

## RADIOMETRIC SORTING REPORTS POSITIVE RESULTS

A-Cap Resources Limited ('A-Cap' or 'the Company'), is pleased to announce the latest positive results from Phase 2 of the metallurgical testwork being conducted on the Company's key Letlhakane Uranium Project in Botswana.

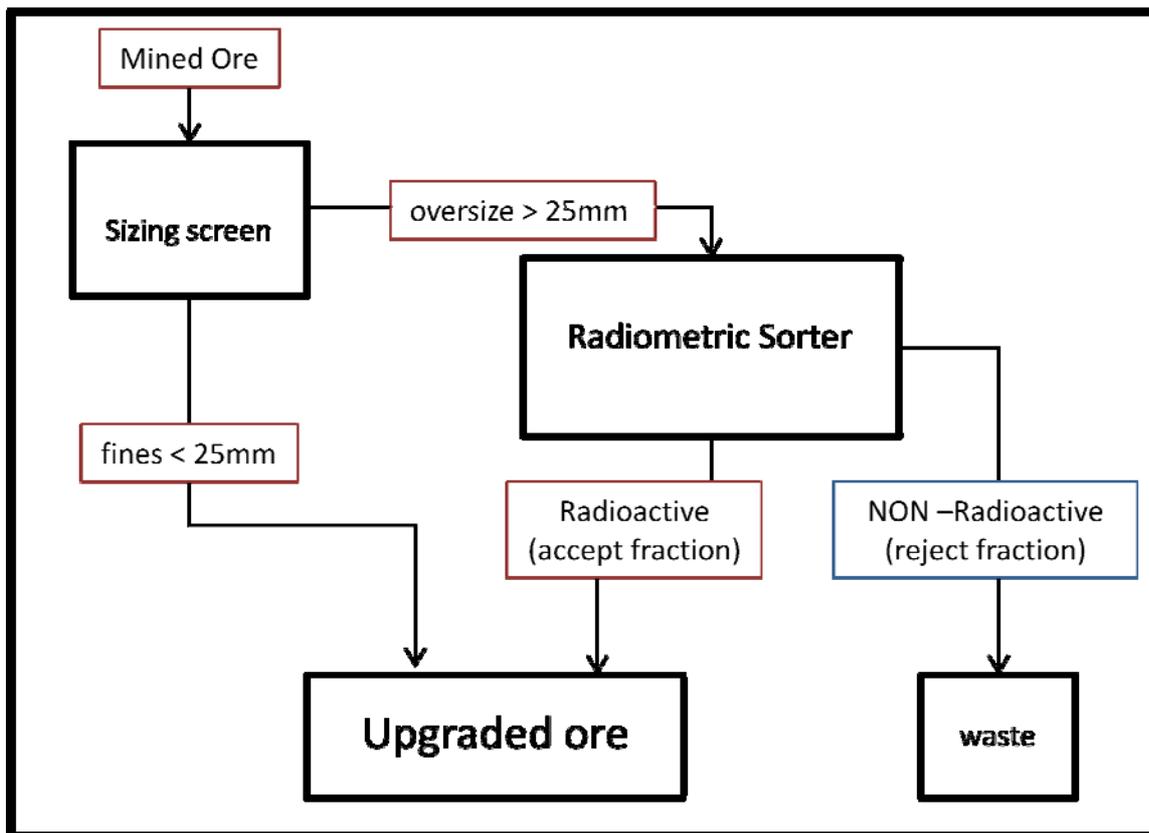
**Results from two large samples of Primary ore have been processed through the radiometric sorter at SGS's laboratory in Perth, indicate that over 80% of the Uranium can be concentrated into a sample that is approximately half the original mass and with an upgrade ratio of around 50% above the original grade.**

These latest results are in line with the Phase 1 testwork reported to the market in May 2010 that tested the sorting technique on much smaller samples.

Managing Director Andrew Tunks said, "The results from Phases 1 and 2 of the primary metallurgical testwork continue to illustrate that the Primary Ore, which represents 67% of our total resource base of 158M lbs U<sub>3</sub>O<sub>8</sub>, could play a major role in the development of the Letlhakane Project. Importantly not only does the radiometric sorting improve the head grade, but it also means we would only have to process approximately half the material leading to significantly lower operating costs. These radiometric sorting results on the Kraken and Gorgon Primary are very positive for the ongoing feasibility work which had previously been focussed on secondary and oxide ores".

