

# Quarterly Report

## Quarter ended 30 June 2008

### HIGHLIGHTS

#### Exploration

- Acquisition of the Nabarlek Mining Lease (UEQ 100%) was completed.
- A number of highly prospective locations along the Nabarlek Shear Zone were identified within the Mining Lease. Approvals were sought from regulatory authorities to secure access for exploration as soon as possible.
- Drilling commenced on the N147 prospect subsequent to the close of the Quarter. N147 lies within the West Arnhem Joint Venture (UEQ 40%; Cameco Australia 60%) Nabarlek tenements.
- Positive initial drilling results received at the Watson's Project in South Australia confirm the concept of a "Beverley-4 Mile" style palaeochannel uranium system.
- High grade surface uranium mineralization up to 1.39% U<sub>3</sub>O<sub>8</sub> was located at Narraweena, Queensland over previously identified airborne radiometric anomalies.

#### Uranium Extraction

- Development of the "PhosEnergy Process" involved construction of a small pilot plant facility. Pilot Plant operations, beginning next quarter, should pave the way for a decision to be made on construction of a larger commercial pilot and/or plant by the end of 2008.

### EXPLORATION ACTIVITIES

#### 1. NORTHERN TERRITORY

##### 1.1 NABARLEK MINING LEASE (UEQ 100%)

The transaction to acquire Queensland Mines Pty Ltd, owner of the Nabarlek Mining Lease (MLN 962), Northern Territory was completed on 30<sup>th</sup> June 2008. The main asset of Queensland Mines is the 12km<sup>2</sup> Nabarlek Mining Lease in the Alligator Rivers Uranium Province, (ASX release dated 4<sup>th</sup> April 2008). The Mining Lease covers the high grade Nabarlek Uranium Deposit, which was discovered in 1970 and mined between 1979 and 1988. The mine produced 24 million pounds U<sub>3</sub>O<sub>8</sub> from 570,000t of ore at an average grade of 1.84% U<sub>3</sub>O<sub>8</sub>.

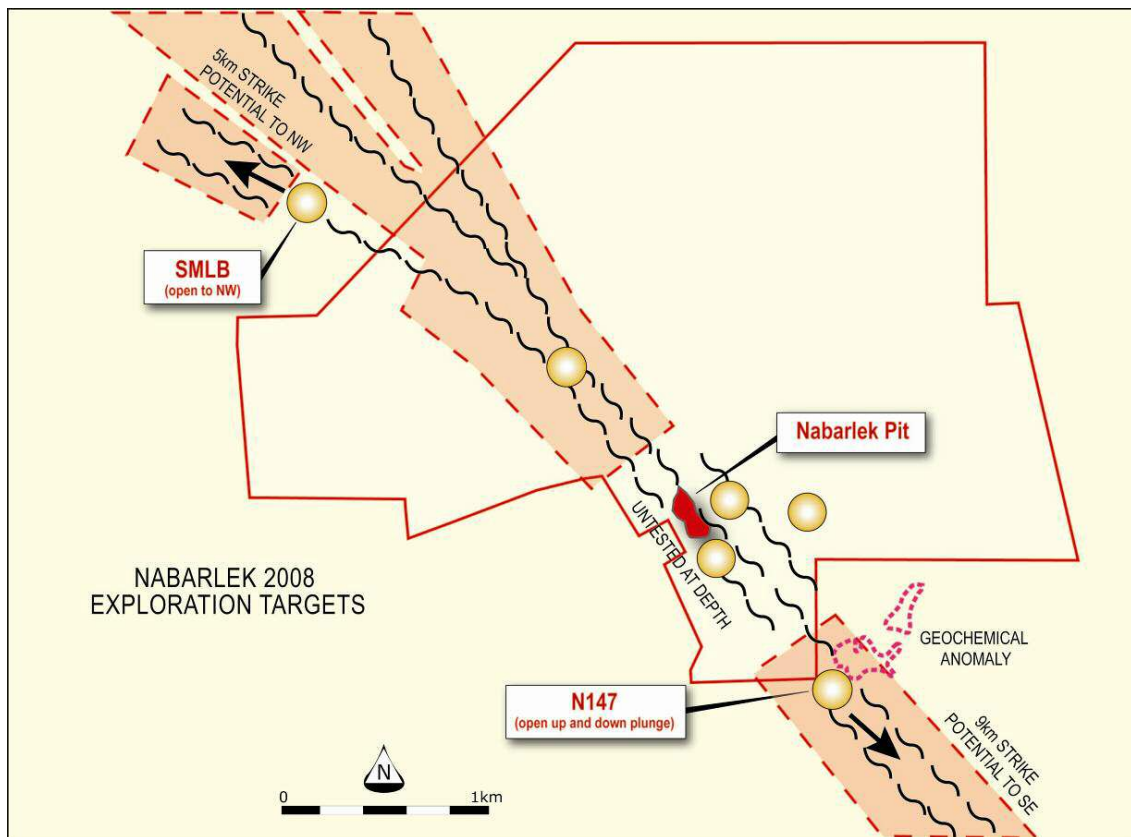
The consideration for the acquisition of Queensland Mines was the payment of \$96,352 for onsite plant and equipment and the replacement of a \$400,000 bond lodged with the Northern Territory Government as security in relation to the Company's rehabilitation obligations.

