

Date 21<sup>st</sup> July 2009

Manager Announcements  
Company Announcements Office  
Australian Stock Exchange Limited  
10th Floor, 20 Bond Street  
SYDNEY NSW 2000

*Via electronic lodgement*

Dear Sir/Madam,

## **DISCOVERY OF 5KM LONG URANIUM ANOMALY 8KM NORTH OF NJAME, ZAMBIA**

### **HIGHLIGHTS:**

- A 5km long and up to 0.6km wide uranium anomaly has been discovered in the Siamboka prospect, approximately 8km north of the Company's Njame uranium deposit.
- The uranium anomalism is associated with siltstones and sandstones similar to those which host uranium mineralisation at Njame.
- Geological mapping indicates that Siamboka may occur on the fault-offset, strike continuation of the Njame stratigraphy.
- Infill sampling has commenced at the Siamboka target to assist with the planning of a drilling programme.
- Reverse circulation percussion drill testing will commence at the Siamboka target in September.
- Drill testing of the Siamboka target is part of a larger programme of drilling designed to increase the resource base in the Chirundu JV and Kariba Valley JV projects.

### **OVERVIEW**

The Directors of African Energy Resources Limited are pleased to announce that field evaluation of the Siamboka airborne radiometric anomaly in southern Zambia has defined a large uranium geochemical soil anomaly which is over 5km long and up to 0.6km wide. The anomalism is associated with siltstones and sandstones that are similar to those which host the uranium mineralisation at the Company's Njame deposit some 8km to the south, where Measured and Indicated resources containing 4.2 Mlb U<sub>3</sub>O<sub>8</sub> at an average grade of 293 ppm U<sub>3</sub>O<sub>8</sub> have been discovered. Infill sampling is currently in progress to refine the

anomaly and assist with the planning of a drilling programme. Reverse circulation drill testing of the anomaly will be undertaken as a matter of priority.

The evaluation of this target is part of a larger programme of exploration drilling which is scheduled to commence during the current quarter. This is primarily designed to locate additional resources within economic trucking distance of the Njame deposit.

### **GEOCHEMICAL SOIL SAMPLING PROGRAMME**

The Siamboka prospect occurs 8km north of the Company's Njame uranium deposit in the Chirundu uranium project in southern Zambia (refer to Diagram 1). The prospect was identified through an airborne radiometric survey which highlighted anomalous uranium response over sedimentary rocks which are interpreted to represent the fault offset continuation of the mineralised sandstones and siltstones at Njame (Diagram 2).

Field evaluation of the prospect commenced in early July and includes geological mapping and an assessment of uranium content of the soils on a 400m x 25m grid pattern. The uranium content in soils was established at each grid point using a calibrated RS-125 spectrometer in assay mode. Results to date indicate that anomalous uranium levels occur over a strike length in excess of 5km and up to 0.6km wide (Diagram 3). The uranium anomalism is spatially related to the contact between siltstones and coarser grained pebbly grits. Similar contacts are mineralised at both of the nearby Njame and Gwabe uranium deposits.

The soil anomaly is parallel to the strike of the sedimentary rocks. A peak value of 32 ppm U was recorded by the RS-125 spectrometer, which is the equivalent of 38 ppm  $U_3O_8$ . The overall anomaly is defined by the 8 ppm U contour (10 ppm  $U_3O_8$  equivalent) which represents the top 5% of the results. The main anomaly remains open to the northeast (along-strike), and a subordinate anomaly remains open to the southwest (also along strike). Further sampling to close off these anomalies is in progress, and infill sampling will be undertaken to refine the anomalies prior to drill testing.

### **FORWARD EXPLORATION PROGRAMME**

The field evaluation of the Siamboka target is part of a systematic programme of exploration which has commenced on the Chirundu and Kariba Valley uranium projects in southern Zambia. This programme is aimed at discovering additional mineral resources which are within economic radius of the Njame deposit where, subject to the successful completion of feasibility studies and project financing negotiations, the Company will build a uranium mine and central uranium processing facility.

The exploration programme consists of the following key elements:

#### **CHIRUNDU JV PROJECT:**

- Drill testing of the Njame South 'near-mine' extensional target
- Drill testing of the Gwabe South 'near-mine' extensional target
- Soil sampling and geological mapping of the Siamboka brownfields target
- Drill testing of the Siamboka brownfields target
- Field evaluation of the other targets (Gwabe East, Nabanda and Gota Gota) to determine if drilling is warranted

#### KARIBA VALLEY JV PROJECT:

- Desktop synthesis of structural data and all radiometric data to prioritise uranium targets in the Kariba Valley JV
- Field evaluation of high priority targets
- Drill testing of high-priority targets in the Namakande prospect area where extensive ground radiometric anomalism was previously defined
- Drill testing of the Chisebuka prospect to follow-up on uranium mineralisation discovered in 2007
- Drill testing of other high-priority targets delineated in the 2009 exploration programme

The Company also expects to undertake additional exploration drilling at its wholly owned Sese Project in Botswana, and its wholly owned Sitwe prospect in the Northern Luangwa Valley in eastern Zambia. The total programme for Chirundu, Kariba Valley, Sese and Sitwe contemplates drilling approximately 17,500m of reverse circulation percussion drilling.

