


 ASX: EQX | 24 April 2012 | **ASX RELEASE**

EXCELLENT MAGNETITE METALLURGICAL TEST RESULTS RECEIVED FOR MAYOKO-MOUSSONDJI

HIGHLIGHTS

- Excellent Davis Tube Recovery ("DTR") results have been received for the magnetite banded iron formation ("BIF") at the Mayoko-Moussondji Iron Project.
- The DTR results returned concentrates with high iron grades (69% Fe) and mass recoveries (50%) with very low levels of silica, alumina, sulphur and phosphorus.
- Significant DTR results from the individual drillholes included:
 - 82m from 141m at an average recovery of 49.5% mass to concentrate and a concentrate grade of 68.6% Fe, 4.1% silica and 0.14% alumina from hole MMKDD002;
 - 50m from 93m at an average recovery of 50.2% mass to concentrate and a concentrate grade of 69.4% Fe, 3.2% silica and 0.06% alumina from hole MMKDD005.
- The results demonstrate that the magnetite iron mineralisation at Mayoko-Moussondji has the potential to be upgraded using simple magnetic separation to produce a high quality concentrate product at a relatively coarse grind size (80% passing 63 microns) and with very high mass and iron recoveries.

Equatorial Resources Limited ("Equatorial" or "Company") is pleased to announce excellent metallurgical testing results from magnetite mineralisation at its 100% owned Mayoko-Moussondji Iron Ore Project ("Mayoko-Moussondji" or the "Project") in the Republic of Congo ("ROC").

Head	DTR Concentrate Results							
Fe	Mass	Fe	Fe	SiO ₂	Al ₂ O ₃	P	S	LOI
%	Recovery	Recovery	%	%	%	%	%	1000 ^o C
36.3	49.8	91.4	68.9	3.7	0.11	0.010	0.013	-3.1

Table 1: DTR Concentrate Results

Equatorial's Managing Director and CEO, Mr John Welborn, said: "While our immediate development plan is focused on the DSO potential of Mayoko-Moussondji these results demonstrate the superb characteristics of the underlying magnetite mineralisation. The results are superior to other regional and international magnetite projects and confirm the significant advantages and massive project mine life potential represented by the large magnetite ore body being delineated at Mayoko-Moussondji. We are very encouraged as this is the first step of a comprehensive metallurgical testing program designed to demonstrate the potential for our project to produce a range of premium iron products."

Mayoko-Moussondji Geology and Drilling Program

Mayoko-Moussondji consists of five main iron ore prospects with an aggregate prospective strike length of over 46km. Modeling of airborne magnetic data collected in 2010 resulted in an initial global exploration target for Mayoko-Moussondji of between 2.3 – 3.9 billion tonnes at 30% to 65% Fe¹ (refer ASX announcement 30 November 2010 for details). The global exploration target is comprised of:

- Potential enriched “hematite cap” iron mineralization estimated to range between 500 to 900 million tonnes at a grade of 40% to 65% Fe; and
- Magnetite mineralization estimated to range between 1.8 to 3.0 billion tonnes at a grade of 30% to 45% Fe.

The current drilling program underway at Mayoko-Moussondji is designed primarily to target potential DSO mineralisation and oxide iron mineralisation that is easily upgradeable to a premium product contained within the enriched weathered zone of the substantial BIF mineralisation at the Makengui Prospect (“Makengui”). Makengui represents approximately 12km of the 46km of prospective strike at Mayoko-Moussondji and is located 500 metres from the operational railway line that leads directly to the deep water port of Pointe-Noire.

The Company previously advised the market of drilling results from Mayoko-Moussondji (refer ASX Announcements dated 5 October 2011 and 15 March 2012) which included significant intercepts of magnetite banded iron formation (“Magnetite BIF”) which underlays the well-developed enriched iron oxide caps with the potential to host direct shipping ore (“DSO”).

While the aim of the current drilling is primarily to define a resource within the enriched iron cap, a number of drill holes are being extended at depth with the aim of investigating the extent of the magnetite mineralisation and to source assay and metallurgical samples. Samples selected for DTR testing were extracted from drill holes MMKDD002 and MMKDD005 drilled at Makengui (refer Figure 1).