UEQ now holds a 100% interest in the Mining Lease and a 40% interest in the surrounding ground, in joint venture with Cameco Australia.

A review and re-interpretation of historical geological data has concluded that the exploration potential for further discovery over the 3km strike of the Nabarlek Shear Zone, within the Mining Lease, is very high. By modern standards, the Mining Lease remains largely untested. No exploration drilling has been conducted for the past 15 years. Areas for immediate exploration are identified in Figure 1.

An exploration camp is being established and the airstrip on the Mining Lease is being rehabilitated. This will enable all-season access to the Mining Lease and surrounding joint venture tenements.

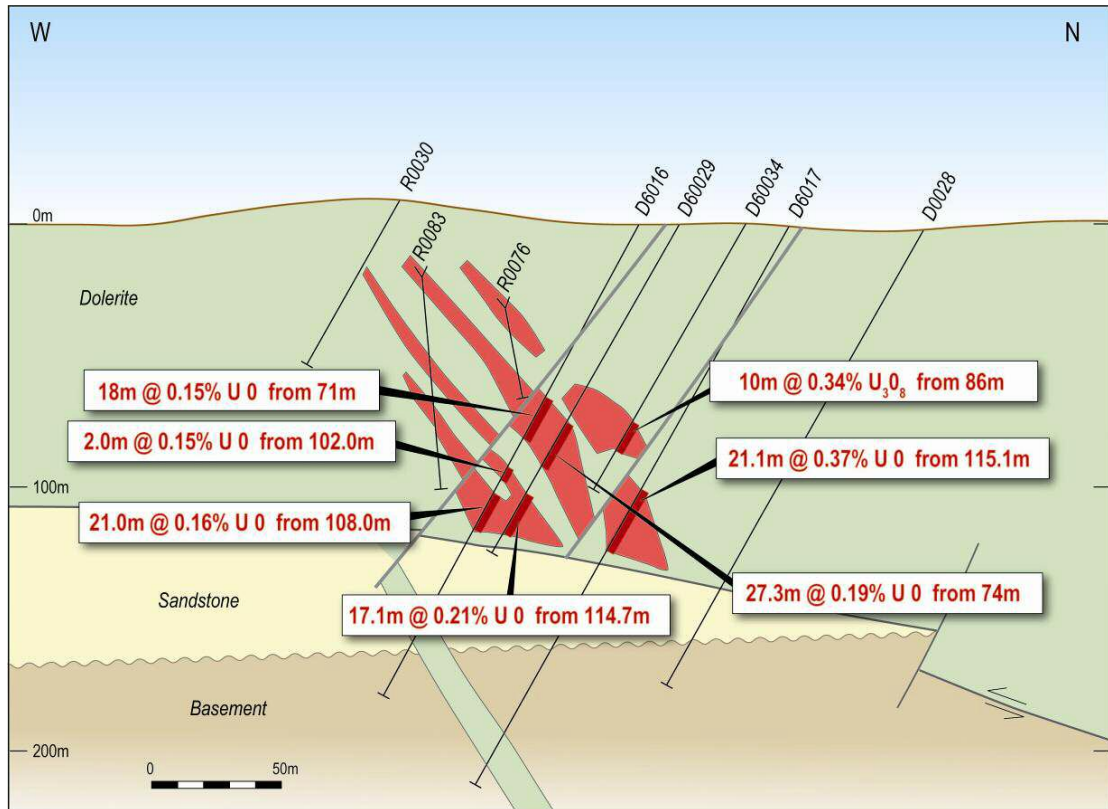
A 7000m RAB and RC drilling program will be initiated on the Mining Lease once final approvals and clearances are received from the Territory and Commonwealth regulatory authorities and the Traditional Owners.



