

## ASX Release

Friday 9<sup>th</sup> September 2015

ASX : ACB

# MINING LICENCE APPLICATION SUBMITTED & TECHNICAL STUDY OUTCOMES

## HIGHLIGHTS

- ▲ The Mining Licence Application was submitted to the Botswana Department of Mines on the 18<sup>th</sup> August 2015;
- ▲ Positive economics from the technical study based on forecast uranium average contract price;
- ▲ Initial construction CAPEX of US\$351 million;
- ▲ Initial working capital of US\$40 million;
- ▲ Targeting up to 3.75 million lb U<sub>3</sub>O<sub>8</sub> p.a. over first 5 years;
- ▲ Pre-Tax NPV of US\$383 million at a discount rate of 8% and IRR of 29%;
- ▲ Operating costs of US\$35/lb U<sub>3</sub>O<sub>8</sub> over first 5 years and approximately \$40/lb U<sub>3</sub>O<sub>8</sub> over 18 year process life.

A-Cap Resources Limited (the “Company” or “A-Cap”) is pleased to announce the submission of the Mining Licence Application (MLA) for the Company’s flagship Letlhakane Uranium Project to the Botswana Department of Mines. The Technical Study outcomes highlighted the potential economic viability of the project with a rising uranium price.

***The Technical Study results and production targets reflected in this announcement are preliminary in nature as conclusions are drawn partly from indicated mineral resources and partly from inferred mineral resources. The Technical Study is based on lower level technical and economic assessments and is insufficient to support estimation of ore reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Technical Study will be realised. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.***

The Technical Study was completed by A-Cap Resources with the assistance of consultants Optiro, Cube Consulting, SLR Consulting (South Africa), Kappes Cassiday & Associates, OMC Hydromet and Lycopodium Minerals Pty Ltd. The relatively low CAPEX of US\$351 million including contingency is in line with previous estimates and reflects the project’s ideal location, near substantial infrastructure with road, rail, and power adjacent to the project area.

The project OPEX is an improvement on the scoping study and reflects much of the progress made with the metallurgical and mining studies. The OPEX for the first 5 years ranges between US\$32 and US\$40 averaging US\$35 per pound U<sub>3</sub>O<sub>8</sub>. The process plant will be targeting production of up to 3.75 million pounds U<sub>3</sub>O<sub>8</sub> per annum over the first 5 years (ranging between 3–3.75Mlbs U<sub>3</sub>O<sub>8</sub>). Production gradually decreases over the mining licence period with processing of lower- grade stockpiles.

The key economic parameters for the project are summarised in Table 1.

<b>Project Economics</b>		<b>Pre-tax</b>	<b>Post-tax</b>
NPV	\$US	\$383M	\$240M
IRR	%	29%	24%
Pay-back period from start of production	yrs	3	3
<b>Capital Costs</b>			
Construction	\$US	351M	
<b>Working Capital</b>			
	\$US	40M	
<b>Inputs &amp; Assumptions</b>			
Price of Uranium (flat price over LOM)	U <sub>3</sub> O <sub>8</sub> US \$/lb	\$81	
Discount rate		8%	
Life of mine (LOM)	yrs	18	
<b>Project Summary</b>			
Average Mining cost	\$US /lb	\$18	
Average Processing Cost	\$US /lb	\$23	
	\$US /lb	\$41	
<b>Cash Flows</b>		<b>Pre-tax</b>	<b>Post-tax</b>
Total Revenue	\$US	\$3,499M	
Project Cash flow	\$US	\$841M	\$539M

**Table 1: Summary of outcomes of the technical study**

The technical study financial outcomes as determined by financial modelling undertaken by A-Cap reported a project pre-tax net present value (NPV<sub>8%</sub>) of US\$383 million (post-tax \$240M) and a pre-tax IRR of 29% (post-tax 24%) assuming a forecast uranium average contract price of \$81 per pound U<sub>3</sub>O<sub>8</sub>, over the projects 18 year life of mine. The cash flow is based on real dollars, i.e. unadjusted for inflation, with the NPV calculated using a discount rate of 8%, which is a typical rate in Lycopodium's experience used to assess developments of this type. The financial outcomes are further based on a 100% equity funded project with no debt financing. Royalties payable to the Botswana Government have been factored in, and post-tax outcomes are based on income tax applicable to Botswana mining companies.