#### TECHNICAL BACKGROUND TO PROJECT

The Chirundu uranium project contains the Njame and Gwabe uranium deposits, which contain a total of 7.4 Mlb U<sub>3</sub>O<sub>8</sub> in Measured and Indicated resources at an average grade of 293 ppm U<sub>3</sub>O<sub>8</sub>. These deposits are currently the focus of metallurgical test-work being undertaken as part of a bankable feasibility study. The Chirundu uranium project is a joint venture between African Energy which owns 70% and is the manager, and Albidon Limited (ASX: ALB) which owns the remaining 30%.

*The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The information contained in this announcement has been presented in accordance with the JORC Code and references to "Measured, Indicated and Inferred Resources" are to those terms as defined in the JORC Code.*

*Information in this report relating to Exploration results, Mineral Resources or Ore Reserves is based on information compiled by Dr Frazer Tabcart (an employee and the Managing Director of African Energy Resources Limited) who is a member of The Australian Institute of Geoscientists. Dr Tabcart 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 under the 2004 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Tabcart consents to the inclusion of the data in the form and context in which it appears.*

For any further information, please refer to the Company's website or contact the Company directly on +61 8 6465 5500.

*For and on behalf of the board*

For further information please contact:

**AFRICAN ENERGY RESOURCES LTD**

**ABN 34 115 065 640**

Ground Floor, 8 Colin Street, West Perth 6005

Telephone: +61 8 6465 5500 Facsimile: +61 8 6565 5599

[www.africanenergyresources.com](http://www.africanenergyresources.com)

