



## Australian Stock Exchange Announcement

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Company Announcements Office  
Australian Stock Exchange Limited  
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### Encouraging Uranium Values in Maiden Eyre Peninsula Drilling.

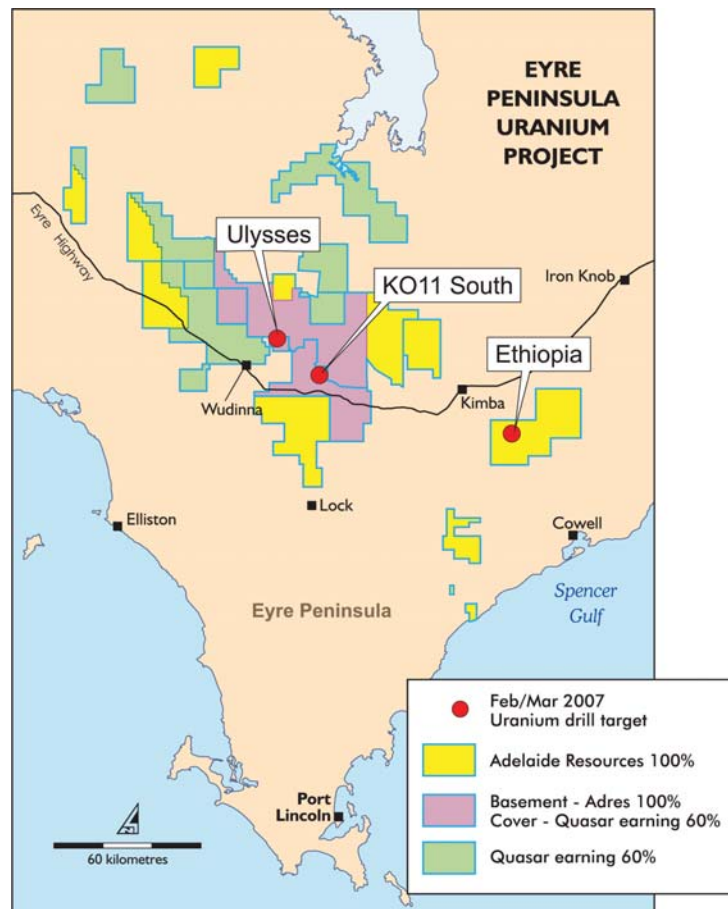
In a most encouraging result from the company's maiden uranium drilling program on Eyre Peninsula, SA, the first two batches of assay data received for drill samples from the 100% owned Ulysses Prospect contain a number of highly anomalous uranium intersections in shallow weathered basement. The intersections are in virgin terrain not previously explored for basement uranium.

#### Uranium intersections include:

- 1 metre at 330 ppm  $U_3O_8$  from 39 metres downhole in ULY-1107.
- 3 metres at 149 ppm  $U_3O_8$  from 43 metres downhole in ULY-1109.
- 5 metres at 165 ppm  $U_3O_8$  from 32 metres downhole in ULY-1120. (including 1m at 230 ppm  $U_3O_8$  from 36 metres downhole).
- 1 metre at 248 ppm  $U_3O_8$  from 41 metres downhole in ULY-1062.

For guidance as to the significance of these results the company is targeting basement hosted deposits with grades of around 1000 ppm (0.10%)  $U_3O_8$  or higher.

While the magnitude of the uranium assays returned from Ulysses to date are below the company's target grade, they are at highly anomalous levels. ***This is a very promising result from such early exploration in a hitherto unexplored area.*** It is indicative of the presence of a virgin uranium system deserving of further exploration.



At this stage only a limited number of assays results for the drill samples are at hand with receipt of the majority anticipated in coming weeks.

### Drilling Details

Bedrock RAB/aircore drilling has been completed at three 100 percent owned uranium targets, Ulysses, KO11 South and Ethiopia on South Australia's Eyre Peninsula (see location plan). At Ulysses 23 holes were completed for 1122 metres, while 42 holes for 2055 metres were drilled at KO11 South. The program at Ethiopia comprised 41 holes for a total of 1431 metres.

The shallow RAB/aircore drilling methods allow penetration through any cover sediment and weathered bedrock but do not penetrate far into fresh bedrock.

