

URANIUM EQUITIES LIMITED ACN 009 799 553



ASX Market Announcements Office via electronic lodgement

# Quarterly Report Quarter ended 30 September 2013

# Highlights

## **Exploration – Australia**

- Farm-in joint venture agreement reached over Oodnadatta and Marla Projects
- Chalice can elect to earn 70% of both projects by sole funding a total of \$5.5 million of exploration expenditure
- **3,000m of drilling** planned for high priority IOCGU targets on Marla Project commencing November 2013

### Corporate

 Demerger of PhosEnergy Process assets by way of in-specie distribution of PhosEnergy Limited shares to shareholders completed

# PhosEnergy – Uranium Extraction Technology

- Agreement reached with a US based fertilizer producer to assess the commercial viability of applying the PhosEnergy Process to the producer's existing operations
- Demonstration Plant operations commenced, ongoing for several months

# Our Strengths

- Nabarlek rare near mine exploration portfolio
- Multiple IOCGU targets to be drilled in November 2013

### ASX: UEQ

### **HEAD OFFICE**

Level 5 29 King William Street Adelaide, SA 5000 T: +61 8 8110 0700 F: +61 8 8110 0777 E: reception@uel.com.au

### PERTH OFFICE

Level 2, 1292 Hay Street West Perth, WA 6005 GPO Box 2890 Perth, WA 6001 T: +61 8 9322 3990 F: +61 8 9322 5800







## 1. EXPLORATION ACTIVITIES - AUSTRALIA

#### 1.1 Project Summary

Name	State	Target	Area (km <sup>2</sup> )		Ownership
			Granted	Applic.	
West Arnhem JV	NT		448	49	UEQ 40% – earning 100%: Cameco Australia 60%
Nabarlek ML	NT		12	-	UEQ 100%
Woodside, Browse, Cadel North, Pluto & Aurari Bay	NT	Structurally controlled and unconformity style uranium	-	254	UEQ 100%
Headwaters	NT	Coronation Hill-style gold – platinum – palladium – uranium	-	2,280	UEQ 100% (in moratorium)
Rudall River	WA	Kintyre style uranium	175	-	Cameco Australia 85%:UEQ free carried 15% conditional JV
Narraweena	QLD	Ben Lomond style uranium	42	-	UEQ 100%
Marla	SA	IOCG+-U, Broken Hill style meta- sedimentary hosted Cu-Au	2,886	-	UEQ 100% - Chalice Gold earning 51%
Oodnadatta	SA	IOCG+-U	4,860	-	UEQ 100% - Chalice Gold earning 51%
			8,423	2,583	

Uranium Equities has a portfolio of high quality exploration projects in a number of Australian states and territories and including a number of different deposit styles and targets.

### 1.2 Marla and Oodnadatta Projects

During the quarter the Company announced that Chalice Gold Mines Limited (ASX: CHN) has entered into a farmin joint venture agreement over the Company's Oodnadatta and Marla Projects in South Australia.

The projects consist of 16 granted exploration licences totalling 7,746 km<sup>2</sup> situated at the underexplored northern margin of the Gawler Craton (Figure 1). The Company considers the tenements to be highly prospective for the discovery of economic Iron–oxide – Copper – Gold  $\pm$  Uranium (IOCGU) deposits.

The farm-in agreement gives Chalice the right to earn up to 70% of both projects by sole funding a total of \$5.5 million in exploration expenditure. Chalice may earn an initial 51% by sole funding \$2.5 million. The initial program will include approximately 3,000 metres of combined rotary mud and diamond drilling on the Marla Project and a ground gravity survey over the Oodnadatta Project. The Projects will be managed by Uranium Equities for the first 12 months.



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Figure 1 Project Location Map

# **Exploration Potential**

Both project areas are located on the Gawler Craton which is the premier region for Iron–oxide Copper – Gold  $\pm$  Uranium (IOCGU) mineralisation and hosts deposits such as Olympic Dam, Prominent Hill and Carrapateena.

The **Marla Project** is situated on the northern margin of the Gawler Craton and straddling a major suture zone between the Gawler Craton and Musgrave Block. Several high priority target areas have been identified where gravity and magnetic anomalism coincide in areas of complex structural interactions.

