

24 May 2012

**Uranium Resources plc ('Uranium Resources' or 'the Company')  
Provides Update for Its Mtonya Exploration Programme**

**Highlights**

- Ongoing drilling generates both high-grade and wide intercepts in both Tier 1 and Tier 2 roll-fronts suggesting excellent in-situ recovery potential for the Company's 100%-owned Mtonya project
- Three holes have intercepted new mineralised roll-fronts within the Tier 1 reduced beds
- Significant intercepts from the latest 14 holes reported include:
  - 397 ppm U<sub>3</sub>O<sub>8</sub> over 1.0 m at 170.4 m (Tier 1 mineralisation)
  - 460 ppm eU<sub>3</sub>O<sub>8</sub> over 4.0 m at 170.4 m (Tier 1 mineralisation)
  - 329 ppm eU<sub>3</sub>O<sub>8</sub> over 3.8 m at 73.7 m (Tier 1 mineralisation)
- Three drill rigs are currently operating at Mtonya and forth rig is expected to be deployed by end of June

Uranium Resources Managing Director Alex Gostevskikh said, "We are extremely encouraged by these drilling results. We have intersected considerably higher grades and greater thicknesses than we have achieved before and discovered Tier 1 roll-fronts. These Tier 1 roll-fronts are very exciting targets, as they are shallower and therefore easier to drill and they also demonstrate good grades and widths. These results also further confirm our geological model of multiple stacked roll-fronts of uranium mineralisation and we expect these shallower drill targets to generate a new dynamic in our exploration programme going forward."

**Update**

Uranium Resources plc, the AIM listed uranium exploration company, is pleased to provide an update on its ongoing drilling programme at its 100%-owned Mtonya project in southwest Tanzania.

The Company continues to generate encouraging results from its planned 2012 20,000m drilling exploration programme at Mtonya. To date, eighteen diamond drillholes have been completed to a total of approximately 5,400m. Three drill rigs are operating at the property and the fourth rig is expected to be deployed by mid-July 2012.

Several holes, namely DH 012, DH 087, and DH 013 have intercepted previously unknown roll-fronts in Tier 1, which is interpreted to occur at depths of 150 to 220 m, depending on topography.

The 2012 exploration programme at Mtonya has been designed on the basis of a significantly enhanced redox interface model. The new drill data are continuously assessed and integrated into the model to

improve the accuracy of drill targeting. The drilling has targeted both deep mineralisation amenable to in-situ recovery and near-surface mineralisation amenable to conventional mining.

The Company continues using both full sampling and assaying as well as downhole gamma-logging to ensure the reliability and accuracy of drilling data. It is noted that the initial gamma-logging in its current interpretation may significantly underreport uranium grades.

Table 1. Significant intercepts

Hole	Longitude	Latitude	From	To	Length	eU3O8
DH 187 <sup>(1)</sup>	36.524	-10.547	303.7 m	305.3 m	1.6 m	574 ppm*
including			304.5 m	305.3 m	0.8 m	1098 ppm*
DH 189 <sup>(1)</sup>	36.525	-10.547	4.0 m	10.0 m	6.0 m	101 ppm
and			37.6 m	38.9 m	1.3 m	102 ppm
and			246.2 m	248.0 m	1.8 m	325 ppm*
and			306.0 m	308.2 m	2.2 m	154 ppm*
and			311.6 m	315.0 m	3.4 m	199 ppm*
DH 053	36.526	-10.547	10.2 m	12.5 m	2.3 m	139 ppm
and			34.8 m	39.2 m	4.4 m	159 ppm
and			46.9 m	49.7 m	2.8 m	125 ppm
DH 012 <sup>(1)</sup>	36.527	-10.528	170.4 m	171.4 m	1.0 m	397 ppm*
and			176.5 m	180.4 m	3.9 m	106 ppm*
DH 050 <sup>(1)</sup>	36.526	-10.547	297.5 m	299.5 m	2.0 m	207 ppm*
DH 013	36.528	-10.528	166.9 m	169.5 m	2.6 m	159 ppm
including			168.1 m	168.9 m	0.8 m	297 ppm
DH 059	36.523	-10.549	20.6 m	22.2 m	1.6 m	182 ppm
and			309.0 m	311.0 m	2.0 m	108 ppm
DH 087	36.527	-10.528	170.4 m	174.4 m	4.0 m	460 ppm
including			172.1 m	173.1 m	1.0 m	644 ppm
DH 181	36.523	-10.544	73.7 m	77.5 m	3.8 m	329 ppm
including			75.2 m	76.2 m	1.1 m	648 ppm
DH 185	36.524	-10.544	9.5 m	10.5 m	1.0 m	116 ppm
DH 186	36.523	-10.544	15.3 m	17.8 m	2.5 m	117 ppm
and			28.1 m	30.5 m	2.4 m	103 ppm
and			40.0 m	45.5 m	5.5 m	138 ppm
and			57.6 m	58.6 m	1.0 m	161 ppm
and			74.9 m	75.9 m	1.0 m	105 ppm
and			79.4 m	80.4 m	1.0 m	101 ppm

DH 193	36.525	-10.525	13.2 m	15.0 m	1.8 m	205 ppm
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Notes to table:

- (1) Figures updates for assay results from previously reported gamma-log data.  
 \* Assays based on core samples analysed by ALS Global (Vancouver).

Only intercepts above 100 Grade Thickness are shown. Grade Thickness is the product of the grade and true thickness of intercepted mineralisation.

### **About Mtonya**

The Company's 100%-owned Mtonya project is situated about 60 km south of Nyota, a significant uranium deposit currently developed by Uranium One.

Mtonya is interpreted to be a classic sandstone-hosted roll-front deposit with remarkable similarities to the deposits of Chu-Sarysu, Kazakhstan and Wyoming, USA.

To date, Mtonya has demonstrated continuous uranium mineralisation in stacked roll-fronts in Triassic arkoses, which is expected to be amenable to in-situ recovery.

The Company's ongoing exploration programme is expected to generate sufficient data to delineate a maiden resource at Mtonya.

### **Assaying and QA/QC**

The Company is using a Mount Sopris' Matrix gamma-logging system to ensure proper instrument calibration and establish the framework for disequilibrium adjustments. The disequilibrium factor (DEF) is used to adjust the grade obtained from measurements by a gamma-ray probe (eU3O8) and to provide rapid estimates for the uranium content in the rock.

In addition to gamma-ray downhole surveys, Uranium Resources plc uses the most reliable methods of quantifying uranium mineralisation by sampling half-core and subjecting the samples to the ME-MS41 analysis at the ALS Global laboratory in Vancouver, BC, Canada.

In accordance with industry standards, the assayed samples include certified standards and duplicates. Analytical results are routinely subjected to statistical review.

### **Competent Person's Declaration**

The information in this statement that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information reviewed by Alex Gostevskikh, Managing Director of Uranium Resources plc, who is a Member of the Mining and Metallurgical Society of America. Mr. Gostevskikh 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' and as a qualified person under the AIM Note for Mining, Oil and Gas Companies. Mr. Gostevskikh consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**\*\*ENDS\*\***

For further information please visit [www.uraniumresources.co.uk](http://www.uraniumresources.co.uk) or contact:

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### **About Uranium Resources**

Uranium Resources plc is an AIM listed exploration and development company. It is the Company's strategy to advance its existing assets and strengthen its portfolio via opportunistic acquisition. Uranium Resources has uranium licences in the highly prospective Karoo Basins in Southern Tanzania.