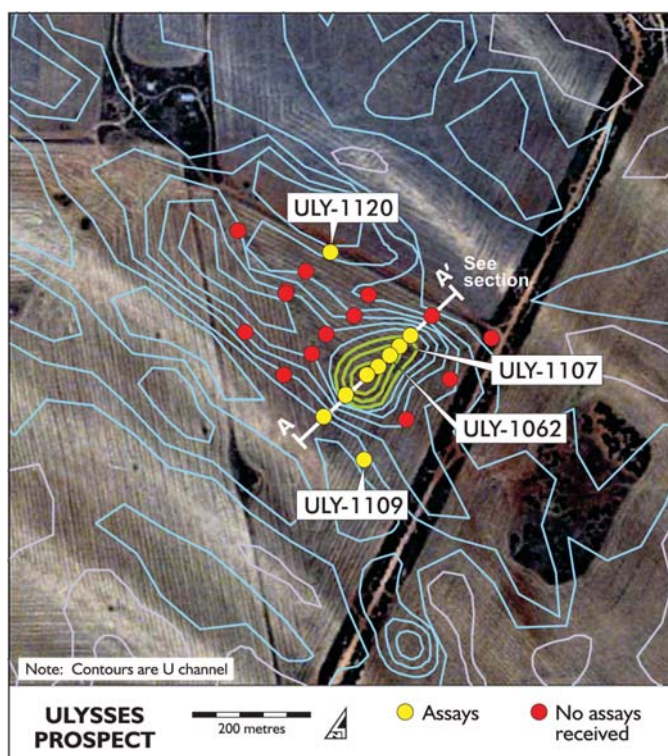
### Ulysses Prospect Exploration

Drilling at Ulysses targeted a uranium channel radiometric anomaly evident in a detailed airborne magnetic/radiometric survey flown in late 2004 (see Ulysses Prospect plan).

An initial five holes were drilled 50 metres apart on a single traverse across the peak of the anomaly. Gamma scintillometry and spectrometry on drill samples from these five holes showed elevated radiometric activity towards the bottom of several of these holes. These were followed by a further 18 exploration holes at the prospect to extend drill coverage.

Assay results, as determined by XRF analytical methods, so far received consist of:

- 44 x 6-metre composited samples collected from the first five holes drilled, and
- 40 x 1-metre samples collected from these and later holes from intervals which in-field gamma showed were radiometrically active.



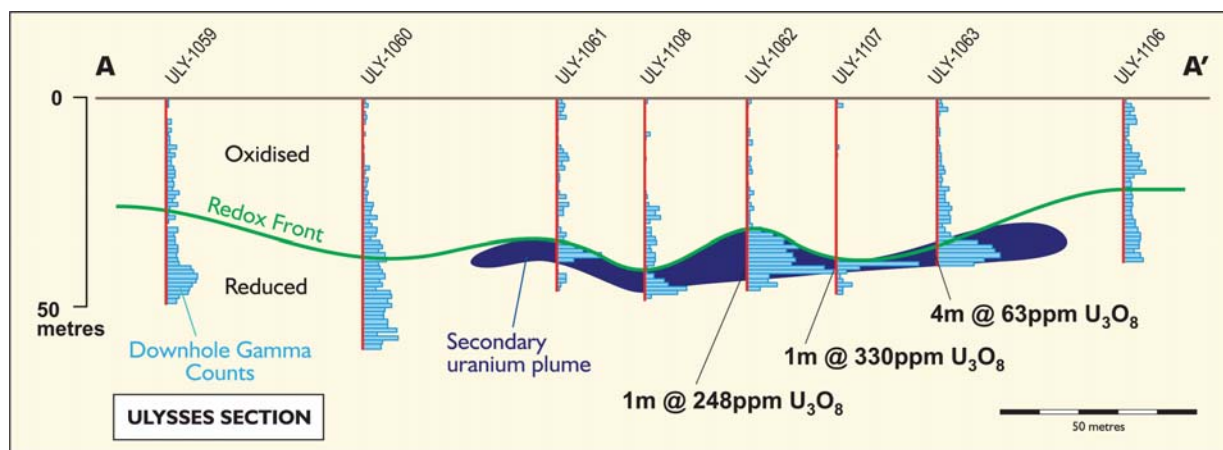
Assaying of a further 161 x 6-metre composited samples taken from Ulysses is underway with results expected in the coming weeks.

