



Uranium Exploration Australia Limited

ABN 65 112 714 397

3 November 2010

The Manager
Company Announcements Office
Australian Stock Exchange
20 Bridge Street
SYDNEY NSW 2000

ASX ANNOUNCEMENT

EXPLORATION UPDATE NORTHERN TERRITORY PROJECTS

- **Airborne geophysical surveys completed at Nabarlek, field mapping commenced**
- **Consent received from Traditional Owners to explore for uranium at Pandanus West**
 - **Exploration licence expected to be granted in time for start of 2011 field season**
- **Stream sediment sampling program targeting heavy rare earth elements (HREE) and uranium to commence at Yambla & Harts Range in November**

Nabarlek North (EL 24868) and Nabarlek West (EL 24564 and EL 28245)

These recently granted tenements form part of UXA's joint venture with RIL Australia Pty Ltd ("RILA"), subsidiary of Reliance Industries Limited, a Fortune Global 500 company and India's largest private sector company. The tenements are located in close proximity to the old Nabarlek uranium mine in Arnhem Land and share similar geology.

UXA has completed the flying of two airborne geophysical surveys over the tenement areas; an airborne magnetic and electromagnetic survey flown by Fugro, and a Hymap hyperspectral mineral mapping survey flown by Hyvista. The results of these surveys will be analysed during the wet season and field follow up will commence in 2011.

Reconnaissance mapping has started and has so far been completed over Nabarlek North (EL 24868). This has included a field inspection of the south east corner of the tenement, close to the recent uranium discovery at U40 announced by Uranium Equities Ltd ("UEL"), which reported a high grade intercept up to 5.20m @ 1.34% eU₃O₈¹ at the company's U40 prospect. The U40 discovery lies approximately 280 metres south of UXA's Nabarlek North licence. The field inspection of this area has reported transported cover over bedrock with elevated scintillometer readings at surface (up to 300 counts per second over a background of 50-60 counts per second). Follow up will require geophysical interpretation and drilling in the 2011 field season.

¹ UEL ASX Release 24 September 2010

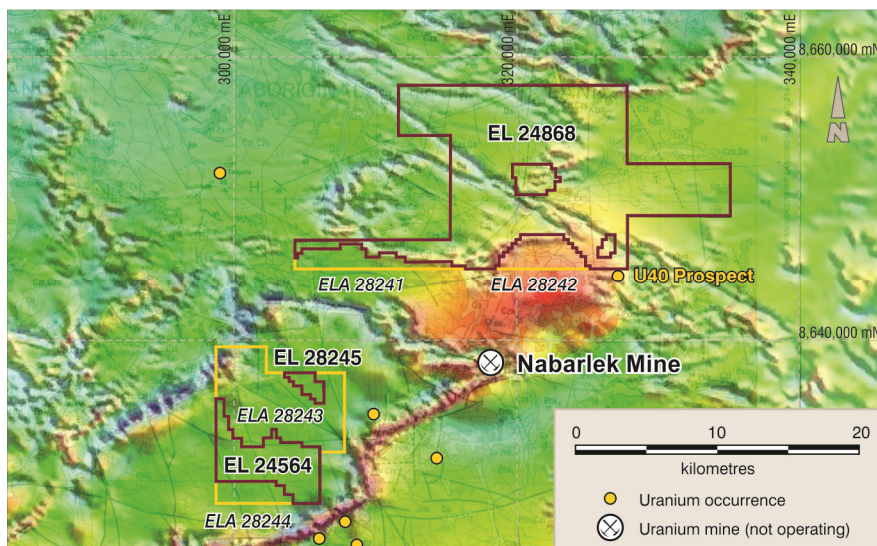


Figure 1. Location of UXA's Nabarlek projects NT

Pandanus West (ELA 24565)

The Pandanus West tenement is part of UXA's joint venture with RILA and lies in the Westmorland uranium province near the border with Queensland. UXA has received Traditional Owner's consent to conduct uranium exploration following a country meeting held at Borollola in the Northern Territory. The agreement on the terms of the exploration and mining agreement will be endorsed at a meeting of the Northern Land Council ("NLC") in November. The final Federal and Northern Territory governmental licence approval process is expected to take approximately 4 -5 months and will allow UXA to commence exploration at the start of the 2011 field season in April/May. This is the same procedure which UXA successfully completed leading to the grant of the Nabarlek tenements.

