

# ASX ANNOUNCEMENT

30 August 2010

URANIUM EQUITIES LIMITED ACN 009 799 553



URANIUM  
EQUITIES

The Company Announcement Officer  
Australian Securities Exchange Ltd  
via electronic lodgement

## Uranium Equities Secures Major Strategic Position in South Australia's Uranium-Rich Frome Basin

*Key JV and New Ground Secured in Highly Prospective Uranium Province*

### Highlights

- **Farm-in Joint Venture** with ASX-listed **Cauldron Energy Limited** to earn up to an 80% interest in the 1,444km<sup>2</sup> West Lake Frome Project
- **\$5M earn-in requirement** over five years with minimum \$0.7M commitment
- **Additional 100%-owned tenements** secured to the west and east of Lake Frome, increasing UEQ's total land holding to 2,263km<sup>2</sup>
- Tenements prospective for **roll-front uranium deposits** similar to the **Beverley** (46 Mlbs @ 0.27% U<sub>3</sub>O<sub>8</sub>)<sup>1</sup>, **Four Mile** (71 Mlbs @ 0.33% U<sub>3</sub>O<sub>8</sub>)<sup>2</sup> and **Honeymoon** (6.5 Mlbs @ 0.24% U<sub>3</sub>O<sub>8</sub>)<sup>3</sup> deposits, also located in the Frome Basin

Uranium Equities Limited (ASX: UEQ) is pleased to announce that it has consolidated a large strategic ground position **totalling 2,263km<sup>2</sup>** in one of Australia's most prospective uranium provinces, South Australia's Frome Basin, after concluding a **\$5 million farm-in agreement** covering a large uranium exploration project and securing a portfolio of adjacent tenements.

The Frome Basin hosts the nearby Beverley, Four Mile and Honeymoon sediment-hosted roll front uranium deposits. The ground acquired by UEQ is considered to have exploration potential for similar deposits.

The farm-in agreement, with Cauldron Energy Limited (Cauldron) (ASX: CXU), gives UEQ the right to earn up to 80% of Cauldron's West Lake Frome Project, which covers an area of 1,444km<sup>2</sup> within three Exploration Licences (3388, 3392 and 3410) (*see Fig. 1*). The licences are subject to an application for a two-year extension. Successful renewal is a pre-condition of the agreement.

UEQ can earn 80% of the West Lake Frome Project by sole funding \$5 million of exploration expenditure over the next five years, and can withdraw after spending \$0.7 million, including a minimum 4,000 metres of rotary mud drilling. The Project will be managed by UEQ.

Exploration agreements with the native title applicants in respect of the Cauldron tenements have been signed and registered.

### OUR STRENGTHS

- Breakthrough PhosEnergy Process
- Nabarlek Project – A rare investment opportunity
- Multiple near term growth opportunities

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In addition, Uranium Equities has been offered exploration tenure (ELA 91/10) over an area of 399 km<sup>2</sup> to the west of Lake Frome which is more or less contiguous with the Cauldron tenements, further consolidating the Company's strategic position along the western margin of the Frome Embayment (*see Fig. 1 attached*).

UEQ has also been granted EL4507 covering 420 km<sup>2</sup> at "Curraworra Bore" to the east of Lake Frome.

## Exploration Potential

The Cauldron and UEQ tenements are located between the uranium-rich Mount Painter Inlier to the north and the Willyama Complex to the south and extend approximately 100km along the Arrowie-Paralana Fault System (*see Fig. 2 attached*) which lies along the western margin of the Frome Embayment.

Structures associated with the Arrowie-Paralana Fault System are considered to have potentially influenced the mineralisation at the Beverley and Four Mile Uranium deposits, located 40km to the north.

Previous exploration in the area has identified uranium anomalous palaeochannels associated with the Erudina paleochannel system. Palaeochannel sands have been identified within both the prospective Namba Formation (host to Beverley), and possibly deeper in the Eyre Formation (host to Four Mile). However, drilling has been sparse and distribution of palaeochannel sands and potential redox boundaries remain poorly defined.

Immediate target areas have been identified to the east of the Arrowie Fault associated with palaeochannel sands in an inferred tributary of the Erudina Palaeochannel draining eastward off the moderately enriched Precambrian basement of the Flinders Ranges.

The Curraworra Bore EL is located in the Frome Basin 80 km north of the Oban uranium deposit adjacent to the Benagerie Ridge, a concealed basement high and potentially source rocks for uranium mineralisation in the area and is considered a very prospective greenfields target area.

