

ASX ANNOUNCEMENT 30 April 2012

URANIUM EQUITIES LIMITED ACN 009 799 553



URANIUM
EQUITIES

The Company Announcement Officer
Australian Securities Exchange Ltd
via electronic lodgement

Quarterly Report Quarter ended 31 March 2012

US Demonstration Plant for PhosEnergy Process set to commence operations as preparations gather momentum for 2012 field season in Australia

Highlights

PhosEnergy – Uranium Extraction Technology

- **USA Demonstration Plant set to commence operations in May** as commissioning nears completion
- **Engineering Study** to run in parallel with the Demonstration Plant
- **Results expected before the end of the year**, paving the way for potential development of a commercial plant

Exploration – Australia

- **Planning for 2012 exploration field season** at West Arnhem JV well advanced, with JV Manager Cameco outlining a preliminary program focused on the **Quarry Fault Zone (QFZ)**
- **Detailed gravity program set to commence at the Marla Project** (South Australia) following signing of Native Title Agreements
- Contract awarded for helicopter-based **detailed ground gravity** work over the Marla Project's Todmorden target area
- **SkyTEM** test survey successfully conducted on Lake Blanche Project (South Australia)
- Re-evaluation of Narraweena Project, adjacent to Mega Uranium's Ben Lomond Deposit, following change of Government in Queensland

Our Strengths

- Breakthrough PhosEnergy Process
- Extensive exploration portfolio >24,000km²
- Multiple near term growth opportunities

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1. URANIUM EXTRACTION TECHNOLOGY

Uranium Equities and global uranium leader Cameco Corporation have jointly developed a potentially industry-changing process for the extraction of uranium from phosphoric acid streams produced in the production of phosphate-based fertilisers, "the PhosEnergy Process". Cameco is funding the development of this Process through a staged investment of up to US\$16.5 million, with a further commitment to fund a minimum of 50 per cent of UEQ's share of the capital cost for construction of the first commercial plant, should this occur.

UEQ estimates the cash operating cost of uranium production employing the PhosEnergy Process to be **US\$20-25** per pound of U_3O_8 based on a 1Mtpa P_2O_5 phosphate production facility operating in the USA (including a 40 per cent contingency). The initial focus of the development team is on the phosphate fertiliser industry in the USA, where it estimates there is an opportunity to recover approximately 6Mlbs of uranium per annum with the worldwide opportunity being in the region of 20Mlbs per annum. Operating in the USA also has several potential synergies with Cameco's existing US operations through its subsidiary Cameco Resources.

Commissioning of the PhosEnergy Demonstration Plant in the United States continued during the Quarter, with operations scheduled to commence in May 2012 (Figure 1). The plant is scheduled to operate for 4-6 months to evaluate the process efficiency for a number of feed variations from various sources.

The Demonstration Plant will collect information for a pre-feasibility level engineering study including chemical consumption rates, equipment design criteria and energy inputs. The study will be completed in parallel with the Demonstration Plant with results expected before the end of the year.



Figure 1 – The PhosEnergy Demonstration Plant

2. EXPLORATION ACTIVITIES

Uranium Equities has an extensive exploration portfolio comprising eight uranium exploration projects covering a total area in excess of 24,000km² in the Northern Territory, South Australia, Western Australia and Queensland and including a number of different uranium deposit styles and targets. The West Arnhem Joint Venture, with Cameco Australia (UEQ 40%) and the 100%-owned Nabarlek Mineral Lease, located in the Alligator Rivers Uranium Field in the Northern Territory, represents a rare near-mine uranium exploration opportunity surrounding the historic Nabarlek Uranium Deposit (previous production: 24Mlbs @ 1.84% U_3O_8).

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2.1. West Arnhem Joint Venture – 40% UEQ: 60% Cameco Australia (Manager) (NT)

Cameco has outlined its preliminary program for the 2012 field season, the primary focus of which will be the **Quarry Fault Zone (QFZ)** which extends over a distance of several kilometres. The QFZ has been identified as a similar prospective parallel structural zone to the Nabarlek Structural Corridor (*Figure 2*), which hosts the Nabarlek Mine.

A JV meeting is scheduled for May to approve the final program, which will target the potential for similar high-grade uranium occurrences in the QFZ to those seen at Nabarlek as well as at the **U40 Prospect**, located to the north (see *Figure 2*). Drilling last year targeting extensions to the previously discovered high-grade mineralisation (6.8m @ 6.71% U₃O₈ from 75m) intersected additional mineralisation in the hangingwall close to where the unconformity is intersected by the fault, returning a best intercept of 1.85m @ 0.35% U₃O₈ from 44.35m.