The production target which forms the basis of the Letlhakane MLA and the economic analysis is based on the resources reported to the ASX on the 6<sup>th</sup> June 2012 under JORC 2004 (Table 2). The 2012 resource estimate was used as it was more appropriate to the mining method envisaged than the 2013 resource, which was based on a probability model approach. Both resource estimates are globally similar and both were completed by external consultants Optiro. The production target is made up of a majority of inferred resources, however the quantum of inferred resources in the production target is not considered a determining factor in the project viability. Recent work based on a drill study comparison at the Kraken deposit has confirmed that at a starting drill spacing of 200m by 200m, the change of contained metal is within +/-10% when drilled down to 100m by 50m drill spacing. The current criteria for inferred resources is nominally greater than 100m by 100m drill spacing.

Cut-off (U <sub>3</sub> O <sub>8</sub> ppm)	Total Indicated			Total Inferred			Global Total		
	Mt	U <sub>3</sub> O <sub>8</sub> (ppm)	Contained U <sub>3</sub> O <sub>8</sub> (Mlbs)	Mt	U <sub>3</sub> O <sub>8</sub> (ppm)	Contained U <sub>3</sub> O <sub>8</sub> (Mlbs)	Mt	U <sub>3</sub> O <sub>8</sub> (ppm)	Contained U <sub>3</sub> O <sub>8</sub> (Mlbs)
<b>100</b>	221.3	153	74.7	819.1	153	277.0	<b>1,040.5</b>	<b>153</b>	<b>351.8</b>
<b>200</b>	32.6	274	19.7	110.7	287	70.0	<b>143.2</b>	<b>284</b>	<b>89.7</b>

**Table 2: June 2012 Mineral resource estimate for all deposits at 100ppm & 200ppm U3O8 cut-offs**

An updated resource estimation utilising Uniform Conditioning and Localised Uniform Conditioning (LUC) resource modelling techniques is continuing. The new resource will include additional data from the mine variability and grade control drilling which was completed in 2014. The LUC uses the proposed mining unit, which has been reduced in size due to the selectivity of the surface miners that will be utilised.

A summary of parameters considered as part of the Technical Study are set out in Table 7 (appended).

The environmental and social impact assessment (ESIA) was also submitted to the Botswana Department of Environmental Affairs (DEA) in May 2015. A reference group meeting with the DEA was conducted in June 2015 and further written feedback correspondence is being finalised.

Paul Thomson CEO stated “This is an important milestone for A-Cap and the Letlhakane Uranium Project. The technical studies to date have shown that this project can be competitive with forecast uranium prices. Further work is ongoing that will seek to further improve the project, in both the project economics and the technical understanding. A-Cap’s large resource base, in-situ infrastructure, stable jurisdiction give it a strengthened position to capitalise on a resurgent uranium price”.

### Competent person's statement

*Information in this report relating to Uranium Exploration results is based on information compiled by Mr Ashley Jones, a full-time employee of A-Cap Resources Limited and a Member of the AusIMM. Mr Jones has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jones consents to the inclusion of the data in the form and context in which it appears.*

*Information in this report relating to Mineral Resources is based on information compiled by Mr Ian Glacken, the Principal Consultant of Optiro Pty Ltd and a Fellow of the AusIMM. Mr Glacken has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person under the 2004 Edition of the Australasian Code for reporting of Exploration Results Mineral Resources and Ore Reserves. Mr Glacken consents to the inclusion of the data in the form and context in which it appears.*

*Information in this report relating to the processing, infrastructure, plant design, and related CAPEX and OPEX is based on information compiled under the supervision of the Manager of Studies Mr Chris Waller, a full-time employee of Lycopodium Minerals Pty Ltd and a member of the Australasian Institute of Mining and Metallurgy (MAusIMM(CP)). Mr Waller (BAppSc Applied Chemistry) has sufficient experience that is relevant to the execution of studies for projects of the type under consideration to qualify as a Competent Person. Mr Waller consents to the inclusion of the data in the form and context in which it appears.*

## **OPERATING COSTS**

### ***Processing and Metallurgy***

Primary, Oxide and Secondary Mudstone uranium mineralisations will be treated by way of acid heap leaching with recovery of uranium via a combined solvent extraction / ion exchange (SX/IX) circuit, with ultimate production of UO<sub>2</sub> filter cake using the indirect uranium precipitation process via sodium diuranate (SDU) precipitation. The leach circuit process flow diagram is illustrated in Figure 1.

The Study focussed on treating 9 million tonnes of mineralisation per year through crushing, agglomerating, stacking and sulphuric acid leaching on one of two permanent leach pads, each with a capacity of 79 million tonnes. Leached material will be left in place and each lift sealed with a geomembrane liner.