Yambla (EL 26142) & Harts Range Project (EL 27850, 27852 and 27874)

A detailed stream sediment sampling program will commence on 8th November at Yambla and on the adjacent Harts Range exploration licences, 140km East of Alice Springs, Northern Territory. At Yambla, UXA has rights to acquire 75% interest in the project from Cullen Exploration Pty Ltd. The three new Harts Range exploration licences (EL's 27850, 27852 and 27874) were recently granted and are 100% held by UXA.

The Yambla and Harts Range licences are located within the Entia Pegmatite Field, considered to be highly prospective for rare earth elements including uranium and in particular the much sought after heavy rare earth elements (HREE) such as Europium, Terbium and Dysprosium used in the manufacturing of permanent magnets and power generators.

Uranium anomalism is also known from outcrops of pegmatite dykes where the presence of Tantalum (Ta) and Niobium (Nb) has been previously documented. At the Swallow-Hof prospect UXA has traced an outcropping zone of pegmatite dykes over a distance of 1.7km and rock chip sampling by UXA has determined the presence of anomalous uranium up to 1,140 ppm U₃O₈. One sample from the pegmatite also returned 305 ppm Tantalum and 375 ppm Niobium which is considered highly anomalous. Further rock chip samples have returned anomalous analyses up to 13.8% U₃O₈, 35ppm Terbium, 270 ppm Dysprosium and 2900ppm Yttrium in separate samples (see September 2010 Quarterly report for details).

The results of rock chip sampling are very encouraging and the Company has decided to conduct the stream sediment sampling program to provide a more comprehensive geochemical coverage of the area, to guide exploration onto the most anomalous zones.

