

## ASX Release

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### URANIUM RECOVERIES OF UP TO 77% CONFIRMED FROM METALLURGICAL OPTIMISATION PROGRAM

A-Cap Resources Limited (“A-Cap” or “the Company”) is pleased to announce important results from heap leach metallurgical optimisation. Results show that recoveries of up to **77%** can be expected from heap leach processing of primary ore at Letlhakane.

This result is extremely important to the economics of this project since 83% of the deposit is primary ore where heap leach field recoveries of 75% can be expected.

This excellent recovery when applied to the 90 million pounds of high grade resource grading 284 PPM (see announcement) has a major bearing on both the operating cost per pound and the overall economics of this project.

This optimisation program follows on from test work on primary ore from Gorgon South using four column sizes (0.4m, 1m, 2m and 4m) which also achieved good recoveries from 70-75% but using ore that had been upgraded from radiometric sorting (see March 2012 Quarterly Report). This current program is using unsorted whole of ore materials which should result in lower operating costs per pound and higher recoveries of uranium.

The Letlhakane project is one of the largest underdeveloped uranium projects in the world, with significant comparative advantages in cost of mining and processing, the proximity of all major infrastructure and its location in a very secure investment jurisdiction.

Feasibility work is well advanced with strong indications that it will deliver very competitive operating costs, together with capital costs below its peers.

Paul Thomson said ‘A-Cap have invested considerable time and money into our metallurgical test work programme and latest results demonstrate the high level of recoveries that can be expected. We are privileged to have a team that includes some of the best metallurgists in the world working on optimising our metallurgical processing and this result is a credit to them. This result when applied to the high grade resource identified and announced in May has a major positive impact on the economics of the project with strong indications now of competitive operating costs per pound and low capital’

## HIGHLIGHTS

- ▲ Total of seventeen two metre column leach tests either completed or in the final stages of the leach at SGS Minerals Services in Perth, Western Australia;
- ▲ Results of three two metre column leach tests using a two stage acid leach on minus 19mm material of mixed oxide ore, composite Kraken and Gorgon primary ore and Serule primary ore demonstrated uranium recoveries of 68%, 75% and 77% respectively;
- ▲ This is the first time the Serule primary ore has been tested, best recovery demonstrated at 77%;
- ▲ Results confirm that the primary ore, which account for 83% of the total 352M lb U<sub>3</sub>O<sub>8</sub> resource at Letlhakane, can be expected to achieve uranium recoveries of approximately 75%;
- ▲ Leach kinetics are positive with the majority of the uranium recovered in the first 20 days;
- ▲ These excellent recoveries when applied to the high grade resources announced in May are very positive for operating costs per pound and overall project economics.

## Details of two Metre Optimisation Column Leach Tests

A total of seventeen 2 metre column leach tests have either been completed or in the final stages of the leach using four Letlhakane ore types:

- Kraken Primary Ore
- Gorgon South Primary Ore
- Serule West Primary Ore
- Mixed Oxide Ore

For each of these ores, three crush sizes (minus 8mm, minus 19mm & minus 30mm) are being evaluated along with three different acid regimes:

- Two stage acid leach using 25kg/t sulphuric acid during agglomeration with 300g/L acid used in the leach liquor during Stage 1 (approx. 10 days) reducing down to 50g/L acid during Stage 2.
- Single stage acid leach using 25kg/t acid for agglomeration and 100g/L acid in the leach liquor.
- Single stage acid leach using 10kg/t acid for agglomeration and 50g/L acid in the leach liquor. *This acid regime was only used on the Serule West primary ore.*

All tests were carried out using whole (unsorted) ore and a mature leach solution, the composition of which was estimated from the results of a series of sequential bottle roll tests on each ore type. This mature leach solution has a composition that is close to equilibrium with the ore material.

## Results of two Metre Column Leach Tests

Results of the three 2 metre column leach tests using the two stage acid leach have been received and were carried out on the following material:

- Mixed Oxide Ore
- Composite Kraken (50%) and Gorgon South (50%) Primary Ore
- Serule West Primary Ore

The leach tests were carried out on minus 19mm material with the uranium in the pregnant liquor recovered by solvent extraction.