ASX Code: AFR

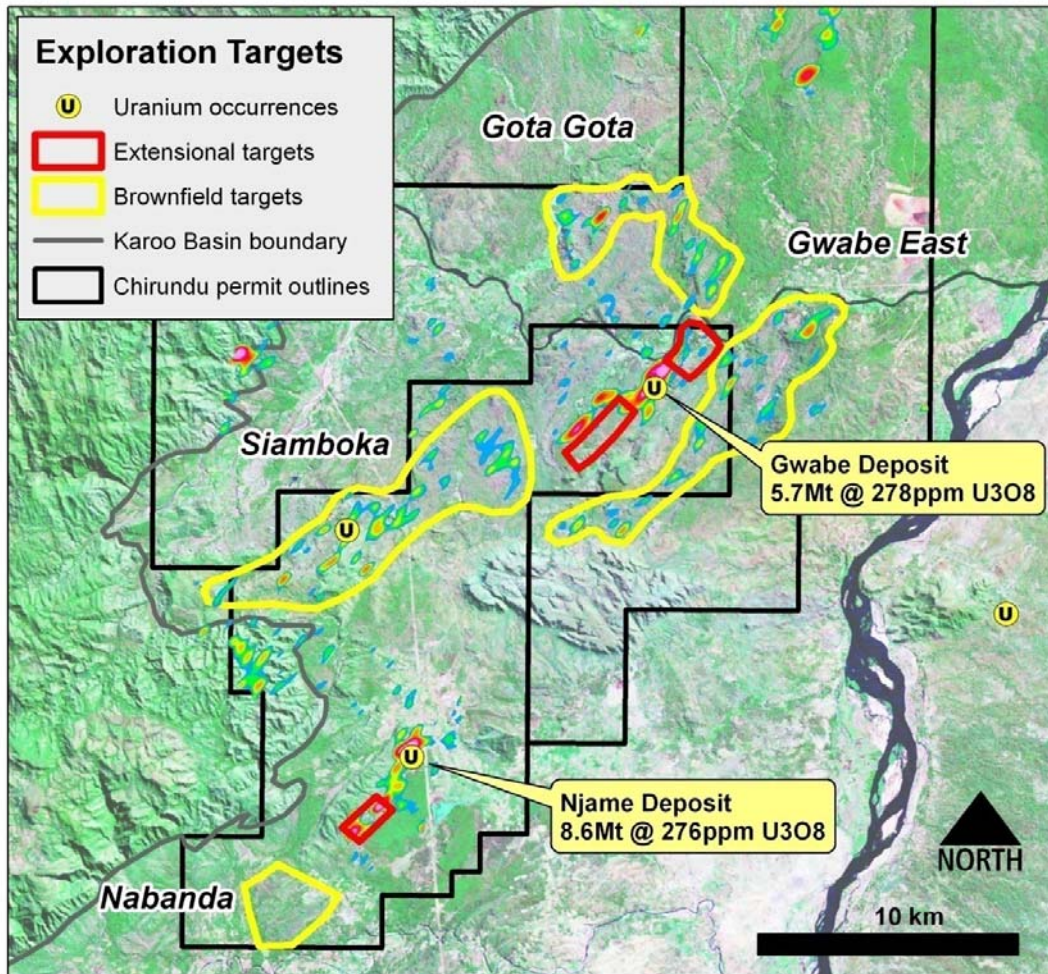
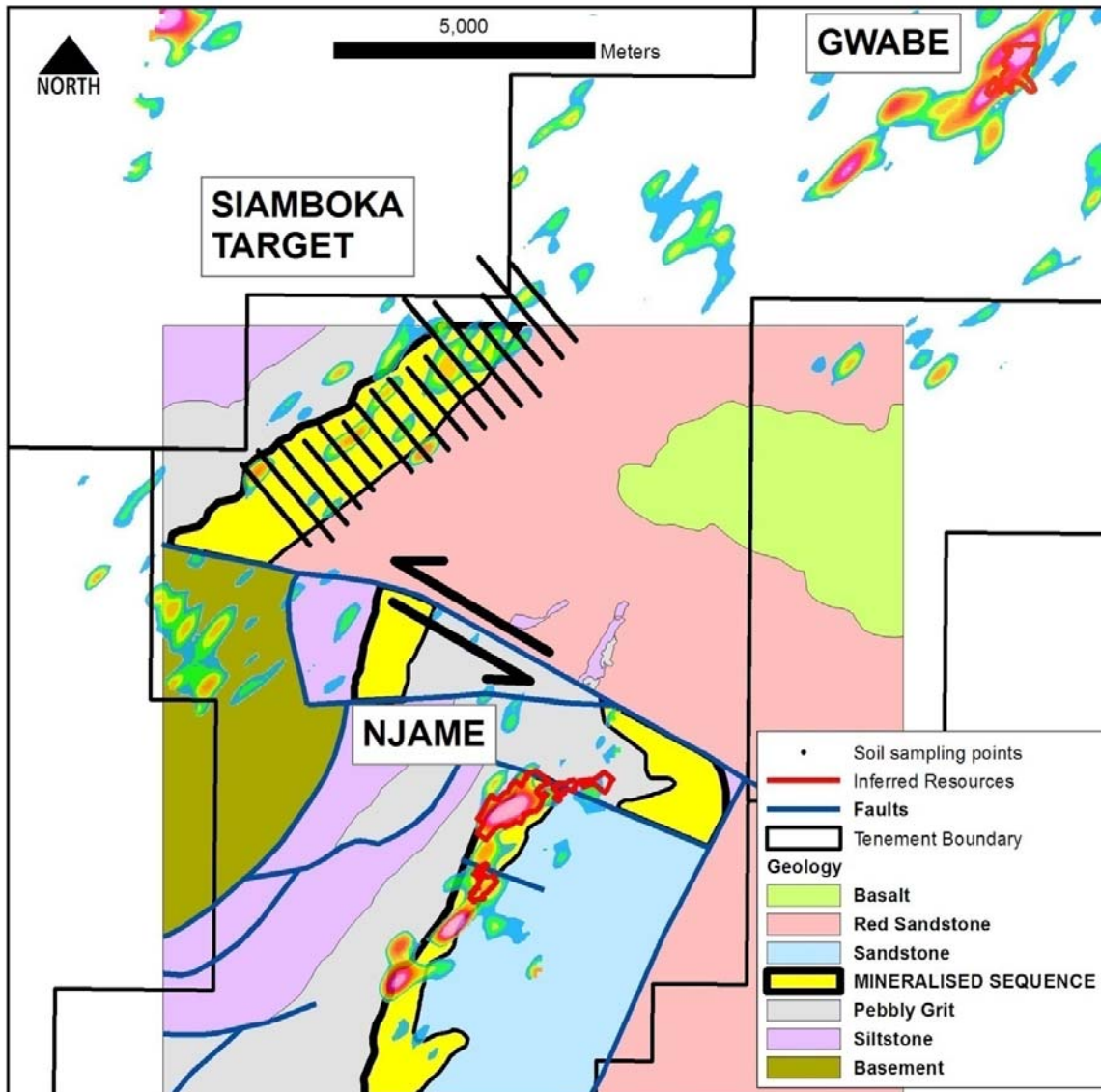


Diagram 1 Location map showing Siamboka target and other brownfields and extensional targets in the Chirundu JV Project. Deposit grade and tonnage represents total inferred, indicated and measured resources at the Njame and Gwabe deposits.



