

ASX Announcement – 31 July 2011

No. of Pages: 11

# **QUARTERLY ACTIVITIES REPORT – JUNE 2011**

# **Highlights of the Fourth Quarter**

# Corporate

- US\$490k in repayments made to fully extinguish Uruguayan client advance
- Further debt repayments made balance at 30 June 2011 reduced to A\$378k.
- Appointed Michael Fry as CFO and Commercial Manager.

# Ze Vermelho

- 68.6 linear metres of exploration development achieved in June quarter.
- Chanel sampling from -74 level averaged 0.78m@104g/t, along 19m of drive.
- Nine holes for 957 metres of diamond core drilling completed during June quarter aimed at testing 'along strike' extension of Ze Vermelho; best intercepts 0.32 metres @ 140.4 g/t and 0.73m @ 16.4 g/t.
- June quarter gold sales of US\$1.19M from gravity treatment (YTD: US\$2.24M).
- Over 2,000 tonnes of gold rich tailings stockpiled for cyanidation.
- Ze Vermelho gravity processing plant upgraded.
- Cyanide circuit forecast to commence operations in September 2011.

# **Contract Mineral Drilling Divisions**

- Revenue of US\$5.59M; (YTD: US\$18.76M)
- All RC and Diamond rigs fully employed with an additional 2 rigs on hire.
- Demand outlook strong.
- Decision made to acquire 1 additional RC drill rig investment of approximately US\$750k
- Decision to construct additional RC drill rig for Brazilian market approximately US\$500,000.
- Decision reached to acquire up to 4 additional diamond drill rigs (investment of ~ US\$1.2M) subject to external financing arrangements.

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#### **Background**

Cougar Metals NL ("**Cougar**" or "**the Company**") holds an exploration portfolio consisting of the Pyke Hill Nickel/Cobalt Project in Western Australia and the Alta Floresta Gold Project in Brazil.

### Pyke Hill Project (Western Australia)

The Pyke Hill Project is located 40km southeast of the Murrin Murrin Nickel Operation in Western Australia. Cougar holds the nickel and cobalt laterite rights to the project, and in March 2008 published Measured plus Indicated Resources of 14.7 million tonnes grading 0.9%Ni and 0.06% Co for 131,621 tonnes of contained nickel metal (0.5% Ni cut-off).

### Alta Floresta Project (Mato Grosso, Brazil)

The Alta Floresta Project is located within the Southern Amazon Craton in the northern portion of Mato Grosso State in central west Brazil (refer to Figure 1). The Project comprises three groups of tenements covering approximately 1,450km<sup>2</sup> and distributed over a 330km long portion of the Alta Floresta gold belt ("AFGB"). Government records estimate past production from the AFGB in excess of five million ounces of gold, overwhelmingly via the processing of alluvial and shallow high grade quartz veins by garimpeiros (artisanal miners). The tenement groups are, from southeast to northwest, located in the Peixoto, Paranaita and Apiacas regions.



Figure 1: Location of Alta Floresta Project in Mato Grosso State, Brazil

# **Exploration Update**

### Pyke Hill

No new work was conducted during the Quarter. The Company continues to seek third parties who may have an interest in participation in the project.

# Ze Vermelho Prospect – Paranaita

The Ze Vermelho Prospect is currently the most advanced prospect in the Company's portfolio.

The Prospect consists of an historic open pit and underground workings consisting of four shafts were sunk, the most significant of which extended approximately 50 metres underground. The Prospect was worked in the early 1990's but reportedly a family dispute and the plummeting gold price led to it being abandoned. Records reveal that the production from the open pit was approximately 70,000 ounces.

Earlier this financial year, Cougar oversaw the de-watering of the underground workings and clearing of debris, in order to undertake underground sampling under a trial mining licence.

As part of the exploration process the Company established its own gravity processing plant. Laboratory testing and operations to date evidence that the gravity treatment of the ore is recovering approximately 45% of the contained gold. The Company is currently in the process of building a cyanidation plant to treat the gravity circuit tailings. Approximately 2,000 tonnes of tailings have already been stockpiled and await treatment.