**Figure 1: Nabarlek ML area -exploration targets and structural elements**

**1.2 CAMECO – UEQ WEST ARNHEM LAND JOINT VENTURE**  
(UEQ 40%)

Planning was completed to undertake the 2008 field season commencing at the N147 prospect early in July 2008. As reported the drilling target at N147 is up plunge and down plunge extensions of the existing high grade mineralisation. A combination of drilling completed in 2007 and in the past has tested one section and delineated uranium mineralisation in a sub-vertical to steeply northward plunging zone, more than 50m wide (Figure 2 and Figure 3).

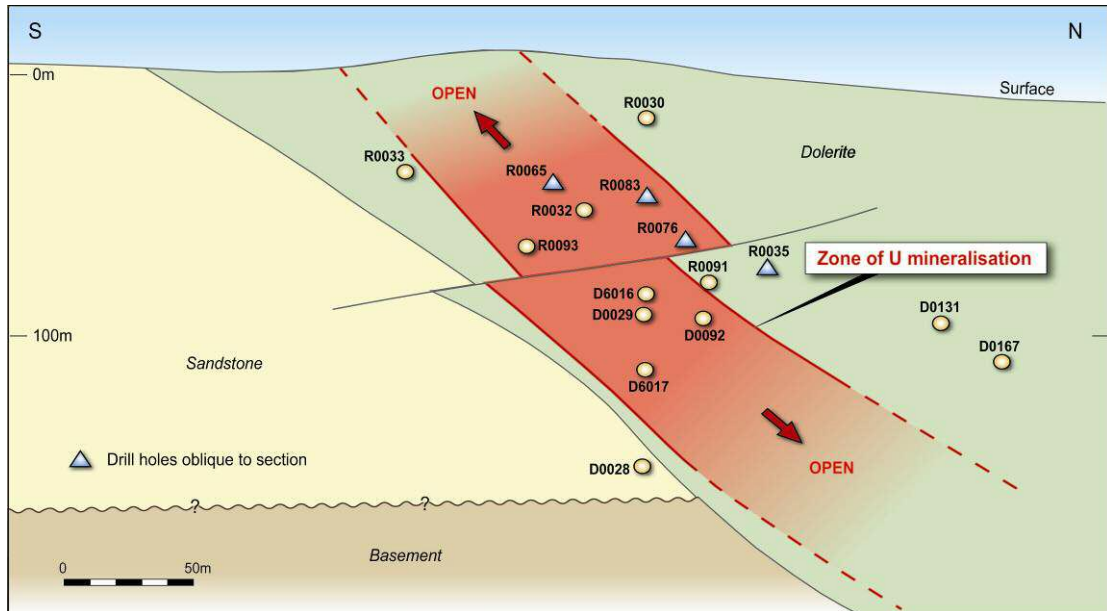


**Figure 2: N147 Cross Section**

Joint Venture drilling intercepts<sup>1</sup> from the 2007 drilling program include:

D6016	18.0m @ 0.15% U <sub>3</sub> O <sub>8</sub> from 71.0m
	2.0m @ 0.15% U <sub>3</sub> O <sub>8</sub> from 102.0m
	21.0m @ 0.16% U <sub>3</sub> O <sub>8</sub> from 108.0m
D6017	21.1m @ 0.37% U <sub>3</sub> O <sub>8</sub> from 115.1m

<sup>1</sup> <sup>1</sup> ICP-OES analyses of core. Results compiled at a 0.02% U<sub>3</sub>O<sub>8</sub> cut-off with maximum internal dilution of 2.0m.