The stand out Todmorden Target area identified from the geophysics is a large fold-type magnetic feature with a coincident gravity response. Depth modelling of the highest priority Marla coincident gravity and magnetic targets has indicated the anomalies sit at less than 400m depth which makes these targets very compelling compared to other parts of the Olympic Dam Province.





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The highest priority targets have all necessary drilling permits including heritage clearances and drilling is planned to commence in early November. Drilling is planned to consist of 7 or 8 rotary mud – diamond core drill holes totalling 3,000 metres across the Todmorden, Rochdale, Smithybridge and Bacup Targets (Figure 2).

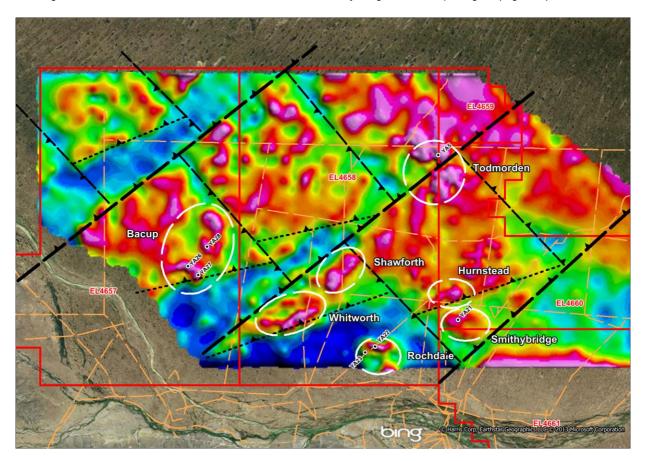


Figure 2 Marla Project Gravity and Structural Interpretation

A \$90,000 PACE co-funding grant was awarded to undertake drilling at the Todmorden Target area.

The **Oodnadatta Project** tenements lie along and adjacent to the Peake – Denison Ranges which include the Peake Metamorphics and the Wirriecurrie Granite.

A review of existing geophysical data over the Oodnadatta Project has identified a number of significant coincident magnetic and gravity features with only limited gravity coverage over the highest intensity magnetic anomalies. An initial ground gravity program covering the most prospective targets is planned for completion in in the current quarter to provide depth and targeting information for drilling.

Well defined large scale structural lineaments, known mineral occurrences and comparatively shallow basement depths make these two projects highly prospective for the next IOCGU discovery.





#### 1.3 Nabarlek Project

The West Arnhem Joint Venture, with Cameco Australia (Uranium Equities right to earn 100%) and the 100%owned Nabarlek Mineral Lease, located in the Alligator Rivers Uranium Field in the Northern Territory, represent a rare near-mine uranium exploration opportunity surrounding the historic Nabarlek Uranium Deposit (previous production: 24Mlb (@, 1.84%  $U_3O_8$ ) – the Nabarlek Project.

Recent detailed 3D modelling of key target areas by Aurel Consulting has been incorporated with established drilling, geochemical and geophysical datasets. This work has provided greater clarity on the geology, mineralisation and structural regimes present around these key targets and assisted with on-going target generation and evaluation.

#### 1.4 Other Projects

#### Woodside, Browse and Aurari Bay (NT)

The Northern Territory Department of Mines and Energy has advised that consent has been given to enter negotiations with the Northern Land Council (NLC) regarding the Aurari Bay, Woodside and Browse exploration licence applications. The Company has submitted written applications to the NLC for its consent to the grant of the licences.

#### Pluto (NT)

A new application has been made in Arnhem Land adjacent to the Nabarlek Project. This new licence application has been assigned ELA30073 and will now be known as Pluto.

The south-eastern corner of the new exploration licence application lies just 600m from the Gorrunghar Prospect in ground held by Alligator Energy Limited (ASX: AGE). Alligator have been following-up rock chip sampling results from a limited area of outcropping mineralisation with assays ranging from 310 - 6,089ppm U<sub>3</sub>O<sub>8</sub> associated with a northwest trending structural zone (see AGE announcement 19/08/2013).

