



## ASX RELEASE

3 August 2009

Company Announcements Office  
Australian Stock Exchange Limited  
20 Bridge St  
SYDNEY NSW 2000

Dear Sir / Madam,

### **Rossing South - Preliminary Cost Estimates**

Please find attached a media release in relation to Preliminary Cost Estimates for Rossing South.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Rance Dorrington".

**Rance Dorrington**  
**COMPANY SECRETARY**

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**MEDIA RELEASE**  
**3<sup>rd</sup> August 2009**

## **Preliminary cost estimates study confirms Rossing South's potential to be one of world's largest uranium mines**

### **STUDY HIGHLIGHTS**

- **Production rate** 15.0 M tpa
- **Estimated head grade** 487 ppm U<sub>3</sub>O<sub>8</sub>
- **Mill Recovery** 92%
- **U<sub>3</sub>O<sub>8</sub> production** 14.8 M lbs / year (6.7 K tpa)
- **Project capital estimate** US \$704M
- **Production cost estimate** US \$23.60 /lb U<sub>3</sub>O<sub>8</sub>

Australian-based uranium mine development and exploration company, Extract Resources Limited (ASX/TSX: **EXT**) ("**Extract** or '**the Company**") today released the preliminary capital and operating cost estimates report which confirm the Rossing South project's potential to be one of the world's largest uranium mines.

The report states that preliminary cost estimates on the granite hosted, uranium mineralisation at Rossing South in Namibia indicates that the project can support a viable open pit mining operation developed to feed a **15M tpa** agitated tank sulphuric acid leach processing plant. Annual production has been estimated at **14.8M lbs U<sub>3</sub>O<sub>8</sub>** with capital costs estimated at **US\$704M** and operating costs of **US\$23.60 per lb U<sub>3</sub>O<sub>8</sub>**.

Extract Resources Managing Director, Mr. Peter McIntyre, said "*the preliminary cost estimates report indicates a conventional open pit mining operation with an agitated tank leach process plant is expected to support a profitable and sustainable mining operation for +20 years.*"

"*This report represents our base case study and we are continuing with our metallurgical testwork and engineering optimization that will consider other options including a heap-leaching component,*" he said.

Namibia has outstanding infrastructure which would greatly assist the development of the Rossing South project. The project area is located about 55 kms east of the coastal town Swakopmund and north east of the deep water port of Walvis Bay. Equipment and materials for constructing and running the mine could be brought in through Walvis Bay.

Mr McIntyre said "*the availability of infrastructure combined with the confirmed resource and the outstanding exploration potential still to be tested on the Husab project, should ensure a long and successful mining operation centred on Rossing South.*"

The Rossing South Feasibility Study, managed by independent consultants GRD Minproc Limited, includes detailed analysis of the Rossing South project parameters with detailed study work ongoing.

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Work completed to date has incorporated a preliminary level of design and cost estimation, to establish the general economic viability of a new development. The study has included some key assumptions relevant to the current resource definition program and the metallurgical characteristics of the uranium mineralization, with work on these critical areas continuing.

ENDS

### **About Extract**

Extract Resources is an Australian-based uranium mine development and exploration company whose primary focus is in the African nation of Namibia. The Company's principal asset is its 100% owned Husab Uranium Project which contains two known uranium deposit areas: Rossing South; and Ida Dome. Extensive exploration potential also exists for new uranium discoveries, in addition to the already known occurrences.

Extract is listed on the ASX and the TSX under the ticker symbol "EXT". For more information on Extract visit [www.extractresources.com](http://www.extractresources.com)

**For further information, please contact**

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## ROSSING SOUTH PRELIMINARY COST ESTIMATE

### 1. SUMMARY

- Preliminary cost estimates indicate Rossing South could support a long life, low cost, low technical risk uranium mine producing 14.8M lbs U<sub>3</sub>O<sub>8</sub> per year.
- Base case conventional load and haul, open-pit mining operation utilising agitated tank leach processing technology.
- Close proximity to road, rail and port and a pro mining culture adds to the prospects of developing a new uranium mining operation in central west Namibia.
- Uranium mineralisation on all zones drilled to date is still open at depth and along strike, and supports the expectation that ongoing drilling will increase the Company global resource.