The design capacity of the processing plant is 3.75 million pounds per annum of U<sub>3</sub>O<sub>8</sub> equivalent per year, to allow for peaks in production, with average annual production estimated at 2.4 million pounds. The acid leach project is expected to operate for 18 years based on the current in-pit resources of Oxide, Primary and Secondary mineralisation.

The continuous surface miners will produce primary crushed material, which feed a closed screening and secondary crushing circuit with <19 mm product feeding the agglomeration drums, where polymer and acid will be added before the agglomerates are stacked by a grasshopper conveying system. A two-stage acid leach was found to be the optimum process where the stage 1 leach is at a higher acid level giving advantages of fast kinetics and early recovery of the bulk of the uranium during the first stage. Leaching will take place in multiple stages using intermediate and raffinate solutions, to limit the volume of PLS feeding the SX plant. Uranium will be recovered from the SX strip solution using continuous ion exchange, followed by purification and precipitation as sodium diuranate using hydrogen peroxide, before final precipitation of uranium oxide concentrate (UOC) and drying.

SX/IX testwork demonstrated that the leachate can be processed by SX followed by IX then refining to yield a high purity saleable uranium oxide concentrate product. The SX/IX combination is novel though each component uses conventional technology and was demonstrated in the ANSTO Campaign 2 program. It was developed to optimise the water and acid balance and minimise acid loss in SX stripping.

The uranium recoveries vary from 60.5% to 77.7% depending on mineralisation type were derived by applying discounts of 2% for scale-up from laboratory conditions to commercial field operations plus losses in ripios interstitial liquor of 0.8% and 0.1% for losses in the refinery. The recoveries used per mineralisation type were calculated following the 4m column testing completed at ANSTO and other column tests carried out at SGS labs in Perth.

Comminution tests indicate that these materials are soft and not very abrasive with the average crushing work index (CWi) of 8.82 kWh/t (range 5.9-13.3kWh/t).

Process costs were calculated by mineralisation type and pit. The major contributors to production is the Primary mineralisation. The summary of the process costs are in Table 3. The main operating consumable is determined by the acid consumption.

Cost Centre	Mixed Oxide		Gorgon & Kraken Primary		Serule West Primary		Lower Mudstone (Acid Leach)		Mixed Mudstone Low Acid Leach (65% UM, 35% LM)	
	USD/wet t	% Cost	USD/wet t	% Cost	USD/wet t	% Cost	USD/wet t	% Cost	USD/wet t	% Cost
Operating Consumables	3.46	60%	3	57%	4.62	67%	3.1	58%	3.11	57%
Product Transportation	0.08	1%	0.08	2%	0.13	2%	0.05	1%	0.06	1%
Maintenance	0.51	9%	0.51	10%	0.51	7%	0.51	9%	0.51	9%
Power	0.68	12%	0.68	13%	0.68	10%	0.68	13%	0.68	13%
Laboratory	0.05	1%	0.05	1%	0.05	1%	0.05	1%	0.05	1%
Labour -Processing & Maintenance	0.46	8%	0.46	9%	0.46	7%	0.46	9%	0.46	9%
<b>Sub-Total - Processing &amp; Maintenance</b>	<b>5.25</b>	<b>90%</b>	<b>4.79</b>	<b>89%</b>	<b>6.46</b>	<b>92%</b>	<b>4.86</b>	<b>90%</b>	<b>4.89</b>	<b>90%</b>
Labour -Administration	0.22	4%	0.22	4%	0.22	3%	0.22	4%	0.22	4%
General & Administration Cost	0.35	6%	0.35	7%	0.35	5%	0.35	6%	0.35	6%
<b>Sub-Total - General &amp; Administration</b>	<b>0.57</b>	<b>10%</b>	<b>0.57</b>	<b>11%</b>	<b>0.57</b>	<b>8%</b>	<b>0.57</b>	<b>11%</b>	<b>0.57</b>	<b>10%</b>
<b>TOTAL</b>	<b>5.82</b>	<b>100%</b>	<b>5.36</b>	<b>100%</b>	<b>7.02</b>	<b>100%</b>	<b>5.42</b>	<b>100%</b>	<b>5.45</b>	<b>100%</b>
<b>Processing Cost, USD/t U</b>	<b>53,783</b>		<b>49,219</b>		<b>39,618</b>		<b>88,809</b>		<b>64,487</b>	
<b>Processing Cost, USD/lb U<sub>3</sub>O<sub>8</sub></b>	<b>20.69</b>		<b>18.93</b>		<b>15.24</b>		<b>34.16</b>		<b>24.81</b>	

Table 3 – Process costs per mineralisation type, inclusive of Labour and Administration costs.