**Figure 3: N147 Prospect Long Section with potential Mineralisation Open Up and Down Plunge**

UEQ ceased participation in exploration of the “Cadell” tenements which cover the eastern part of the West Arnhem Joint Venture Area. The withdrawal will enable the Company to focus its expenditure on the highly prospective Joint Venture tenements (UEQ 40%) surrounding the Nabarlek Mining Lease (UEQ 100%).

## 2. SOUTH AUSTRALIA

### 2.1 WATSONS PROJECT

(UEQ 51% with option to earn 80%)

Past drilling and geophysical exploration has identified a geological/chemical environment favourable for the development of a “Beverley-4 Mile” “roll-front” style uranium mineralization system within the project area, 210km northwest of Ceduna in South Australia.

9 holes totaling 621m were completed during the quarter as part of an initial reconnaissance drilling program on this project.

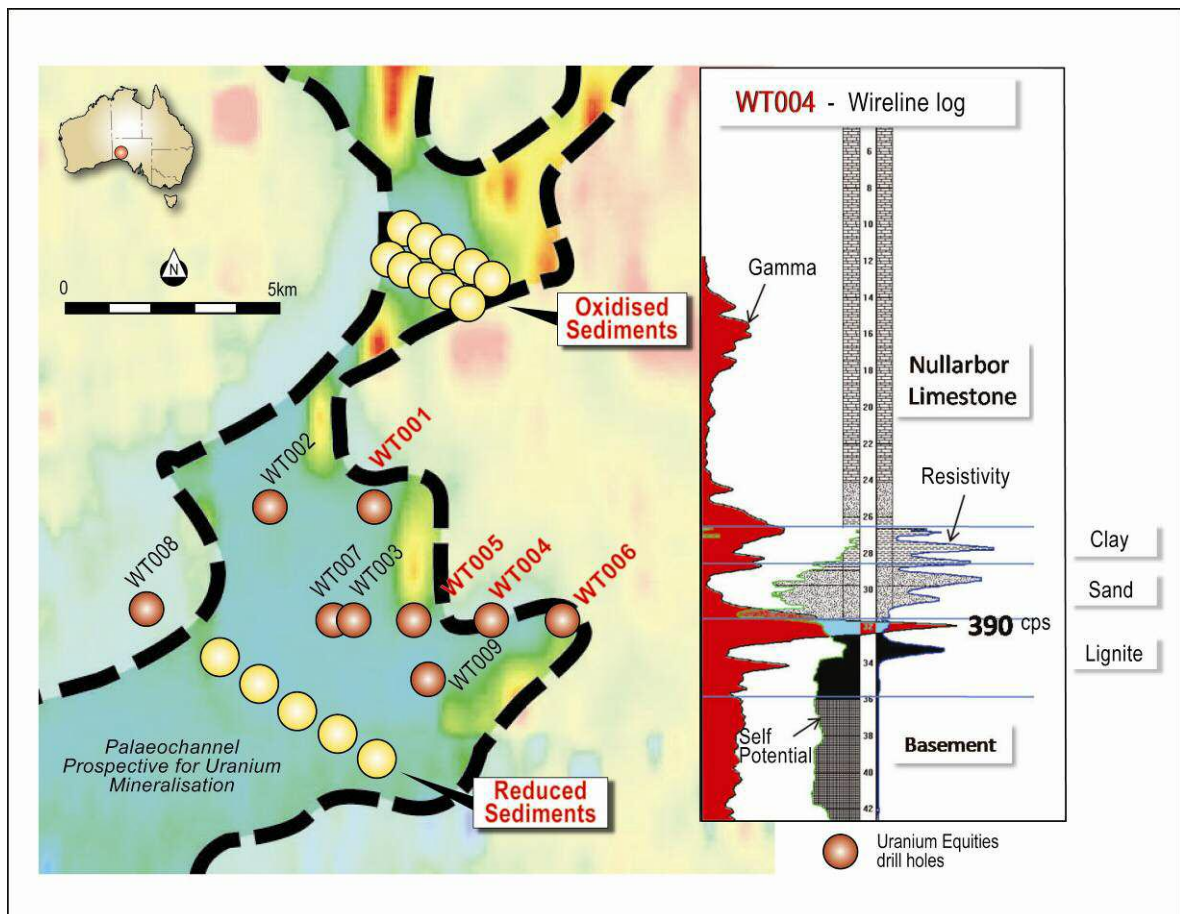
Results confirmed the exploration concept and established the presence of a uraniferous system. Significant gamma anomalism was encountered in holes WT001, WT004, WT005 and WT006 related to thick sequences of both oxidized and reduced sands near the channel margin. The best intersection in hole WT004 was an equivalent grade of 100ppm eU3O8 over 1.8m (Figure 4).