For individual samples the relationship between laboratory uranium assays and in-field gamma readings are not directly proportional. Some samples with only moderate gamma activity have returned significant uranium assays. Conversely, some samples giving significant gamma readings contain relatively low levels of assayed uranium.

The cause of the non-proportional relationship between uranium assay and gamma readings remains to be determined however it is likely that the uranium mineralisation is not in radiometric equilibrium with its gamma emitting daughter isotopes. Disequilibrium is a common feature observed in many young uranium deposits.

## Ulysses Geology

The anomalous uranium intersections at Ulysses are hosted by weathered bedrock which occurs below thin cover sequences including the interpreted headwaters of a palaeochannel river system. Fresh bedrock comprises gneiss likely to be part of the Archaean Sleaford Complex which forms the basement geology of much of the Eyre Peninsula and the broader Gawler Craton.



The weathered bedrock zone at Ulysses includes an upper pallid or leached zone, an intermediate oxidised upper saprolite zone and a reduced lower saprolite zone which grades downwards into fresh gneiss bedrock. Uranium anomalism is restricted to the reduced lower saprolite and is disposed as a relatively flat lying plume commencing between 30 and 45 metres below the surface (see drill cross section).

Several drill holes at Ulysses have intersected encouraging evidence of hydrothermal activity typified by strongly developed chlorite alteration.

### Significance of the Results

While the magnitude of the uranium assays returned from Ulysses to date are below the company's target grade, they are at highly anomalous levels indicative of the presence of a uranium mineralised system deserving of further exploration.

The position and shape of the uranium mineralisation, and the possibility that it is in radiometric disequilibrium with its daughter isotopes, suggest the intersections achieved to date are of secondary mineralisation remobilised from a primary source in the basement. Importantly, these characteristics additionally suggest that uranium is present in a mineral phase that is soluble in oxidising conditions and therefore likely to be metallurgically recoverable.

If radiogenic disequilibrium is shown to be occurring at Ulysses it implies that uranium is currently, or has very recently been, mobile in the ground waters in the district. This presents the possibility that mineralisation such as that discovered at Ulysses could be an important source for secondary uranium deposits hosted by palaeochannels in the region to be explored in the joint venture with Quasar Resources Pty Ltd.

The exploration approach employed at Ulysses has been to test a relatively subtle uranium channel anomaly in detailed airborne radiometric data. The underlying assumption is that, due to geochemical depletion in the upper parts of the regolith, such subtle anomalies may reflect significant mineralisation at depth. The company is not aware of any past uranium explorers in

the district targeting similar subtle airborne anomalies and the success of this approach presents a new exploration method which can be applied regionally.

### **Forward Program at Ulysses**

These encouraging early exploration results returned from Ulysses clearly warrant further evaluation and follow-up.

The full extent of the secondary uranium plume at Ulysses remains to be defined and the company proposes to complete a second program of bedrock RAB/aircore drilling to better define the limits of the plume and identify targets to be followed up by a deeper basement drilling program aimed at locating the primary source.

The company has commenced efforts to secure a drilling rig to complete this next phase of exploration.

The success of the exploration approach has also prompted the company to commence a detailed assessment of its available airborne radiometric data to identify additional exploration targets.

### **KO11 South and Ethiopia Prospects**

Assays for the first 91 of 337 6-metre composite samples from KO11 South have been received with no anomalous uranium present. No assay results are available for the 270 6-metre composite samples collected at Ethiopia. Included in the samples awaiting assay are a number which were taken from gamma anomalous intervals at holes at both KO11 South and Ethiopia.

The remaining samples are currently being processed in the analytical laboratory with results anticipated to be available for reporting in the company's March Quarterly Report.

This announcement is released coincident with a presentation to be given by Chris Drown at the Paydirt Uranium Conference today. Versions of both of these releases appear on the company's website [www.adelaideresources.com.au](http://www.adelaideresources.com.au)

*The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Chris Drown who is a Member of the Australasian Institute of Mining and Metallurgy, and who has sufficient experience relevant to the style of mineralisation, the type of deposit under consideration, and the activity 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 (the JORC Code). This report is issued in the form and context in which it appears with the written consent of the Competent Person, who is Exploration Director of the Company.*



Keith Yates  
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