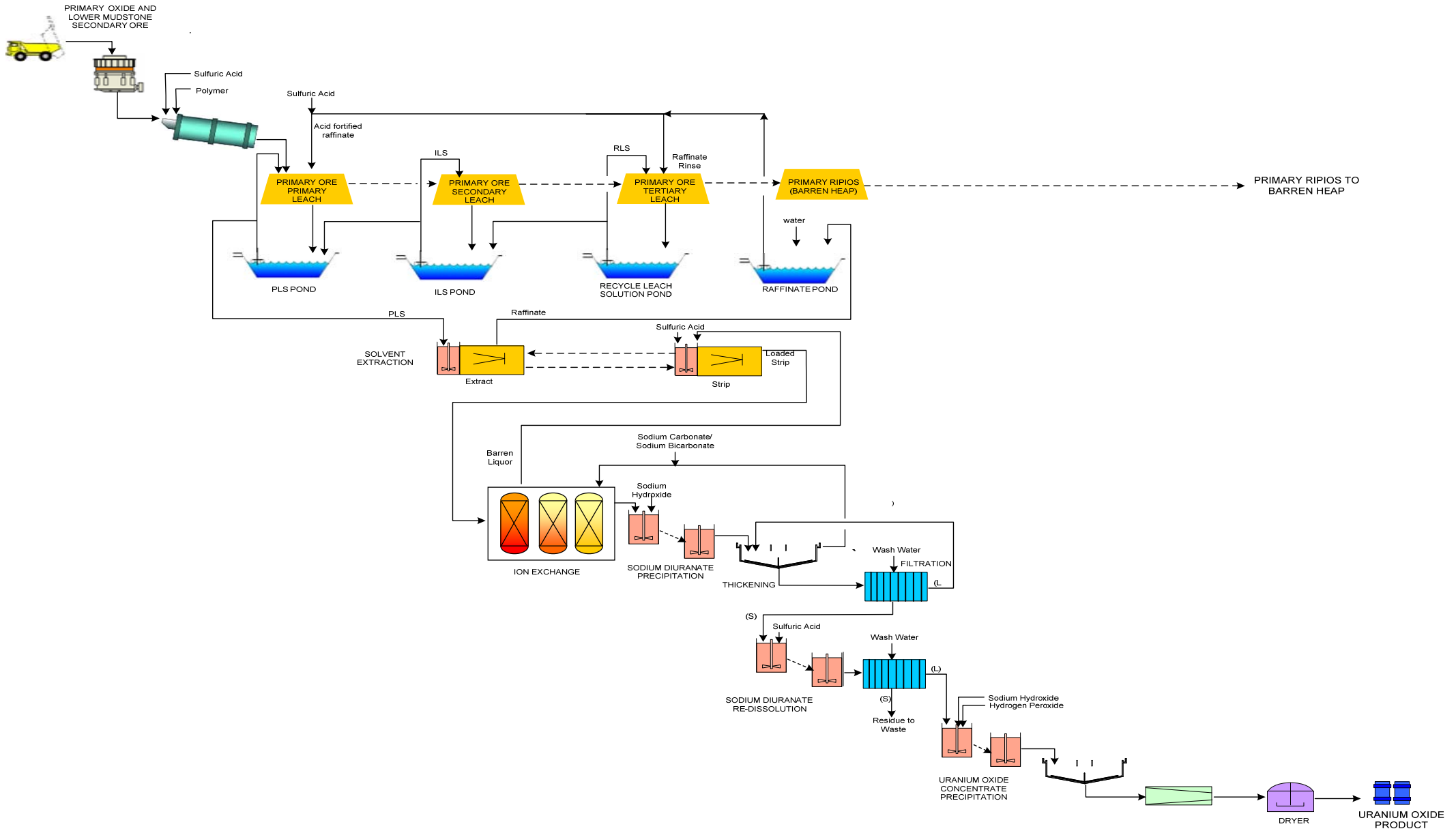
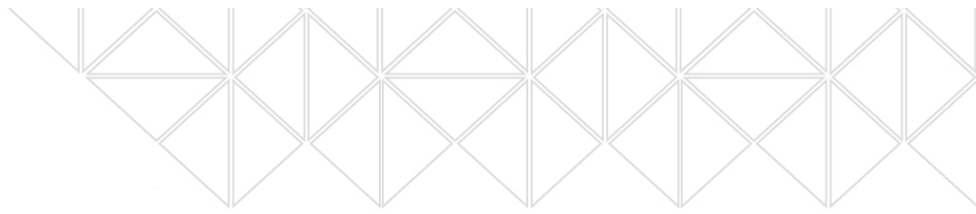