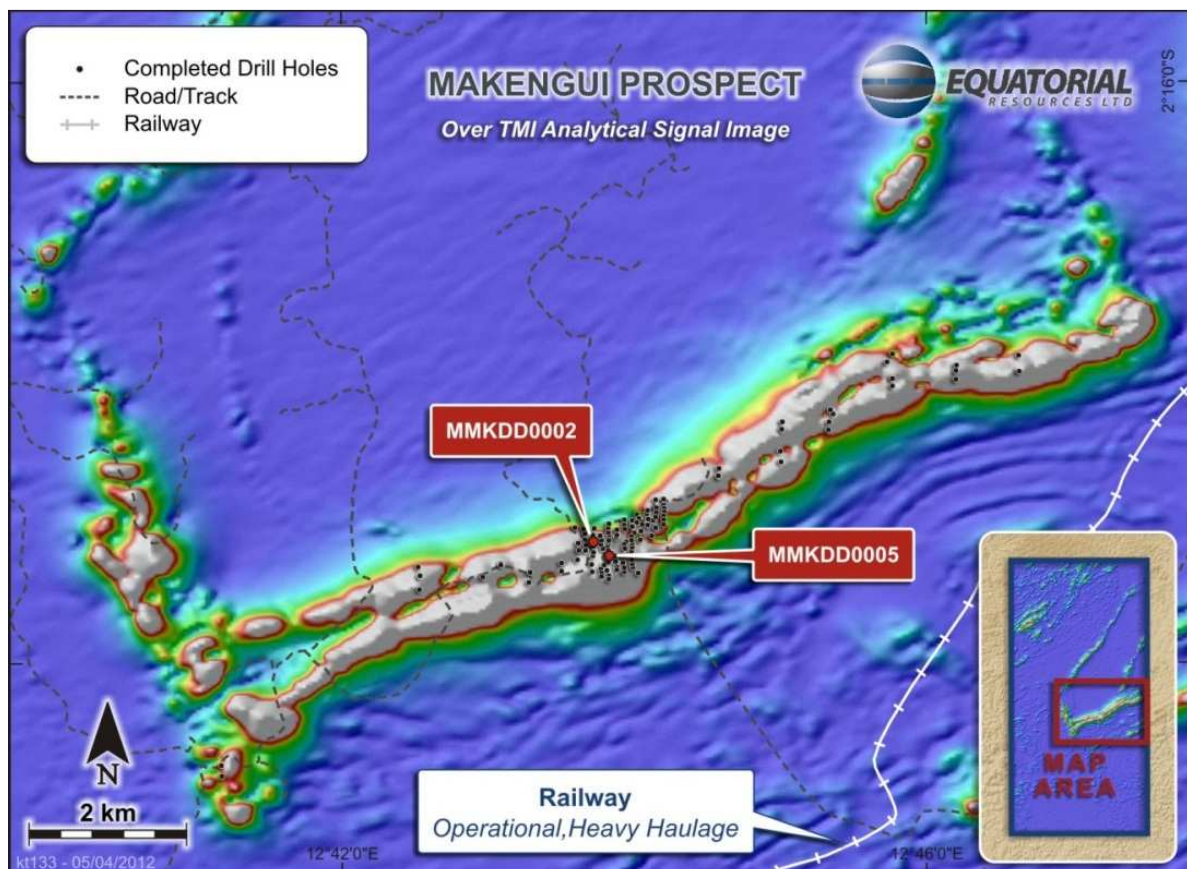


Figure 1: Makengui Prospect Drill hole Location Plan

¹ Exploration Targets: The estimates of exploration target sizes mentioned in this announcement should not be misunderstood or misconstrued as estimates of Mineral Resources. The potential quantity and grade of the exploration targets are conceptual in nature and there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

Based on the completed drilling the following potential ore types are now recognised (refer Figure 2):

- **DSO (Zone 1):** Shallow enriched hematite mineralisation grading above 55% Fe which is capable of producing a quality saleable product after simple crushing and screening;
- **pDSO (Zone 2):** Enriched loose and friable hematite-magnetite mineralisation with a grade of between 40% Fe and 55% Fe that has the potential for simple beneficiation to a premium product;
- **Colluvial (Zone 3):** Erosion of the DSO and pDSO has resulted in the deposition of colluvial iron mineralisation with a grade of between 40% and 60% Fe on the flanks of hillsides and as valley fill.
- **Magnetite (Zone 4):** – fresh magnetite BIF with a grade of between 30% Fe and 40% Fe. This includes material previously recognised as 'transitional', now included with the magnetite as it is likely that it would be processed via the same process flowsheet.