The presence of anomalous gamma within the channel is consistent with previously reported anomalous uranium (ASX release 19<sup>th</sup> May 2008).

Difficult drilling conditions were encountered in penetrating the limestone overlying the target sequence and the program was suspended until a more suitable drilling rig becomes available. Geological interpretation of the initial results is continuing. It is anticipated that further drill testing within this target

zone will be undertaken in the coming quarter to follow up on the encouraging results thus far.

The Company met its 51% Joint Venture earn in commitments with Internet Resources (ASX: ITT), and is awaiting Internet's decision on whether to participate and part fund the next round of drilling.



**Figure 4: Drill hole locations and representative wireline log for hole WT004, north- eastern Watsons Channel**

## 2.2 EROMANGA PROJECT (UEQ 100%)

The Eromanga Project comprises 2 large tenement packages, 23,500 km<sup>2</sup>, ("Simpsons" and "Lake Blanche") covering sedimentary sequences within the Eromanga Basin immediately adjoining the Arunta (NT) and Mt Painter (SA) uraniumiferous basement rocks.

Approvals for drilling and land access are being sought with the anticipation that drilling can commence in the 4<sup>th</sup> Quarter 2008. An initial program of 4000m of rotary mud drilling is planned at Lake Blanche.

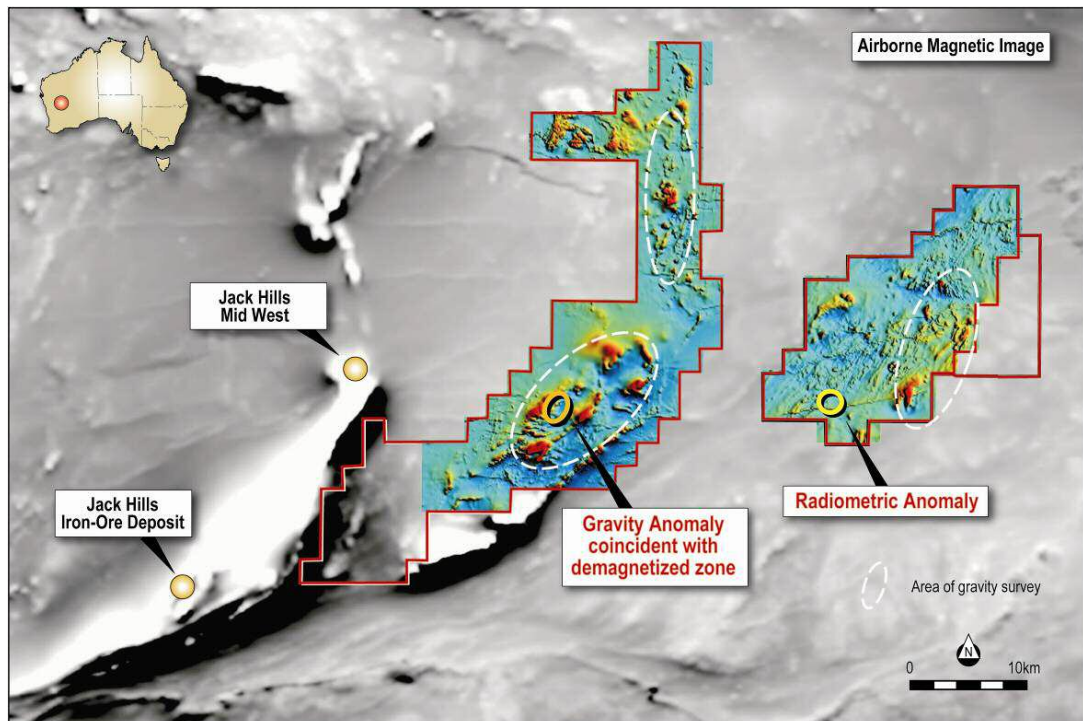
### 3. WESTERN AUSTRALIA

#### 3.1 MOORARIE (UEQ earning 60%)

The Moorarie Project is situated 120 km northwest of Meekatharra in the Northern Yilgarn Craton. Uranium Equities is earning a 60% interest in 3 Exploration Licences, E51/1066 and E52 (1902-03), through a joint venture with Independence Group NL.