Figure 1: Process Flowsheet



## **MINING**

### Optimisations

The 2015 optimisations were based on new information including:

- Mining quotes for conventional and surface mining from three Southern African Mining contractors,
- Optimised pit shells which contained “in pit” resources of 194 million tonnes at 172ppm  $U_3O_8$  for approximately 48Mlbs  $U_3O_8$  recovered,
- Updated recovery and acid consumption figures calculated by consultants from Testwork completed at ANSTO and SGS and
- Capital and Process Operating costs calculated by Lycopodium and A-Cap from vendor quotes and/or their databases for similar projects.

### Schedules

The in-pit resources were then scheduled using the Minemax Scheduler and produced a 16 year mine life and an 18 year process life with:

- Total process feed of 156,599,369 tonnes at a grade of 191ppm  $U_3O_8$ ,
- Of which 102,821,163 is direct feed to the leach pads,
- 53,778,206 tonnes is reclaimed from stockpiles in the latter years of the Project,
- The Indicated resources amount to 29,257,991 tonnes averaging 209 ppm  $U_3O_8$  while the Inferred resources total 73,563,172 averaging 164 ppm  $U_3O_8$
- The proportion of Indicated to Inferred in the direct feed to process is currently 28.5% to 71.5%.

### Mining Equipment

Quotations using surface miners with loading and haulage based on conventional equipment have been used in the assessment of the mining cost.

Samples have been analysed for the Wirtgen and Vermeer surface mining machines to determine hardness and abrasiveness for the dominant lithologies. The hardness and abrasiveness parameters vary between mineralisation and oxidation type. They are utilised in quantifying the pick wear cost which is the main cost factor in the surface miner’s operations. The physical characteristics of the Karoo sediments indicate that the surface miners can operate effectively and blasting requirements will be minimal.

Shallow open pit mining methodology is assumed in the equipment selection and costs. The production target is based on pit depths between 40-80m. The stacked thin tabular nature of the resource and the flat 1 degree west dipping mineralisation make it more suitable to surface miners than conventional excavator and truck operations.

Dilution will be minimised in the proposed mining method with the use of grade control scintillometers which will measure the gamma radiation from the pit floor before mining of each cut. The contouring of the gamma data will allow more accurate determination of grade before the mineralisation is mined, to ensure that dilution is minimised and grade is maximised.



The mining costs are calculated by using quoted prices from operating mining contractors within Southern Africa. The costs take into account, pit depth, specific gravity and hardness of the material moved.

OPEX	Mining cost	Processing including G&A	Total Operating costs
	US\$/lb	US\$/lb	US\$/lb
LOM	18.1	22.7	40.7

**Table 4 – Opex costs over life on mine**

OPEX	Mining cost	Processing including G&A	Total Operating costs
Year	US\$/lb	US\$/lb	US\$/lb
1	18.0	14.2	32.2
2	18.8	14.7	33.4
3	21.7	14.9	36.6
4	24.3	15.8	40.0
5	14.2	18.0	32.2
Average*			34.9

\* the average is weighted against the UO<sub>2</sub> produced per annum.

**Table 5 – Opex for first 5 years production**

### **Initial Construction CAPEX**

Main Area	US\$ (Million)
Construction Indirects	30
Process Plant	176
Reagents & Plant Services	30
Infrastructure	33
Mining - Pre strip	26
Management Costs	25
Owners Project Costs	28
Owners pre-production buildup	3
<b>Grand Total exc. Working Capital</b>	<b>351</b>

**Table 6 – Total initial construction CAPEX**

The initial construction CAPEX table includes a contingency of US\$43 million. Working Capital of approximately US\$40 million is required (includes US\$5M contingency). Owners Project costs incorporate admin and plant pre-production costs, spare parts and mobile plant. A pre strip is required in the Serule West area to access potential higher grade mineralisation.