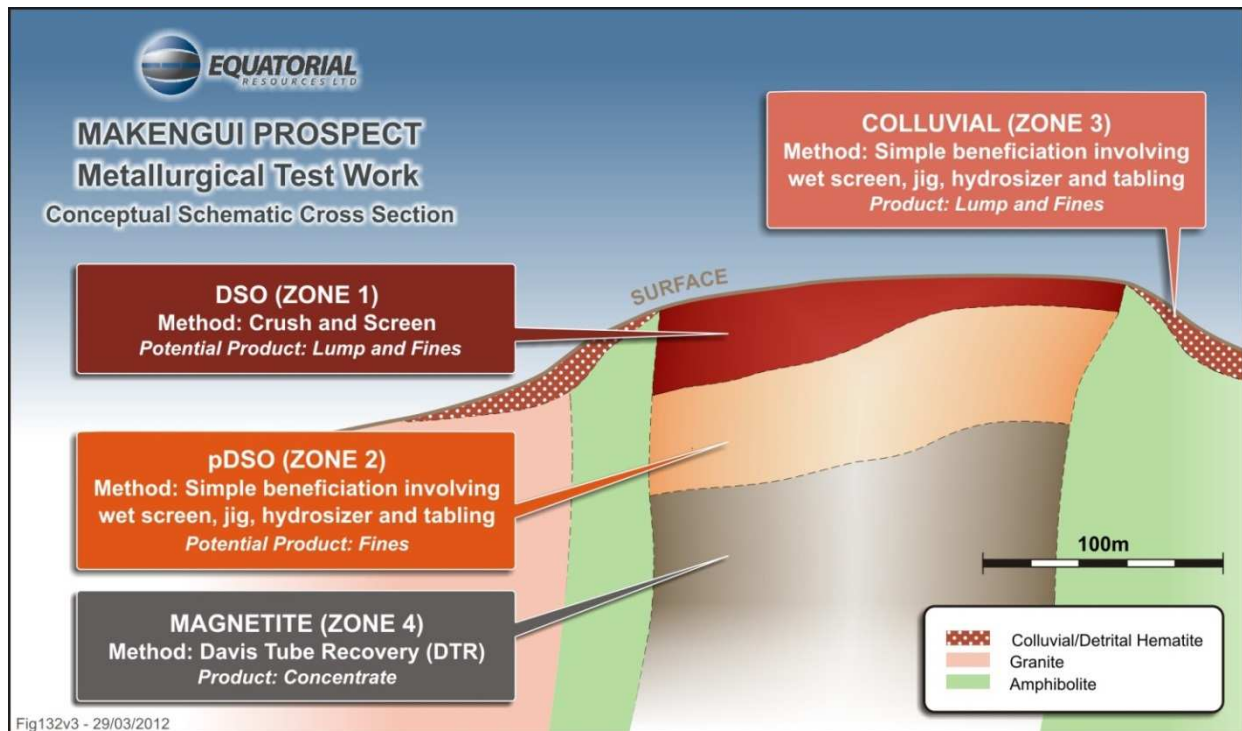


Figure 2: Schematic Section Makengui Deposit

Metallurgical Test Program and Mayoko-Moussondji Product Potential

Equatorial's metallurgical testing program has been designed to demonstrate the potential for the ore types identified at Mayoko-Moussondji to produce a range of premium iron ore products. Highly experienced iron ore metallurgist Dr John Clout has been engaged as the Company's Chief Metallurgical Consultant and is in charge of the testing program.

Dr Clout has over 19 years of experience in iron ore characterisation, beneficiation, process plant flowsheet design, sintering, lump quality for the blast furnace, pelletising as well as iron ore technical marketing. Dr Clout has worked for the CSIRO conducting industry-focused projects and more recently played a leading role in the development of Fortescue Metals Group Ltd as Head of Resource Strategy and General Manager R & D.

The Company's current metallurgical testing program has been categorised into distinct work programs based on the different types of mineralisation at Mayoko-Moussondji.

The program is progressing well as shown in Table 2 below.

Ore Type	Test Work	Progress	Results
DSO (Zone 1)	Bulk samples/core	Bulk Samples collected	Expected H2 2012
pDSO (Zone 2)	Bulk Samples and core	Bulk samples collected, testing of core samples underway	Expected May/June 2012
Colluvium (Zone 3)	Bulk Samples	Bulk samples collected Initial tests completed	Expected April 2012
Magnetite BIF (Zone 4)	HQ Core	Initial DTR tests complete	Received and attached

Table 2: Summary of Mayoko-Moussondji metallurgical testing program

Further metallurgical and product quality test work will occur on drill core samples and bulk samples of all mineralisation types over the coming months. Larger bulk samples will allow for extensive upgradability testing, lump conditioning and product sinter and lump quality testing.