The leach tests were carried out over a period of 60-67 days with the following recoveries achieved (see Figure 1):

- Mixed Oxide Ore – 68%
- Composite Kraken and Gorgon South Primary Ore – 75%
- Serule West Primary Ore – 77%

The majority of the recovered uranium was leached within the first 20 days (see Figure 1) indicating good leach kinetics.

**These results confirm that the primary ore, which accounts for 83% of the total 352Mlb U<sub>3</sub>O<sub>8</sub> resource at Letlhakane, can be expected to achieve uranium recoveries of around 75%.**

It should also be noted that these results are indicative of only the first three out of a series of 17 columns which are designed to optimise crush size and acid leach conditions for these ores. Once all the results are available, these optimised conditions may improve recoveries above the level seen in these first three tests.

Once this first stage optimisation program is complete, the second stage program is likely to consist of a program of 4 metre columns for each ore type, using the optimised crushed size and acid regime determined from the current program. The results of these current columns and the proposed 4 metre columns will be the main pre-cursor to a pilot plant test which will produce data of sufficient detail for the Definitive Feasibility Study.

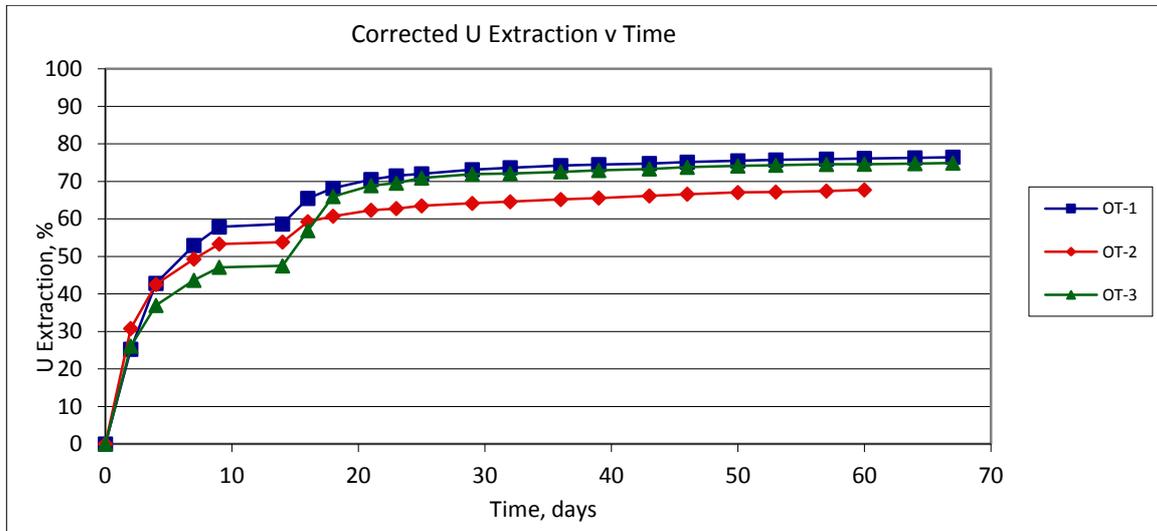


Figure 1 : Results of the Two Stage Leach using Minus 19mm ore – OT-1 Serule West Primary Ore, OT-2 Mixed Oxide Ore and OT-3 Composite of Kraken and Gorgon Primary Ore

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*Information in this report is based on data compiled by Mr Randall Pyper of Kappes, Cassiday & Associates Australia Pty Ltd who is a consultant to A-Cap Resources Limited. Mr Pyper, who is a Fellow of the Australasian Institute of Mining and Metallurgy, has sufficient experience in heap leach technology and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

#### Background of A-Cap Resource's Letlhakane Uranium Project

A-Cap Resources Ltd is an ASX listed exploration company that focuses its efforts towards the investment-friendly country of Botswana in Southern Africa, where it has over 4000km<sup>2</sup> of exploration licences. The 100% owned Letlhakane Uranium Project in northeast Botswana has a JORC compliant resource of 1,041 Mt for 352 Mlb U<sub>3</sub>O<sub>8</sub> at a grade of 153ppm based on a cut off grade of 100ppm. Currently the Company is completing a Feasibility Study on the Project and the metallurgical testwork forms a crucial aspect of that study.