A preliminary structural interpretation has identified a series of U40 Prospect-style targets within the QFZ trend. A work program to examine these areas during the 2012 field season is planned.

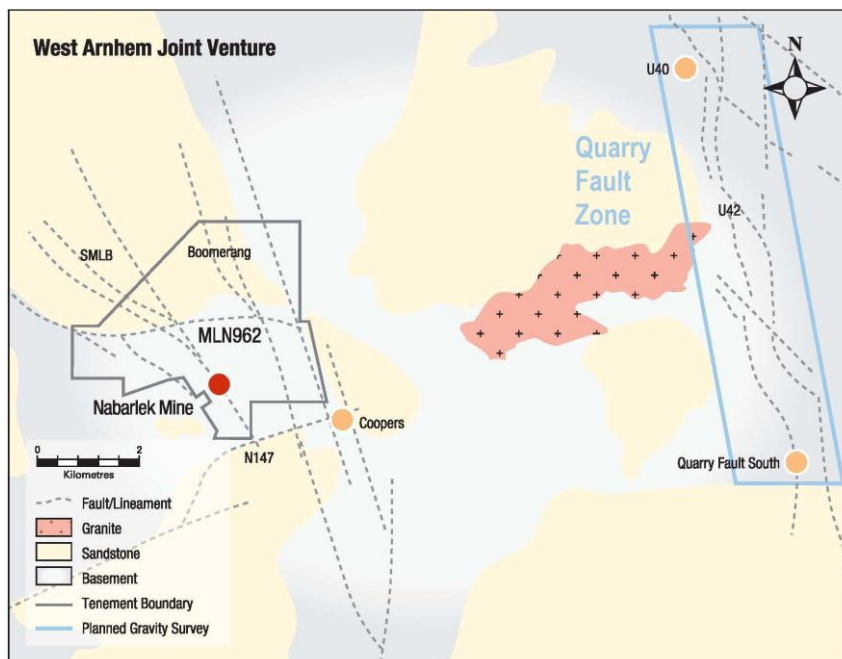


Figure 2 – West Arnhem JV Target Areas

2.2. Nabarlek Mineral Lease (100% UEQ) (NT)

Geological and geophysical datasets have been reviewed and combined to identify structures beneath transported sands and develop new drill targets.

2.3. Oodnadatta & Marla Projects (SA)

The Oodnadatta and Marla Projects cover a total area of 15,283 km² in the northern Gawler Craton in South Australia (*Figure 3*) and are considered prospective for IOCGU (iron-oxide-copper-gold-uranium) deposits and Kazakhstan-style sandstone-hosted uranium deposits.

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Marla & Oodnadatta Project Locations

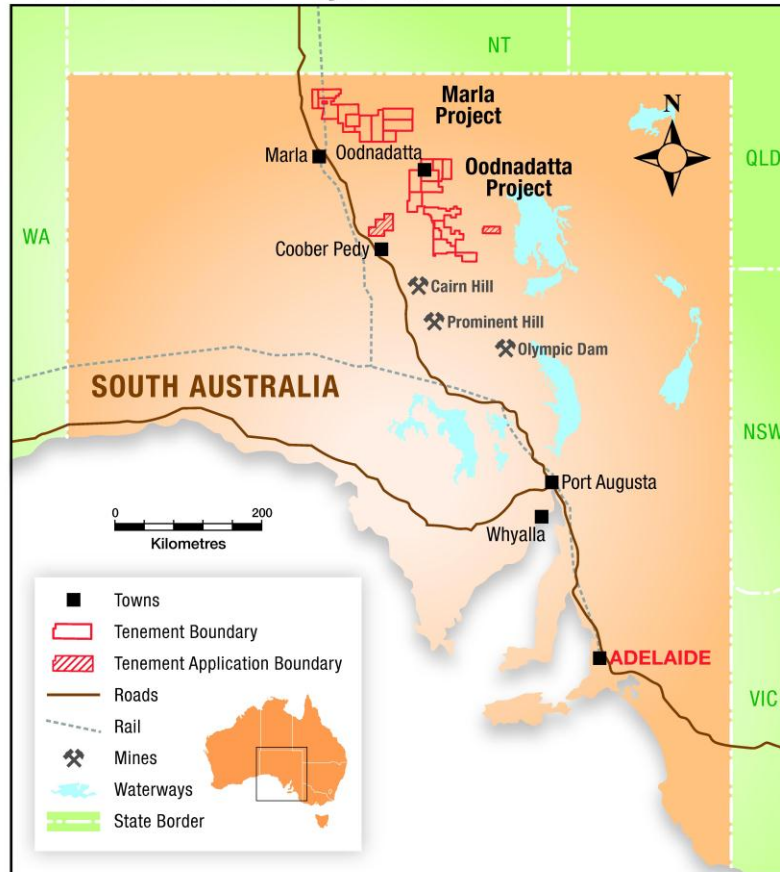


Figure 3

Native title negotiations have progressed to allow exploration access to the Marla Project. During the Quarter, Company representatives attended on-country meetings with Traditional Owners in Marla and Coober Pedy where exploration access agreements were signed with three of the four native title holder groups that cover the majority of the project area. Negotiations with the fourth group are nearing completion.