\*\*\*Ends\*\*\*

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**Table 7 Summary of Parameters Considered as Part of the Technical Study**

<b>Criteria</b>	<b>A-Cap Explanations</b>
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<p>The mineral resource reported is in compliance with JORC 2004.</p> <p><b>There is no current mineral reserve</b> due to the high proportion of Inferred (72%) Resources scheduled for production. In-pit resources have been used to develop the economic model.</p>
<i>Site visits</i>	Site visits have been completed by Optiro and Lycopodium Minerals.
<i>Study status</i>	<p>The current study is to a level of +/-25% accuracy. It has been completed by external consultants and by Lycopodium.</p> <p>The study has developed the CAPEX and the OPEX required for the Project and is in sufficient detail to satisfy JORC 2012 in terms of modifying factors in relation to metallurgy and mining inputs.</p> <p>No detailed pit designs have been made due to no mining reserves at present, however mining factors have been included during the optimisation and scheduling studies.</p>
<i>Cut-off parameters</i>	<p><b>No ore reserve has been calculated however</b> lower cut-off parameters have been used and vary by mineralisation type because of the differing reagent consumptions required, particularly acid.</p> <p>Scale of the project is constrained by the acid requirement of 420kt pa which results in a maximum of 9Mtpa being acid leached.</p> <p>The mining method selected is to undertake an initial prestrip using conventional mining equipment. During the operational phase a mix of Wirtgen and Vermeer surface miners will mine the deposits. Conventional equipment will be used for loading from windrows and transport to the Waste or ROM stockpiles.</p> <p>An initial pre-strip of 17Mt of waste is planned for year -1 of the Project.</p> <p>Mining Factors used in the optimisation include:</p> <ul style="list-style-type: none"> <li>• An acid price of US\$50/t.</li> <li>• Uranium price of US\$81/lb U<sub>3</sub>O<sub>8</sub>.</li> <li>• Royalty of 3%.</li> <li>• Mining costs as per mining contractor quotes with premium of 12.5% over owner operating costs.</li> <li>• Variable haulage rates by pit depth to waste dumps one kilometre from pit crest.</li> </ul>

	<ul style="list-style-type: none"> <li>• An overhaul rate beyond one kilometre of \$0.20/t-km to the ROM pad for mineralisation.</li> <li>• Process Parameters - metallurgical recoveries, process costs and acid consumptions for various mineralisation types.</li> <li>• Annual process throughput design maximum of 3.75 Mlbs U<sub>3</sub>O<sub>8</sub>.</li> <li>• Acid leach production rate of 9Mtpa.</li> <li>• Stockpile Re-claim cost of \$1.00/t.</li> <li>• Transport of product \$0.24/t.</li> <li>• Grade control \$0.10/t based on vehicle mount scintillometer mapping grade on bench with information contoured to guide surface miner.</li> <li>• Mining supervision \$0.20/t mineralisation mined.</li> <li>• Rehandle \$0.10/t mineralisation.</li> <li>• Preliminary pit wall design: <ul style="list-style-type: none"> <li>- 'Overburden' (surface to an average depth of 20 m): 5 m vertical height benches, mined at face angles of 80°, separated by 6 m wide berms. Mining to these parameters yields a slope inter-berm angle (measured between successive berm crests) of 35°.</li> <li>'Fresh' rock (below 20 m depth): 10 m vertical height benches, mined at face angles of 80°, separated by 8 m wide berms. Mining to these parameters yields a slope inter-berm angle (measured between successive berm crests) of approximately 46°.</li> </ul> </li> </ul> <p><b>Schedule</b> - The selected optimisation shells, one for the Letlhakane model and one for the Gorgon West model, were factored to simulate the pit design process and the resultant pit inventory available for scheduling was:</p> <p><b>In pit mineralisation:</b> 184.7 Mt @ 172ppm U<sub>3</sub>O<sub>8</sub> with a strip ratio 2.2. <i>Indicated (28%) and Inferred (72%) resources categories</i></p> <p><b>Dilution</b> - The models provided by Optiro were proportion models that represented a proportion of a block that was mineralisation and its grade.</p> <p>Mining recovery – the surface miner is very selective and has the ability to cut to 0.25m. No mining recovery factor was used.</p> <p><b>Hydrogeological Considerations</b></p> <p>A full Ground Water report is located in the ESIA Appendix I (SLR 2015). The main issues affecting mining are summarised here.</p> <p>Water Surveys Botswana (Oct 2014) noted the presence of three types of aquifers within the Project area</p> <p>The Lebung sandstone Aquifer is the only significant contributor to water in the pits.</p> <ul style="list-style-type: none"> <li>• Modelling has calculated the volumes expected over the life of the Project with some of the water of suitable quality for directing to process while the remainder will be used for dust suppression around the mining areas and on haul roads.</li> </ul>
<p><i>Metallurgical factors or assumptions</i></p>	<p>A two stage acid heap leach process is proposed with a novel solvent extraction / ion exchange (SX/IX) circuit, with ultimate production of UO<sub>2</sub> filter cake using the indirect uranium precipitation process via sodium diuranate (SDU) precipitation. Although the SX/IX</p>