*Diagram 2 Siamboka location and sampling points plotted on a geological base map. Airborne radiometric data is overlain on the geology. Note the occurrence of airborne radiometric anomalism at Siamboka on the same geological sequence as that which hosts Njame, with an interpreted fault offset between the two.*

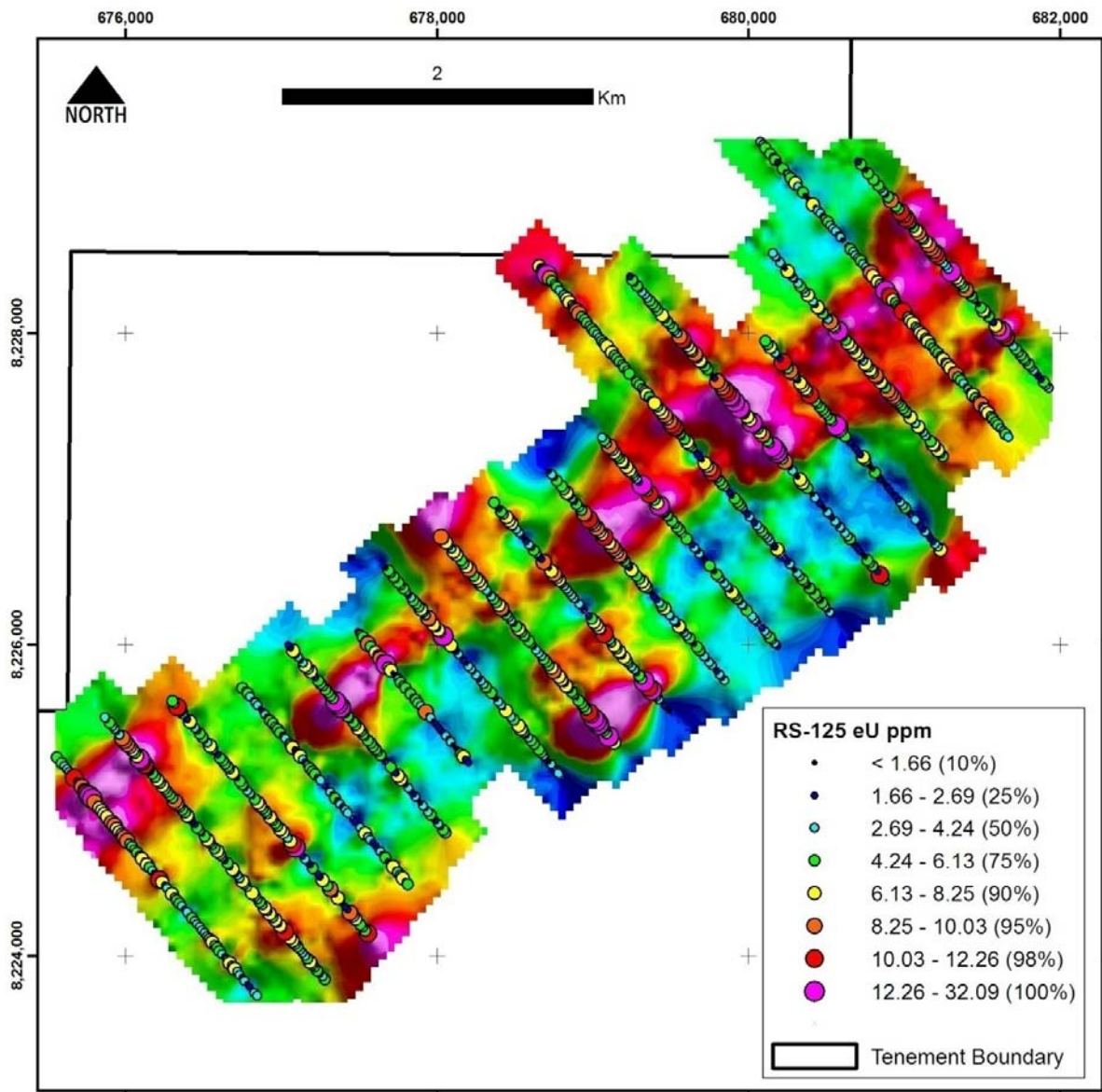


Diagram 3 Soil sampling results from RS-125 spectrometer survey of the Siamboka target