### **RADIOMETRIC SORTING**

Radiometric sorting is a simple technique that uses the primary physical characteristic of the ore (radioactivity due to the presence of uranium) to divide the sample into two portions: a radioactive portion (the accept fraction) and a non-radioactive portion (the reject fraction). Because a Radiometric Sorter requires a minimum particle size to work effectively the first step is to separate the mined ore into fine (<25mm) and coarse (> 25mm) size fractions. The coarse fraction is then passed through the sorter; the accept fraction is then re-combined with the fines to produce an upgraded composite sample for leaching and the reject fraction is sent to waste. The process is outlined in the figure below.



## RESULTS OF RADIOMETRIC SORTING

Following on from the successful small-scale radiometric sorting tests that were conducted at SGS laboratories early in 2010, two large (>1.7 tonne) representative samples of Primary ore from Kraken and Gorgon were tested during the second quarter. The results of these radiometric sorter tests prior to recombining the accept fraction with the fine sample are summarised in the table below with the Phase 1 data (Samples A-F). Prior to recombining with the fines, the Kraken Primary ore sample recovered 61% U in 32% mass at a grade of 376ppm U and the Gorgon Primary sample recovered 60% U in 36% mass at a grade of 283ppm U.

Sample	Initial Grade U ppm	Beneficiated Grade U ppm	U Accepted %	Mass accepted %	Upgrade Ratio
A	265	590	68	30	2.2
B	106	181	36	21	1.7
C	128	226	41	23	1.8
D	138	222	33	20	1.6
E	249	511	76	37	2.1
F	403	589	75	52	1.5
2t Kraken Primary	200	376	61	32	1.9
1.7t Gorgon Primary	170	283	60	36	1.7

After sorting the accepted fraction was recombined with the fine fraction as would be the case in any mining operation and the results are as shown in the table below.

Sample	Initial Grade U ppm	Beneficiated Grade incl undersize U ppm	U Accepted incl undersize %	Mass accepted incl undersize %	Upgrade Ratio
2t Kraken Primary	200	304	80	53	1.5
1.7t Gorgon Primary	170	243	82	57	1.4

These results are encouraging as they indicate that over 80% of the uranium is retained throughout the sorting process, while significantly increasing the ore grade of the sorted sample. Equally important is the reduction in sample volume of round 50%. This will have a marked effect on the amount of reagents used to leach the uranium and consequently, a significant impact on operating costs.

**To further quantify the overall leaching characteristics of the Primary ore concentrates, a series of metallurgical tests on the sorted ores are currently in progress at SGS Laboratory in Perth. These test results will aid in determining updated recovery and operating costs for heap leaching of the Primary Ore. The results of the testwork will be released to the market as they become available.**

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For Further information contact



Andrew Tunks, A-Cap Resources  
Victoria Thomas, Six Degrees Investor Communication

+ 61 8 9200 9850  
+ 61 3 9674 0347

## BACKGROUND

The Letlhakane Project is in northeast Botswana and has a JORC compliant resource of 158 Mlbs U<sub>3</sub>O<sub>8</sub>. The Company is currently conducting a BFS on the project and the metallurgical testwork forms a crucial aspect of that study.

There are three significant ore types that occur in the deposit;

- **Secondary Ore** typically occurs within 15m of the surface and is characterised by carnotite as the main ore mineral. Secondary ore occurring close to the surface often contains significant amounts of carbonate which gradually decrease with depth.
- **Oxide Ore** has been variously affected by weathering and oxidation, some examples are strongly oxidised and some are only weakly oxidised and are termed **transitional** ores that are mineralogically similar to primary ore. Oxide ores occur between 10m to 25m below the surface.
- **Primary Ores** represent the uranium ores as they originally formed and are unaffected by weathering and oxidation from the earth's surface Primary ore types occur below 25m depth. Primary ore represents 67% of the total ore resource.