The exploration target is a hematite deposit possibly represented by the 8+ mgal gravity anomaly located coincident with a 2km x 300m demagnetised zone within the Banded Iron Formation some 20-30 km from the Jack Hills hematite deposit (Figure 5).

A meeting with representatives of the traditional owners in the area is arranged for 17<sup>th</sup> July 2008. Subject to satisfactory clearance agreement a 5000m RAB drilling program is planned for mid August to assess the highest priority hematite targets.



**Figure 5: Moorarie exploration tenements showing magnetic features, areas of reconnaissance gravity survey and location of radiometric and gravity anomalies**

#### 3.2 OTHER WA PROJECTS

Three Springs, Rudall River and Lake Barlee projects remain part of UEQ's Western Australian project portfolio.

Granting of tenements is awaited at Three Springs (Joint Venture with Southern Uranium Limited) near Geraldton and at Rudall River (2 tenements totaling 144km<sup>2</sup>) near the Kintyre uranium deposit.

## 4. QUEENSLAND

### 4.1 NARRAWEENA

(UEQ 100%)

Reconnaissance sampling over uranium anomalies detected in airborne radiometric data (ASX release 21/12/07) has confirmed the presence of outcropping high-grade uranium mineralisation in three locations, 3 km south east of Mega Uranium's (TSX:MGA) Ben Lomond uranium/molybdenum deposit (Figure 6).

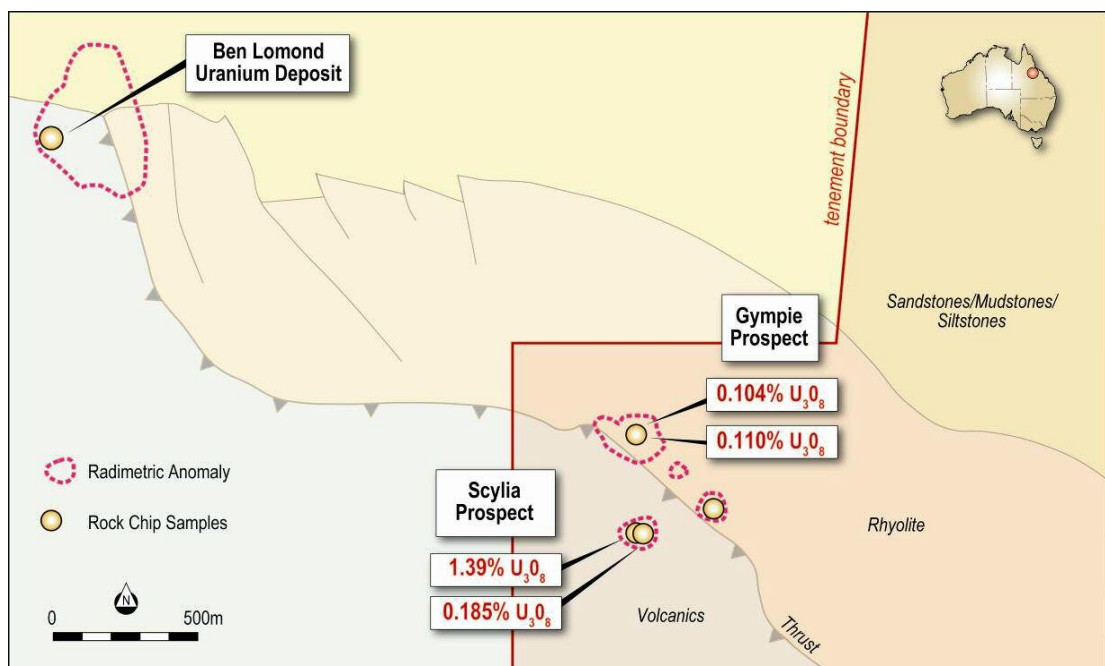
The highest assay obtained from individual grab samples was 1.39% U<sub>3</sub>O<sub>8</sub> at the Scyllia Prospect. Other anomalous assays of 0.185% and 0.024% U<sub>3</sub>O<sub>8</sub> were obtained from the central part of this radiometric anomaly.