State-based aeromagnetic and gravity data are currently being reprocessed on a prospect scale to better define IOCGU targets identified by the Company. A review of existing geophysical data has identified a number of significant coincident magnetic and gravity features which will be systematically explored in coming months. The Todmorden region has been targeted due to the presence of well-defined, large-scale structural lineaments and comparatively shallow basement depths.

Because existing regional gravity data for this region is too widely spaced to identify specific drill targets, the Company plans to commence a detailed gravity survey over the most prospective project areas. This survey will comprise 2,000 stations and will cover an area of 1,612km² at between 500m and 1km spacings. Atlas Geophysics has been awarded the contract to conduct the survey, which will commence shortly. A \$40,000 co-funding grant was awarded as part of the South Australian Government's PACE 2020 Initiative to undertake the gravity program.

Following completion of the detailed gravity survey, data will be processed and reviewed to identify prospective drill targets.

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2.4. Lake Blanche Project (SA) (Cameco (Operators) Earning up to 60%)

The Lake Blanche Project, covering a total area of 6,074km² in the Eromanga Basin in South Australia, is prospective for sandstone-hosted uranium.

During the Quarter, a SkyTEM survey was conducted across three small test areas within the Lake Blanche JV project area. Several test survey lines were also conducted over interpreted palaeochannels mapped within the Eyre and Namba Formations. Preliminary data have been received with final data due to be delivered next Quarter.

A seismic interpretation of the open file data is also in progress. The work is being completed by an in-house Cameco geophysics team who have been using seismic profiles to generate targets in other sedimentary basins globally. The aim of the study is to use the existing seismic data to complete a structural interpretation of the region. Once the final seismic and SkyTEM data is available and interpreted, the 2012 drilling campaign will be developed.

2.5. Rudall River (WA) (Cameco 60%: UEQ 40% conditional JV)

The Rudall River Project consists of three Exploration Licence Applications covering 162km², the western-most of which adjoins the Cameco/Mitsubishi Kintyre Project. The Company believes the region is prospective for additional Kintyre-style vein-type mineralisation.

The native title negotiation process continued with the Traditional Owners of the Rudall River region. The licence applications have been advertised under the Department of Mines and Petroleum's expedited procedure provisions. The native title objection period for all applications now closed with objections recorded against two of the three licence areas. The company will continue to negotiate to allow exploration access.

2.6. Narraweena (QLD)

The Narraweena Project comprises a single exploration permit for minerals (EPM 15101), which is 100%-owned by Uranium Equities and covers a total area of 78km² in North Queensland adjacent to the Ben Lomond Uranium Deposit.

Following the Liberal National Party's (LNP) victory in the Queensland state election on 24 March 2012, the Company is re-examining the Narraweena Project with a view to conducting on-ground exploration. The new LNP State Government has not announced its position on uranium mining, but is expected to follow the Federal LNP policy which supports uranium mine development throughout Australia.

Mega Uranium Limited (TSX: MGA), the owner of the adjacent Ben Lomond Deposit (10.7Mlbs U₃O₈ @ 0.25%), announced on 27th March 2012 that it is planning a 4,200 metre drill program to test for extensions to the known mineralisation. The Ben Lomond Deposit is a sheeted vein system hosted within the Carboniferous St James Volcanics which are unconformably overlain by barren rhyolitic ignimbrites of the Watershed North Rhyolite.

The Narraweena Project contains exposures of the Watershed North Rhyolite with the likelihood that these overlying barren volcanic units obscuring possible extensions of Ben Lomond-style mineralisation into the Narraweena licence.

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3. CORPORATE

The Group's cash balance at the end of the quarter was \$2.6 million (refer Appendix 5B for further information).

A handwritten signature in black ink, appearing to read "Bryn Jones".

Bryn Jones
Managing Director

Intercepts calculated using stated cut-off and may contain a maximum internal dilution of 2m. All intercepts are down hole lengths.

Competent Person Statement

The information in this report 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. Information on the West Arnhem Joint Venture and Lake Blanche Project is based on information supplied by Joint Venture operator Cameco Australia. 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 high quality exploration assets covering more than 24,000km² in a number of Australian states and territories and various deposit styles.

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 U₃O₈. 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% U₃O₈). 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.