SWICK**  
Executive Chairman

*The information in this report that relates to exploration results is based on information compiled by Dr Christopher Stephens who is a consultant to the Company. Dr Stephens is Principal of CJ Stephens Consulting Pty Ltd is a member of the Australian Institute of Geoscientists (AIG) and the Australia Institute of Mining and Metallurgy (AusIMM). Dr Stephens 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 "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Stephens consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

### **About Cougar Metals NL:**

*Cougar Metals NL is a Perth based exploration company listed on the Australian Securities Exchange (ASX:CGM). The Company is focused on exploring the Alta Floresta Gold Project in central west Brazil, where past production is estimated at five million ounces of gold. The Company also operates growing mineral drilling businesses in Brazil and Uruguay, providing surface diamond, reverse circulation and RAB drilling services to the Brazilian and Uruguayan mining industries. The Company also holds the mineral rights to the Pyke Hill Measured plus Indicated Resources of 14.7mt @ 0.9% Ni and 0.06% Co (published March 2008).*