During the June quarter the Company completed 68.6 linear metres of exploration drive development, comprising:

- 4.4 linear metres to the north-west on the -64 level;
- 7.5 linear metres of rising at 45\_220, from the -74 level towards the -20 level (currently at -54 metres);
- 10.37 linear metres of decline to link the -64 level to the -74 level (drive 40\_45); and
- 43.97 linear metres of development drive on the -74 level, consisting of 22.94 linear metres to the north-west and 21.03 linear metres to the south-east. (See Figure 2 below).

The mineralised structure at the -74 level is similar to what was observed at the -64 level consisting of a quartz vein showing varied degrees of sulphide dissemination.

It has been confirmed that the gold grade is proportional to the amount of contained pyrite so that when a massive pyrite band is encountered a bonanza gold grade can be expected.

A massive pyrite band was consistently encountered in the first 19 m to the north-west of -74 level (see Figure 1 below). The structure continues to pinch and swell up to 1.51 metres in width.



Figure 1: Mineralised structure at -74 level, 16.17m to NW.

The high gold grade nature of the Ze Vermelho mineralised structure continues to be confirmed through assays of channel samples systematically taken at each advance. Thirty-two (32) samples taken at the -74 level returned an average grade of 104 g/t for a mean vein width of 0.78m.

These assays are shown in the table below.

Drive	Collected face	Location ( m from the beginning of the drive)	Vein Width (m)	Au Grade (g/t)	
40_45	NE	2.25	0.64	87.8	
40_45	NE	4.52	0.65	131.4	
40_45	NE	5.62	0.9	89.8	
40_45	NE	5.9	1.29	110.8	
40_45	NE	7.03	1.52	80.1	
40_45	NE	7.93	1.23	39.7	
40_45	NE	10.37	0.55	8.9	
74	NW	1.4	1.23	166.8	
74	NW	2.48	1.01	177.5	
74	NW	3.9	0.94	63.9	
74	NW	5.42	0.68	60.9	
74	NW	7.26	0.52	108.7	
74	NW	8.4	0.35	156.2	
74	NW	10	0.61	159.2	
74	NW	11.4	0.61	122.0	
74	NW	12.75	0.81	329.9	
74	NW	13.44	0.81	302.8	
74	NW	14.93	0.71	263.5	
74	NW	16.17	0.54	415.6	
74	NW	17.63	0.41	306.8	
74	NW	19.1	0.35	207.8	
74	SE	1.01	1.01	27.7	
74	SE	2.38	1.12	5.4	
74	SE	2.9	1.01	2.4	
74	SE	3.54	0.94	2.8	
74	SE	4.6	0.76	10.9	
74	SE	5.72	0.66	3.2	
74	SE	6.8	0.71	0.8	
74	SE	7.9	0.71	1.8	
74	SE	8.4	0.63	2.0	
74	SE	11.1	0.79	1.3	
74	SE	12.7	0.51	3.5	
74	SE	13.63	0.56	0.5	

 Table 1: Assay results from recent channel samples collected

Note: Location refers to the distance in metres from the beginning of the drive, at the decline intercept



Selected assay results overlaid against prior results are reflected in the diagram below:

Figure 2: Long section of Ze Vermelho Trial Mine Workings to date.

# **Exploration Drilling**

The drilling program aims to evaluate the extension of the mineralized structure both along the strike and down dip of Ze Vermelho. To date eleven (11) drill holes have been completed totaling 1,490 metres. Results for the first nine (9) holes have now been received with the most significant intercepts being as follows:

HOLE_ID	EAST	NORTH	DIP	AZIMUTH	FROM (m)	TO (m)	WIDTH (m)	Au (g/t)
ZV-DDH-01	556795	8947215	-60	220	60.00	60.50	0.50	19.0
ZV-DDH-02	556795	8947215	-65	220	58.68	58.80	0.12	17.0
ZV-DDH-03	556795	8947215	-70	220	61.11	61.84	0.73	16.4
ZV-DDH-06	556772	8947246	-90	230	87.55	87.80	0.25	6.5
ZV-DHH-07	556772	8947246	-83	230	81.26	81.58	0.32	140.4
ZV-DHH-08	556816	8947289	-75	230	77.46	78.21	0.75	10.5
ZV-DDH-09	556816	8947289	-90	230	94.52	95.12	0.60	9.9

 Table 2: Selected exploration drill hole intercepts at Ze Vermelho

It is noted that the Ze Vermelho structure was intersected in holes 001, 002, 003, 006, 007, and 011, and confirmed the pinching and swelling nature observed within the underground workings. Drill holes 005 and 010 did not intersect the structure while holes 008, 009 and 011 intersected what is interpreted to be shallower and cross-cutting mineralized structures.