Davis Tube Recovery Results

Final DTR results have been received from 33 fresh magnetite BIF samples from drill holes MMKDD002 and MMKDD005 drilled at the Makengui Prospect (refer Figure 1). DTR testing is a standard laboratory-scale method of magnetic separation used for assessing the quality and quantity of concentrate that can be produced from magnetite mineralisation by using a simple separation process.

Samples were selected for DTR testing based on geological logging data and field magnetic susceptibility test results. Each DTR sample selected represented a nominal 4m downhole intersection through fresh magnetite BIF.

After initial head assay analysis was completed on the samples by SGS Mineral Services in South Africa, the samples were sent to SGS Lakefield Oretest ("SGS Lakefield") in Perth, Australia, for standard DTR testing. This was preceded by testing to select an optimal grind size required to produce a high grade magnetite concentrate with less than 5% combined silica and alumina.

Details of the results are included in Table 3 below. A grind size of 80% passing 63µm (microns) was selected as it produced a high quality concentrate which averaged 49.8% mass recovery to concentrate, 68.9% Fe, 3.7% silica and 0.11% alumina. The mass and Fe recoveries are exceptionally high, remarkably consistent throughout the individual samples tested and are thought to simply reflect the consistent grain size of the magnetite and the low levels of any other Fe-bearing mineral reporting to the non-magnetic fraction.

The DTR results demonstrate that the magnetite iron mineralisation at Mayoko-Moussondji has the potential to be beneficiated using simple magnetic separation to produce a high quality concentrate product with low impurity levels and very high mass recoveries using a relatively coarse grind size of 63 µm.

Collar Location				Hole Details			Intersection			Head	DTR Concentrate Results							
Hole ID	Easting	Northing	RL	Dip	Azimuth	Length	From	To	Interval	Fe	Mass Recovery	Iron Recovery	Fe	SiO ₂	Al ₂ O ₃	P	S	LOI
UTMWGS84 Z33SH				Degrees	Metres		Metres			%	%	%	%	%	%	%	%	1000°C
MMKDD002	247407	9743421	712	-61	180	231	141	223	82	35.6	49.5	90.4	68.6	4.1	0.14	0.011	0.018	-3.1
MMKDD005	247611	9743249	791	-60	360	150	93	143	50	37.5	50.2	93.1	69.4	3.2	0.06	0.009	0.005	-3.0
							Average			36.3	49.8	91.4	68.9	3.7	0.11	0.010	0.013	-3.1

Table 3: DTR Results

Notes:

1. Sample intervals are 4m composites except where sample length was adjusted to correspond to lithological boundaries.
2. Each composite sample was individually tested for DTR, intercepts are length weighed averages.
3. Intersections are downhole measurements and do not represent true thickness.
4. DTR testing was carried out at SGS Lakefield in Perth, Australia with chemical analysis of concentrate samples by x-ray fluorescence spectrometry (XRF).
5. Original head assay intersection of magnetite interval in hole MMKD0002 reported 5 October 2011 included 2 samples totaling 5.44m of unmineralised pegmatite. These 2 samples were not subjected to DTR testing and the head Fe% included in the table above has been adjusted to exclude the head Fe% results from the 2 pegmatite samples to ensure the comparison with DTR results is equivalent.
6. Head samples were ground using a standard ring mill grinding procedure with check sizing measurements performed.
7. DTR samples were sourced from two holes in close proximity and the results may not be consistent with magnetite BIF samples collected from other parts of the Makengui Prospect or other prospects of Mayoko-Moussondji.
8. The results do not represent intersections that traverse the entire width of the magnetite BIF mineralisation in this part of the Makengui Prospect.



Figure 3: Magnetite BIF from hole MMKD0002 at the Makengui Prospect

Peer Comparison

The DTR results from Mayoko-Moussondji compare very favourably with a selection of peer magnetite deposits, as summarised in Table 4. In particular the mass recovery to concentrate is exceptional and, if replicated in a full-scale magnetite processing plant, would represent significantly higher production of magnetite concentrate from each tonne of ore processed when compared to the majority of the peer deposits. The grind size of 63µm required to produce a quality concentrate also compares favourably with other deposits, in particular those from Western Australia.