Preliminary cost estimates on the granite hosted, uranium mineralisation at Rossing South indicate that the project can support a viable open pit mining operation developed to feed a **15M tpa** agitated tank sulphuric acid leach processing plant. Annual production has been estimated at **14.8M lbs U<sub>3</sub>O<sub>8</sub>** with capital costs estimated at **US\$704M** and operating costs of **US\$23.60 per lb U<sub>3</sub>O<sub>8</sub>**.

Existing infrastructure and a supportive geopolitical environment make Namibia an outstanding location to develop a new mining project.

The company now looks forward to working closely with the Namibian Government to obtain the necessary permits to enable the mine to be developed in a timely manner for the benefit of all stakeholders.

### 2. INTRODUCTION

The Husab Uranium Project is covered by Exclusive Prospecting Licence (EPL) 3138 and EPL 3439. The licenses contain two (Rossing South and Ida Dome) of the five currently known occurrences of uraniferous granites (alaskites) within the highly prospective Central Zone of the Damara Orogeny in Central West Namibia (Figure 1). Only one of these occurrences is currently being mined and that is the Rossing Mine which has been processing ore through an agitated tank leach process plant for over 30 years. The Rossing operation currently produces about 7% of the global U<sub>3</sub>O<sub>8</sub> mine production.

The Rossing South deposits (Zone 1 and Zone 2) are the most advanced within the Husab Uranium Project and are the focus of a Feasibility Study which commenced in April 2009. GRD Minproc Limited was appointed lead consulting group because of their knowledge of the uranium industry and their extensive African experience.

The next stage of the Feasibility Study is to complete a Prefeasibility Study to an accuracy level of ± 25%. The final Definitive Feasibility study report will be to an accuracy level of ± 10-15%. Once completed this information would be sufficient to enable the Company to source finance for developing the project. The Feasibility Study is currently in an early stage with preliminary capital and operating costs defined for the base case processing option of agitated tank leach. Other processing options are also being considered, such as heap leach, with ongoing metallurgical test work aimed at defining the most appropriate option.

### 3. RESOURCE

The Rossing South area contains two known zones of uranium mineralisation (Figure 1) which host one of the largest known uranium resources in the world. Significant detail on these resources, generated following JORC Code guidelines, has been previously reported to the market (ASX releases 2<sup>nd</sup> and 22<sup>nd</sup> July 2009) with a summary table shown below (Table 1).

The currently defined Inferred and Indicated Resource at Rossing South has formed the basis of the preliminary capital and operating cost estimate. Ongoing resource definition drilling is required to increase resource confidence levels so that reserves can be defined for more detailed project evaluation.

Total resources for Rossing South at 100 ppm U<sub>3</sub>O<sub>8</sub> cut-off is as follows:

Rossing South Total	Category	Tonnes (Million)	Grade (ppm U <sub>3</sub> O <sub>8</sub> )	U <sub>3</sub> O <sub>8</sub> (M.lbs)
Zone 1	Indicated	21	527	24
	Inferred	126	436	121
Zone 2	Inferred	102	543	122
	<b>TOTAL</b>	<b>249</b>	<b>487</b>	<b>267</b>

Table 1: Rossing South Resource Table. Note figures have been rounded.

### 4. MINING

The mining study is aimed at assessing the economic viability of an open pit operation at Rossing South. Conventional open-pit bulk mining utilising contract mining services and owner operator are both being considered.

Mining costs have been derived by independent mining consultancy ORElogy. Mining rates are based on a 15M tpa processing plant.

For this preliminary review an average strip ratio of 5:1 (waste:ore), including the overlying desert sands, has been used with more detailed mine design currently being completed on the most recent Zone 1 and Zone 2 resource models.

### 5. METALLURGY AND PROCESSING

The base case process plant is designed to treat 15M tonnes of run of mine ore, on an annual basis, at an average head grade of 487 ppm U<sub>3</sub>O<sub>8</sub> to produce an average of 14.8M lbs U<sub>3</sub>O<sub>8</sub> (6.7K tonnes U<sub>3</sub>O<sub>8</sub>). Process plant capacity data is shown in the following table (Table 2).