# Gold production

The gravity processing plant was upgraded during June with the addition of a third hammer mill and a second centrifuge. This upgrade aimed to raise the processing rate from the actual 350-450 t/month up to 600-650t/month. This upgrade was completed successfully with processing rates increased up to a maximum of 30 tonnes per day.



<u>Figure 3: The Ze Vermelho gravity processing plant with the Castanha-do-Para Tree</u> (Brazil Nut) which stands at the entrance to the site.

For the quarter, 1066 t of ROM was gravity processed which yielded 23,249g of gold at a mean recovered grade of 21.8 g/t of gold. Revenue by way of gold sales for the quarter was US1.186 M.

A systematic sampling of the centrifuge overflow has been implemented since the beginning of June to evaluate the tailing's grade for cyanidation treatment.

Results for the first batch of nine (9) samples (see Table 2 below) returned a mean gold grade of 28.72 g/t which compared with the mean gravity gold grade implies a recovery rate of 45%.

Sample	Date of collecting	Type of sample	Au (g/t)
130199	6/6/2011	Centrifuge overflow	17.6
130201	7/6/2011	Centrifuge overflow	20.9
130202	8/6/2011	Centrifuge overflow	18.1
130203	9/6/2011	Centrifuge overflow	2.1
130204	14/6/2011	Centrifuge overflow	67.9
130205	15/6/2011	Centrifuge overflow	48.4
130206	16/6/2011	Centrifuge overflow	7.8
130207	17/6/2011	Centrifuge overflow	22.4
130208	18/6/2011	Centrifuge overflow	53.2

Table 2. Assays for centrifuge overflow samples.

An estimated 2,000 tonnes of tailings grading an estimated 30-40g/t are now stockpiled awaiting cyanidation.

# Cyanidation Program Status

The commencement of cyanidation of tailings has been delayed from late July to early September as a result of equipment and contractor availability. Additionally, further test work is underway to clarify some metallurgical characteristics.

Currently the leaching and pregnant solution tanks have been constructed and lined with a geo-membrane. The cyanidation laboratory is currently under construction with an estimated completion date of mid-August.

Equipment for cyanidation desorption has been ordered and is expected to be delivered on site by early August.

### Peixoto de Azevedo:

Subsequent to the quarter a drilling program at the Cidnha prospect near Peixoto de Azevedo, MT has been planned. It is expected that a GeoLogica Sondagen's diamond drill rig will mobilise to the area in August and commence a drilling program of approximately 1500 to 2000m.

A trenching program conducted in 2010 returned significant results over a strike length of approximately 850m as shown in the table 3 below.

Sample No	Easting (mE)	Northing (mN)	Au (g/t)	Detailed Description
120024	26941	13156	27.4	0.45 m wide Quartz vein with 5% pyrite
120025	26941	13154	20.8	0.56 m wide Quartz vein with 5% pyrite
CPTR002	26999	13238	200.0	2 kg of 0.55 m wide quartz vein sample
CPTR002A	26999	13238	14.0	293 kg of 0.55 m wide quartz vein sample
120016	27053	13304	4.2	0.80 m wide Quartz vein with trace pyrite
CPTR001	27084	13340	800.0	2kg of 0.60 m wide quartz vein sample
CPTR001A	27084	13340	21.0	333 kg of 0.60 m wide quartz vein sample
120012	27141	13312	4.9	10 cm wide quartz vein
120019	27184	13578	1.7	1.20 m wide Quartz vein with trace pyrite
120018	27220	13572	2.9	0.35 m wide Quartz vein with trace pyrite
120001	27594	13704	90.0	Float Quartz vein fragments
120003	27594	13714	49.0	Float Quartz vein fragments
120002	27598	13716	3.05	Float Quartz vein fragments

Locations in Cidinha Local Grid

Table 3: Significant Rock Chip, Channel and Bulk Sampling Gold Assay Results, PeixotoDistrict, Alta Floresta Gold Project

# MINERAL DRILLING BUSINESS ACTIVITIES

#### Background

Cougar's owns two contract drilling companies, GeoLogica Sondagens Ltda ("GeoLogica") and Palinir S.A. trading as Cougar Drilling Services – Uruguay ("CDS"), who service the mining sectors in Brazil and Uruguay respectively. Both companies provide rotary air blast ("RAB"), reverse circulation ("RC") and diamond drilling ("DD") services.