Company	Project	Grind Size (P80 µm)	Mass Recovery %	Fe %	Concentrate Grades			
					SiO ₂ %	Al ₂ O ₃ %	S %	P %
Equatorial	Mayoko	63	49.9	68.9	3.7	0.11	0.01	0.01
Xstrata	Mauritania	80	45.2	70.2	1.8	0.22	n/a	n/a
African Iron	Mayoko	59-65	39.3	69.4	3.1	0.22	0.03	0.01
Bellzone	Kalia	65	32.0	68.7	3.9	0.14	0.32	0.01
Xstrata	Zanaga	65	33.6	66.1	4.5	0.20	n/a	n/a
Gindalbie	Karara	35	40.7	68.8	4.2	0.08	0.08	0.01

Table 4: DTR Peer Results Comparison

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The information in this report that relates to Exploration Results, other than Metallurgical Test Results and Geophysical Exploration Results, is based on information compiled by Mr Sean Halpin, who is a member of the Australian Institute of Geoscientists. Mr Halpin is a full time employee of Equatorial Resources Limited. Mr Halpin 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 Halpin 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 Metallurgical Test Results is based on information compiled by Dr John Clout who is a Fellow of the Australasian Institute of Mining and Metallurgy. Dr Clout is a consultant to Equatorial Resources Limited. Dr Clout 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'. Dr Clout consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

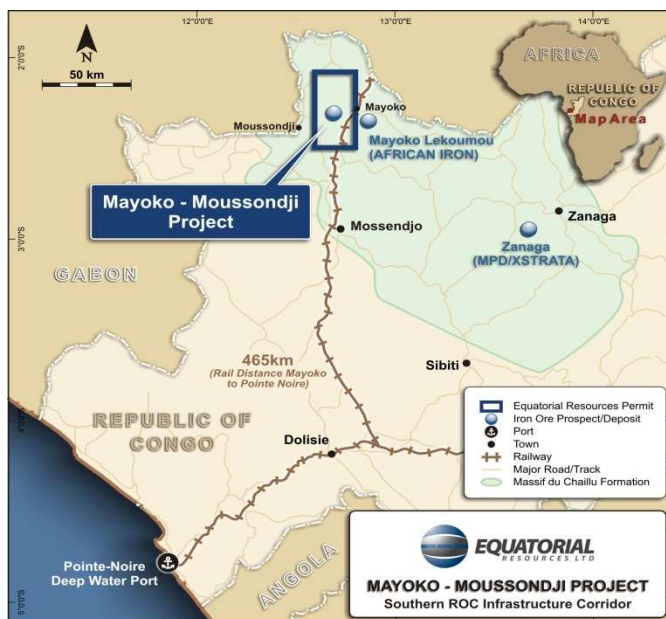
The information in this announcement that relates to Geophysical Exploration Results is based on information compiled by Mr Mathew Cooper (B.App.Sc (Geophysics) Hons.) of Resource Potentials Pty Ltd, who was engaged by Equatorial Resources Limited to provide geophysical consulting services. Mr Cooper is a member of The Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralization 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 Cooper consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

ABOUT EQUATORIAL RESOURCES

Equatorial Resources Limited (ASX:EQX), is focused on the exploration and development of two 100% owned potentially large-scale iron ore projects located in the politically stable and investment friendly Republic of Congo ("ROC") in the emerging global iron ore province of Central West Africa.

The **Mayoko-Moussondji Iron Project**, located in the southwest region of the ROC, has an estimated global exploration target of between 2.3 and 3.9 billion tonnes¹ of iron mineralisation at a grade of 30% to 65% Fe. The project has access to a rail line running directly to the deep-water port of Pointe-Noire, where the Company's operational office is located.

The **Badondo Iron Project**, in the northwest region of ROC, has an estimated global exploration target of between 1.3 and 2.2 billion tonnes¹ of iron mineralisation at a grade of 30% to 65% Fe. The project is located within a regional cluster of world-class iron ore exploration projects including Sundance Resources' Mbalam and Nabeba projects.



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¹ *Exploration Target: The estimates of exploration target sizes mentioned in this announcement should not be misunderstood or misconstrued as estimates of Mineral Resources. The potential quantity and grade of the exploration targets are conceptual in nature and there has been insufficient exploration to define a Mineral Resource in accordance with the JORC Code (2004) guidelines. Furthermore, it is uncertain if further exploration will result in the determination of a Mineral Resource.*