Description	Value
ROM throughput, M tpa	15
ROM grade, ppm U <sub>3</sub> O <sub>8</sub>	+/- 487
Annual contained U <sub>3</sub> O <sub>8</sub> (ROM), M lb	16.1
Overall U <sub>3</sub> O <sub>8</sub> recovery, %	92
Annual recovered U <sub>3</sub> O <sub>8</sub> , M lb	14.8
Annual recovered U <sub>3</sub> O <sub>8</sub> , K tonne	6.7

**Table 2: Process Plant Capacity Data.** *Note figures have been rounded.*

Metallurgical test work completed on core samples from Rossing South indicates agitated tank leach recoveries in excess of 90% are consistently being achieved. Agitated tank leach is currently the base case processing option. However, several other options, such as heap leaching, are still being considered with final outcomes to be based on the results from ongoing metallurgical testwork.

## 6. INFRASTRUCTURE

This region of Namibia has good infrastructure which would greatly assist the development of the Rossing South project. The project area is located about 55 kilometres east of the coastal town Swakopmund and north east of the deep water port of Walvis Bay. Equipment and materials for constructing and running the mine could be brought in through Walvis Bay. A rail line connecting Walvis Bay to the African network runs within 40 kilometres of Rossing South.

Power is expected to be sourced from Nampower with an expected demand of about 35 MW. Nampower is currently completing an Environmental and Socio Economic Impact Assessment to construct a new coal fired power station in the Walvis Bay area with three capacity scenarios being considered to provide 200, 400 or 800 MW of electricity.

Water for the operation is expected to be sourced from a proposed seawater desalination plant located between Swakopmund and Henties Bay. There have been discussions with several parties regarding the prospect of a collaborative desalination project to meet the needs of multiple industrial customers in the region. Namwater are expected to be the main supplier of this service.

## 7. CAPITAL COST ESTIMATE

Capital cost estimates have been prepared by GRD Minproc. The capital cost for the project is estimated to be **US\$704M**.

The costs include EPCM and engineering contingency, but do not include the cost of off site water supply capital works (which have been included in the operating cost estimate, process costs), working capital, closure costs and owner's costs

Mining costs have been omitted from the capital cost estimate, as a total mining cost of US\$2.10 per tonne has been defined which includes capital and all material movement during the course of mining (such as overburden prestrip, near surface and at depth within the open pit).

## 8. OPERATING COST ESTIMATE

The operating cost estimates have been prepared by GRD Minproc Limited, with the exception of the mining costs generated by ORElogy.

The estimated annual operating costs for the project are **US\$351M** when full production has been reached. The operating costs estimated for the mining operation and process plant, as at July 2009, are shown in the following table (Table 3).

Annual Operating Cost	Million US\$ pa	US\$/t* of ore	US\$ / lb U <sub>3</sub> O <sub>8</sub>
Mining Cost (includes capital)	189	12.6	12.7
Process Cost	162	10.8	10.9
<b>Total Operating Cost</b>	<b>351</b>	<b>23.4</b>	<b>23.6</b>

**Table 3: Summary of the annual operating cost estimate. Note figures have been rounded.**

\*Cost per tonne for mining is based on total (ore + waste) tonnes moved to get ore to the ROM pad, using a strip ratio of 5:1 (waste:ore). Processing costs are based on a 15M tpa processing plant.

Sulphuric acid is the single largest reagent cost item within the process plant with the assumption that it would be imported through the Walvis Bay Port. However, there are opportunities for significant cost savings if acid is produced in Namibia. This option will be investigated in more detail during the course of the Feasibility Study.

*The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information reviewed or compiled by Mr Martin Spivey, who is a Member of The Australasian Institute of Mining and Metallurgy and Mr Andrew Penkethman who is a Member of the Australian Institute of Geoscientists. Mr Spivey and Mr Penkethman are both full time employees of the Company. Mr Spivey and Mr Penkethman have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking 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'. Mr Spivey and Mr Penkethman consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.*

Figure 1: Husab Project Location Plan. Note the road, rail, air and port infrastructure proximal to Rossing South.