The Company is continuing to pursue opportunities in South Australia, in particular the Frome Basin, to add to its quality portfolio of uranium exploration projects.

UEQ's Managing Director, Bryn Jones, said the joint venture and new ground acquisitions presented an outstanding opportunity for the Company.

"We are delighted to have secured such quality uranium exploration acreage in the heart of one of Australia's most prospective uranium provinces and we look forward to commencing exploration programs in the near future," Mr Jones said.

BRYN JONES  
Managing Director

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<sup>1</sup> Mineral resource per Heathgate Resources Pty Ltd and PIRSA websites

<sup>2</sup> Indicated and inferred mineral resources per Alliance Resources Limited 31 March 2010 Quarterly Report

<sup>3</sup> Indicated mineral resources per Uranium One website

## Competent Person Statement

The information in this announcement that relates to Exploration Results is based on information compiled by Mr. Grant Williamson, Geology Manager - Exploration of Uranium Equities Limited, who is a Member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy Inc. Mr. Williamson has sufficient experience in the field of activity being reported 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 consents to the release of information in the form and context in which it appears here.

## About Uranium Equities

Uranium Equities Limited (UEQ) has two main areas of focus: The development of the **PhosEnergy Process**; and exploration activities directed at a small core of high quality exploration assets which include the key **Nabarlek Project**.

The PhosEnergy Process is an innovative patented process for the extraction of uranium as a by-product from phosphate in the production of phosphate based fertilisers.

The global annual production potential of uranium from the phosphate industry is in the order of 20 Mlbs  $U_3O_8$ . This quantity of uranium is mined in phosphate ores but not recovered annually on a worldwide basis. The major phosphate based fertiliser producers are located in Northern Africa, North America and Asia.

The PhosEnergy Process has been proven to pilot scale with results establishing a robust process capable of achieving high levels of uranium recovery at the lower end of the cost curve.

The Nabarlek Project provides a rare near mine exploration opportunity surrounding the historic Nabarlek Uranium Deposit (24 Mlbs @ 1.84%  $U_3O_8$ ). The deposit lies within an extensive uranium mineral system which extends over more than 50 square kilometres within the Mineral Lease and the surrounding tenements. The mineral system which contains widespread anomalous uranium geochemistry and ore grade mineralisation at several locations remains largely untested.

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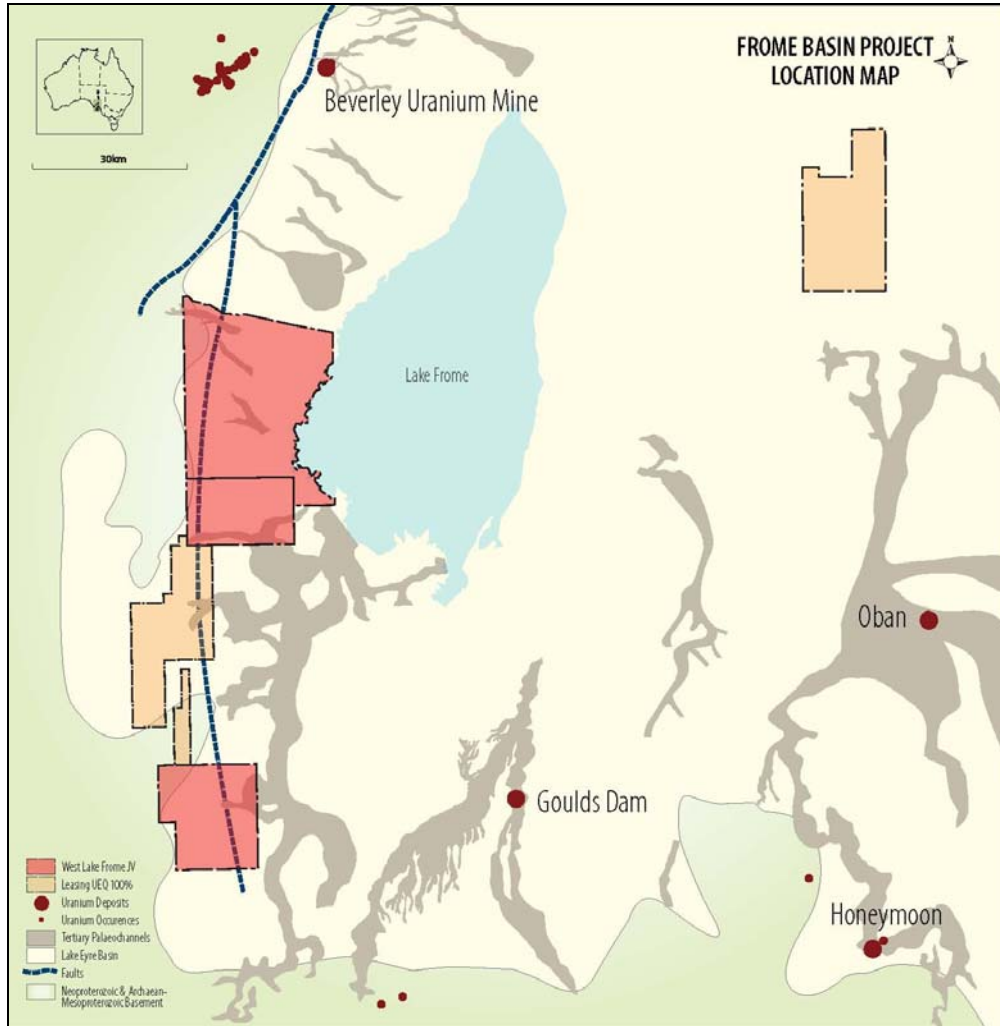