Recently announced follow-up drilling by Alligator Energy (see AGE announcement 16/10/2013) intersected encouraging mineralisation possibly trending to the east northeast. However they report that further drilling is required to properly define the orientation of mineralisation.





### 2. URANIUM EXTRACTION TECHNOLOGY

Prior to the demerger of the PhosEnergy Process assets (see 3.1 below) the Company announced that it had, together with Cameco Corporation, entered into an Agreement with a US based fertilizer producer to assess the commercial viability of applying the PhosEnergy Process<sup>(1)</sup> to the producer's existing operations.

The Agreement covers on-site operation of the PhosEnergy demonstration plant with the results providing inputs to a pre-feasibility study. The pre-feasibility study will allow the parties to assess the economic viability of the Process and make a commercial decision on progressing further toward a full scale operation.

Operation of the demonstration plant commenced in August and will be ongoing for a number of months with the pre-feasibility study following shortly thereafter.

Future progress on the PhosEnergy Process can be followed through the PhosEnergy Limited website <u>www.phosenergy.com</u>.

<sup>(1)</sup> PhosEnergy Limited 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 an investment of US\$16.5 million, with a further commitment to fund a minimum of 50 per cent of PhosEnergy Limited's share of the capital cost for construction of the first commercial plant, should this occur.

An independent Pre-feasibility Level Engineering Study completed in March 2013 estimates the cash operating cost of uranium production employing the PhosEnergy Process to be below US\$18 per pound of  $U_3O_8$  based on a 1Mtpa  $P_2O_5$  phosphate production facility operating in south east USA. The initial focus of the development team is on the phosphate fertiliser industry in the USA, where we estimate there is an opportunity to recover approximately 6Mlbs of uranium per annum. The worldwide opportunity is in the region of 20Mlbs per annum. Operating in the USA also has several potential synergies with Cameco's existing US operations.

### 3. CORPORATE

#### 3.1 PhosEnergy Demerger

On 29 August 2013 shareholders approved a separation of the Company's exploration and PhosEnergy Process assets.

The demerger of the PhosEnergy Process assets has created two independently focussed companies, allowing different funding and development strategies to be applied to the substantially different businesses. It allows shareholders and investors to hold or invest in the exploration assets, the PhosEnergy Process, or both depending on their investment strategies and risk appetite.

The demerger was completed on 13 September 2013 following:

- (a) Transfer of the PhosEnergy Process assets into the Company's wholly owned subsidiary, PhosEnergy Limited (PEL) in return for shares in PEL; and
- (b) Distribution of PEL shares to shareholders (for no cash outlay) on an approximately 1 for 10 basis.

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Shareholders now hold shares in both Uranium Equities and PEL and at the date of this report the Company retains a 9% interest in PEL.

#### 3.2 Investment in Energia Minerals Limited (ASX: EMX)

On 30 October 2013 the Company advised that it had entered into an agreement to sell its 18.52% interest in Energia Minerals Limited (ASX: EMX) to ASX-listed uranium explorer Enterprise Uranium Limited (ASX: ENU).

The Company's 37,280,714 Energia shares have been transferred to Enterprise Uranium for 2.2 cents per share for a total consideration of \$820,176 comprising:

- \$500,000 in cash; and
- The balance in fully paid ordinary shares in Enterprise Uranium at an issue price of 4.0 cents (for a total 8,004,393 shares).

Uranium Equities now holds a 10.49% interest in Enterprise Uranium, a Perth based explorer currently focussed on uranium assets in Western Australia.

Bryn Jones Managing Director

#### **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. 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) is a uranium explorer with exploration activities directed at high quality exploration assets in Australia's premier uranium districts.

UEQ's key asset, the Nabarlek Project, provides a rare near mine exploration opportunity surrounding the historical Nabarlek uranium deposit (previous production: 24 Mlb @ 1.84% U<sub>3</sub>O<sub>8</sub>). 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.

The Company's Oodnadatta and Marla projects are located on the Gawler Craton, the premier region for Iron–oxide Copper – Gold  $\pm$  Uranium (IOCGU) mineralisation which hosts deposits such as Olympic Dam, Prominent Hill and Carrapateena. Multiple targets, characterised by coincident gravity and magnetic anomalism in areas of complex structural interactions, have been identified.