Sampling of the Gympie Prospect returned highest assays of 0.104% and 0.110% U<sub>3</sub>O<sub>8</sub> from grab samples taken 500 metres apart.

The area sampled was the focus of limited historical exploration drilling in the early-mid 1980's by Total Mining Australia Pty Ltd with mixed results. Whilst some holes failed to intersect uranium mineralisation, other shallow holes reported anomalous values. Further assessment and drilling is required to determine the significance of these results.

A 50% reduction in area of the Narraweena tenement was completed.

The next phase of exploration will involve a further geological assessment, systematic sampling and mapping and drilling of targets along the strike of the thrust zone and related structures.



**Figure 6: Narraweena – Prospect Uranium anomalies and sampled grades**

## URANIUM EXTRACTION

### 5.1 The PhosEnergy Process

Uranium Equities through USA registered Urtek LLC (a company in which UEQ is a 16.13% shareholder and holds the right to secure a 90% interest as reported to ASX 20<sup>th</sup> June 2007) is currently undertaking the development of new technology for the extraction of uranium from phosphoric acid streams. These streams are generated in the production of superphosphate fertilisers from rock phosphate in what Urtek has designated as "the PhosEnergy Process".

Worldwide, the annual potential production of uranium from phosphate rock/phosphoric acid has been estimated to be up to 8,500t U<sub>3</sub>O<sub>8</sub> per annum. Historically, production from phosphoric acid peaked at 1,700-2,400 t U<sub>3</sub>O<sub>8</sub> per annum during 1978-1983. All worldwide uranium production from these sources ceased in the early 1990's as a consequence of high operating costs and falling (low) uranium prices.

The PhosEnergy Process is being developed (using the Company's in-house chemical engineering and metallurgical expertise) jointly with a major producer of phosphate fertilisers and phosphoric acid. This work is being carried out in conjunction with and under exclusive arrangements with ANSTO (The Australian Nuclear Science and Technology Organisation) and QED-Occtech.

The development of the PhosEnergy Process has advanced to the pilot scale testwork stage with a phosphoric acid producer partner. Completion of this stage of development, which may lead to a decision to undertake the evaluation of a commercial scale plant, is expected within the next 12 months. Following successful completion of commercial scale testwork, it is anticipated that the PhosEnergy Process could be in commercial application as soon as 2011.

Currently, a pilot scale plant is being constructed at an established phosphoric acid and former uranium producing operational site with a view to start pilot operations during mid to late 2008. Piloting of the key areas of the proposed flow sheet on live liquor will enable the testwork to advance in an integrated manner and will enable more accurate determination of future capital and operating costs. This will also allow for the optimisation of the downstream unit operations and the development of the design basis for a larger demonstration plant, if required.

UEQ currently provides personnel and funds to support its share of the technology development and is earning an increased equity position in Urtek.



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*The information in this report that relates to Exploration Results is based upon information compiled by or approved by Mr David A. Brunt, a full-time employee of Uranium Equities Limited, who is a Fellow of the Australasian Institute of Mining and Metallurgy Inc. Mr. Brunt 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, Minerals Resources and Ore Reserves, and consents to the release of information in the form and context in which it appears here.*