	<p>combination is novel, each component uses conventional technology. This process was demonstrated in the 2015 ANSTO Campaign 2 program of 4 metre column leach tests, which were in closed circuit with SX and IX. A high purity saleable uranium oxide concentrate (UOC) product was produced at ANSTO during this test program. This UOC was of high purity with the exception of calcium, which does not meet the most stringent specification, but is within the saleable upper limit and is unlikely to attract a penalty.</p> <p>The process flowsheet was the result of extensive testwork carried out at SGS, Perth and ANSTO, NSW over the last 6 years aimed at optimising recoveries and minimising process costs.</p> <p>The recoveries and process costs in the Study are based on actual 4m column leach test results where the leachate was in closed circuit with the SX/IX recovery unit.</p> <p>The metallurgical column leach testwork included a composite of Mixed Oxide mineralisation, a composite of Gorgon South &amp; Kraken Primary mineralisation, Serule West Primary mineralisation and Secondary Mudstone mineralisation which represent the majority of the mineralisation proposed to be processed during first five years of the operation. These samples were obtained from PQ core drilled over each of the deposit areas in a regular pattern.</p>
<p><i>Environmental</i></p>	<p>The Environmental, Social Impact Assessment (ESIA) was completed by consultants SLR Consultants, South Africa. The ESIA was submitted to the Botswana Department of Mines in May 2015.</p> <p>The ESIA consisted of several studies evaluating potential impacts of the Project, relating to:</p> <ul style="list-style-type: none"> <li>• Topography</li> <li>• Soils and land capabilities</li> <li>• Biodiversity</li> <li>• Surface water, including pollution</li> <li>• Groundwater, including pollution</li> <li>• Air quality</li> <li>• Air pollution, dust generation</li> <li>• Noise</li> <li>• Visual impact</li> <li>• Archaeological, cultural, heritage</li> <li>• Radiological impacts</li> <li>• Socio-economic impacts</li> <li>• Changes in road use affecting safety</li> <li>• Blasting hazards</li> <li>• Loss of current land uses, third party infrastructure</li> <li>• Socio-economic benefits</li> <li>• Inward migration, associated social and health issues</li> <li>• Positive economic impact</li> </ul> <p>Each potential impact has been investigated to determine the significance of the impact unmitigated and mitigated. The assessment is currently underway with the Department of Environmental Affairs.</p> <p>Waste rock will be located in dumps adjacent to the pits and will be designed to and</p>

	<p>encapsulate coal waste material.</p> <p>Heap Leach pads have been designed and are expandable as the project extends its life. The Heap leach pads will be rehabilitated in place progressively.</p> <p>Full Rehabilitation costs have been considered in the Financial Model.</p>
<i>Infrastructure</i>	<p>The project is located in the Central Region of Botswana, adjacent to the A1 Highway and railway line between Gaborone and Francistown, about 75 km south of Francistown and lying between Serule and Gojwane villages. The turn-off to Selebi Phikwe is at Serule, about 3.1 km south of the proposed processing plant. The main A1 road from Gaborone to Francis town runs through the tenement. The main North-South Rail line runs through the tenement</p> <p>A water resource has been defined 35 km to the west and extraction rights have been obtained. The wellfield has been designed and its CAPEX included.</p> <p>A 220 kV power line runs north-west from the Serule switching station to the Orapa mine. This line crosses the south-west corner of the mine lease.</p> <p>International air access is available to Gaborone and Francistown.</p>
<i>Costs</i>	<p>The capital cost estimate presents costs for a 9 Mt per annum heap leach and uranium recovery operation.</p> <p>The operating cost schedule has been developed for the 18 years Project life based on the projected mineralisation throughput, composition and uranium production obtained from the Mine Schedule Provided by the Client. The estimate has been prepared by major category, and includes such items as power, labour, reagents and consumables, maintenance materials, laboratory costs and general and administration costs. The estimates have been compiled using data from a variety of sources including: Metallurgical testwork, Mass balance information, Metallurgical consultants and typical industry values, Supplier's quotation, Lycopodium database for similar operations, First principle estimates.</p> <p>The operating costs are a combination of Processing costs (Inclusive of general and administration costs) and mining quotations.</p> <p>Transport charges were supplied along with quotes for capital items, transport of reagents, product etc.</p> <p>The primary currency quotes were based in \$US.</p> <p>Government royalties of 3% of gross revenue are allowed for as are the required income and other Botswana taxes.</p>
<i>Revenue factors</i>	<p>The revenue is based on the recovered lbs of uranium as calculated from the detailed production schedule and using the assumed long term uranium price.</p> <p>The assumed long term (contract) uranium price is based on price forecasts published by Raymond James Ltd in their Mining &amp; Natural Resources publication dated October 2014. This report forecast a spot uranium price of US\$70 /lb from 2018 onwards in real terms. This price was then converted to a forecast long term price by taking the historical price difference between spot and long term uranium prices, as reported by Ux Consulting, within the \$65 - \$75 range and grossing up based on the average difference between spot and long term</p>