### **Mineral Drilling Business Activity**

### Brazil – GeoLogica Sondagens

Revenue for the June Quarter was US\$1.63M compared to US\$1.51M for the March Quarter.

During the quarter, GeoLogica operated three surface diamond rigs and one RC rig on third party contracts.

In addition, GeoLogica provided diamond drilling services (utilising one (1) surface diamond drill rig) to the Ze Vermelho prospect valued at approximately US\$200k. It is expected that this drill rig will continue throughout the remainder of calendar year 2011.

The company's RAB rig was deployed to Cougar's areas in Peixoto however it was deemed unsuitable due to the ground conditions and demobilised to Belo Horizonte.

Demand for drilling services in Brazil remains high and the Company is currently negotiating new work on several fronts.

# Uruguay – Cougar Drilling Services Uruguay

Revenue for the quarter was US\$3.96M compared to US\$3.82M for the previous Quarter; representing continued strong performance.

During the quarter, two additional contracts were won within Uruguay, however income levels are expected to remain relatively constant as the number of rigs in work will remain unchanged.

All rigs remain fully employed on a 24/7 basis with the exception of one RC drilling machine that has had significant mechanical issues. This machine is currently being repaired before an expected return to work in September.

# Expansion of Drill Fleet

In light of the demand outlook for drilling services in South America and specifically for the services offered by Cougar's drilling businesses, a decision has been made to acquire 1 additional RC drill rig at a cost of approximately US\$750,000. The drill rig will be shipped to Uruguay initially and should be operational by October 2011. It will be funded from internal cash-flow.

Additionally the company has purchased components to commence the construction of a further RC machine to service the Brazilian market, to be undertaken at its workshop facility in Uruguay. These components are in the United States and expected to ship to Uruguay mid to late August. The construction will be funded through internal cash flow at an estimated cost of US\$500,000.

A decision has also been made by the Group to acquire up to four (4) new surface diamond drill rigs at an aggregate cost of US\$1.2M, subject to appropriate financing arrangements. Options for funding of these rigs are currently being evaluated including vendor finance, client advance and local bank support.



Figures 4 and 5:Cougar Drilling Services diamond drilling and RC drilling operations in Uruguay.

# **CORPORATE ACTIVITIES**

#### **Extinguishment of Client Advance**

Prior to drilling commencing in July 2010, Cougar's Uruguayan drilling business (Palinir S.A.) received US\$2.6m in advance payments to assist it in sourcing drilling rigs and support equipment specific to what would be required to undertake the agreed drilling program.

From August 2010, Palinir S.A. has been making monthly repayments in reduction of this client advance. During the quarter the last repayment was made; accordingly this debt is now fully extinguished.

### Senior Executive Appointment - Michael Fry

Effective 4 July 2011, Michael Fry joined the Group as Chief Financial Officer and Commercial Manager. Michael is very experienced in the management and operation of drilling companies having been Finance Director and Chief Financial Officer for Swick Mining Services Ltd, a company with drilling operations in Australia and North America.

# PLANNED ACTIVITIES FOR THE NEXT QUARTER

#### Exploration

- Continuation of exploration development and drilling at Ze Vermelho towards a JORC compliant resource statement
- Completion and commissioning of cyanidation circuit at Ze Vermelho
- Planning and implementation of induced polarisation aerial survey at Ze Vermelho and surrounding areas
- Commencement of diamond drilling at the Cidinha prospect Peixoto de Azevedo

### Mineral Drilling Business

- Continuation of current drilling activities in Brazil and Uruguay and neighbouring countries.
- Importation of RC rig and additional components to Uruguay

For further information, please contact the undersigned on +61 8 9381 1755.

Yours faithfully

Randal Swich

**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.

The information in this report that relates to Mineral Resources has been compiled by Mr Paul Payne. Mr Payne, is a Member of the Australasian Institute of Mining and Metallurgy, is a full time employee of Runge Limited and has sufficient relevant experience to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Payne consents to the inclusion in this document of the matters based on his information in the form and context that the information 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).