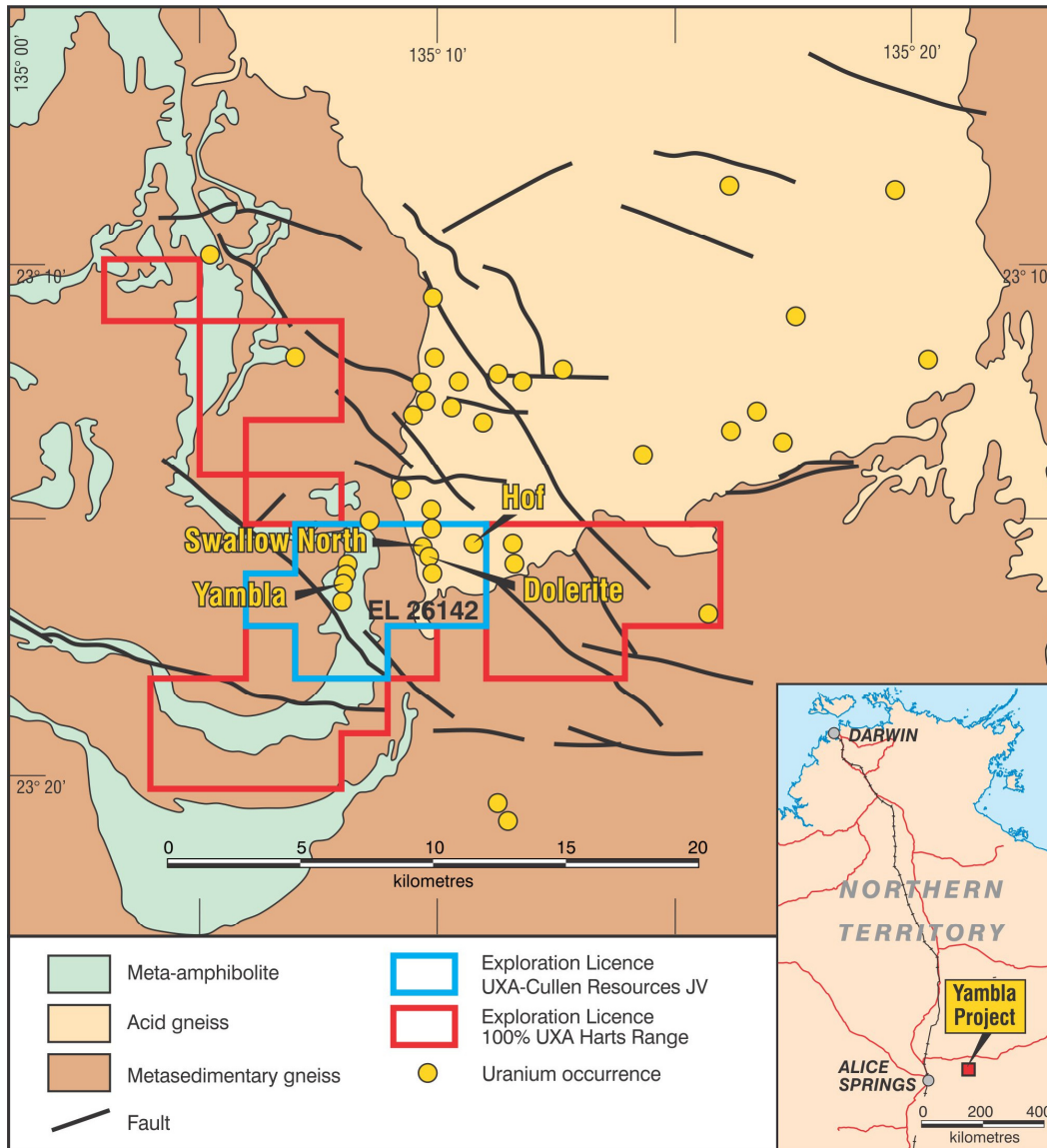


Figure 2. Location of UXA’s Yambla & Harts Range Project near Alice Springs NT.

For further information, contact.

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Technical Information in this report is based on information compiled by Mr Simon Powell who is employed by Uranium Exploration Australia Limited and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Powell has sufficient exploration 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’ (“JORC

2004"). Mr Powell consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

About UXA

Uranium Exploration Australia Limited is a diversified uranium and base metal exploration company, focusing principally on its ground holdings in the world class uranium provinces in Northern Territory and Western Australia and base metal exploration on South Australia and New South Wales. UXA has an exploration joint venture with RIL Australia Pty Ltd, a subsidiary of Reliance Industries Limited, the largest private sector company in India.

In September 2010 UXA announced the signing of an option agreement with Teck Australia Pty Ltd (subsidiary of Teck Resources Limited, a major Canadian mining company) to explore the Dome 5 zinc-lead-silver discovery in New South Wales and adjacent areas in New South Wales and South Australia for zinc-lead-silver and IOCG style Cu-Au deposits.

During 2010 UXA has signed a number of agreements to explore for sandstone-hosted uranium at Myroodah and Mudjalla in the Canning Basin, Western Australia.

UXA is also the owner of a complementary cash flow business, Geoscience Associates Australia Pty Ltd (GAA), a borehole wireline logging company principally working in the uranium, iron ore, coal and coal seam gas sectors in Australia. The UXA Group owns the worldwide rights to the Prompt Fission Neutron uranium logging tool which has a unique role to play in uranium deposits with disequilibrium. In August 2010 UXA announced the signing of an agreement to purchase an operating borehole wireline logging business in the United States of America.

More information on UXA can be found on our website at www.uxa.com.au