	prices.
<i>Market assessment</i>	<p>A-Cap Resources is targeting initial production of three million pounds of Uranium Oxide (U<sub>3</sub>O<sub>8</sub>) to be transported from Botswana by truck to the port of Walvis Bay in Namibia and from there to be shipped to a uranium conversion facility for processing. The price forecasts are outlined under Revenue Factors, with volume based on detailed production schedules.</p> <p>The two main markets that uranium is sold into are either the Long Term Market or the Spot Market. The Long Term market accounts for approximately 85-95% of all transactions and typically trades are at approximately at a premium to the spot market.</p> <p>A-Cap envisages having multiple off take agreements with long term contracts secured as well as the ability to trade on the spot market as required.</p>
<i>Economic</i>	<p>The key inputs used to carry out the economic analysis for the study include:</p> <ul style="list-style-type: none"> <li>• Process costs – determined my mass balance calculations to determine acid consumption,</li> <li>• CAPEX (construction costs prepared by Lycopodium of US\$351 million,</li> <li>• Working capital requirement of US\$40 million,</li> <li>• Sustaining CAPEX of US\$342 Million – Inclusive of building new pads and mine closure costs,</li> <li>• Mining costs – supplied by Southern African Contractors utilising Surface mining equipment,</li> <li>• Recovery &amp; grade – determined by recent column leach test work on different mineralisation types, uranium test work was completed at ANSTO,</li> <li>• Assumed Uranium Price of US\$81/lb,</li> <li>• Discount rate of 8%,</li> <li>• 18 years life of mine,</li> <li>• Cost of Acid of US\$50/t,</li> <li>• Royalty of 3% payable to the Botswana Government,</li> <li>• Real numbers, unadjusted for inflation.</li> </ul> <p>The NPV is impacted by +10/-10% change in the following sensitivities as follows (\$US):</p> <ul style="list-style-type: none"> <li>• Price \$558M / \$209M;</li> <li>• CAPEX \$352M / \$414M;</li> <li>• Mining Costs \$340M / \$427M;</li> <li>• Process costs \$340M / \$427M;</li> <li>• Recovery \$558M / \$209M;</li> <li>• Grade \$514M / \$253M.</li> </ul>
<i>Social</i>	<p>The local communities of Serule, Gojwane and smaller surrounding villages have a population in the order of 5,000 persons, while the town of Selebi Phikwe, approximately 60 km distant, has a larger population well used to mining and mineral processing, and is likely to be a valuable source of skilled labour for the proposed operations.</p> <p>Francistown is Botswana’s second largest city and provides access to full commercial and contracting facilities, as well as schools and medical facilities. It has an established housing market and A-Cap’s existing in-country office is located in the city.</p> <p>An area of surface rights were granted in 2009 conditional on the ESIA approval. The surface rights area has been expanded and is under application with the relevant land boards.</p>

<i>Other</i>	The Financial assumptions are based on procurement of acid from a local source. Negotiations are advanced but not finalised on securing the supply of acid. Acid supply changes could affect the economics on the CAPEX and OPEX.
<i>Classification</i>	<b>No reserves are as yet defined.</b> <b>The in-pit resources</b> are drilled to Indicated (28%) and Inferred (72%) resource status only.
<i>Audits or reviews</i>	A review of the financial models integrity was completed independently by external consultants.