Figure 1 Frome Basin Project Location Map

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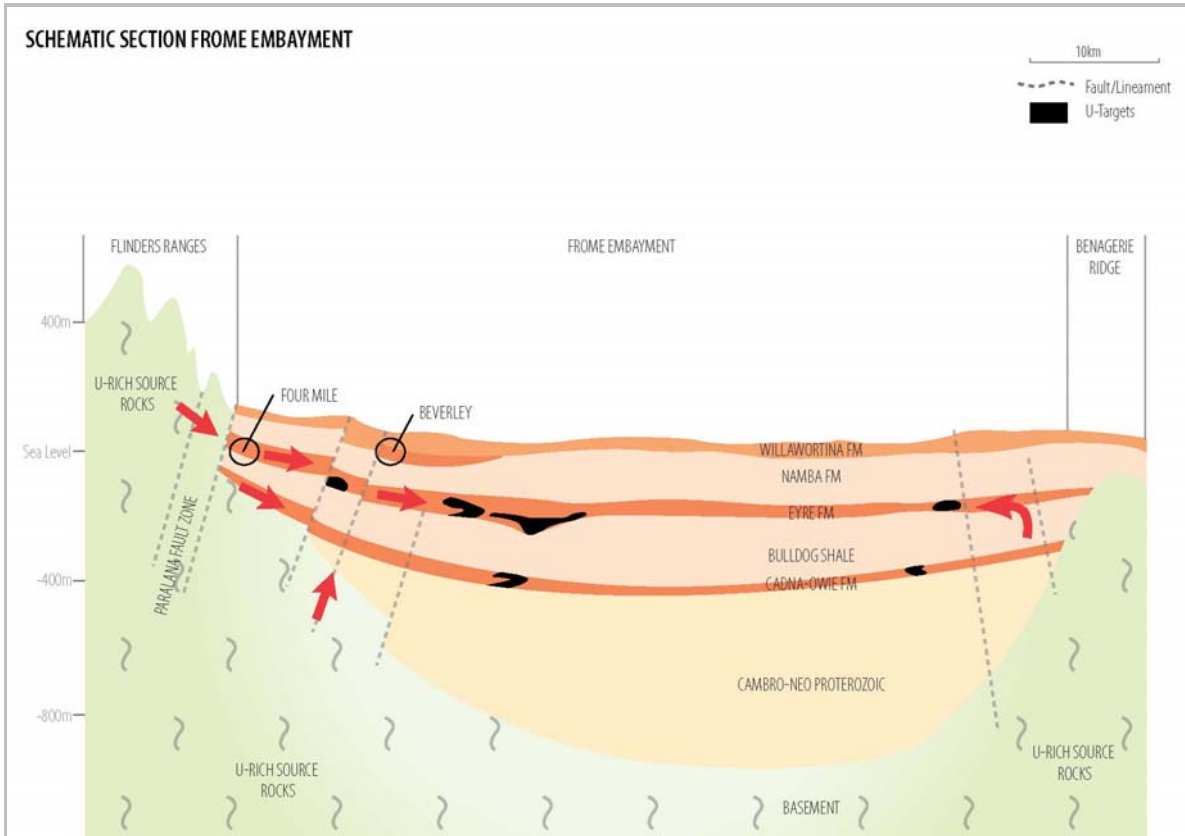


Figure 2 Frome Embayment schematic