

# ASX/Media release

1<sup>st</sup> March 2011



# STONEHENGE METALS URANIUM PROJECT – PRE SCOPING STUDY AND PRELIMINARY METALLURGY TEST RESULTS

- Positive Scoping study and excellent preliminary metallurgy results confirm Daejon Uranium Project on track with strong upside potential
- Scoping study indicates favourable net cash costs of US 24.50/lb Uranium (U<sub>3</sub>O<sub>8</sub>) with potential for further improvement
- Leach tests show that > 90% uranium is extracted under weak acidic conditions and a leach temperature of 50°C
- Early vanadium leach testing yields promising results with approximately **50% vanadium extraction** at a leach temperature of 95°C after 8 hours
- Results of metallurgical test program have been applied to develop a conceptual flow sheet to recover uranium and vanadium

The Board of Stonehenge Metals Ltd **(ASX: SHE) ("Stonehenge"** or the "**Company"),** is pleased to announce the pre-scoping study for its wholly owned Daejon Uranium Project in South Korea, conducted by Clean TeQ Ltd (ASX: CLQ). These preliminary results indicate a favourable Uranium unit cash costs with upside potential, while preliminary metallurgical testing has also produced excellent results.

Preliminary leach tests on two bulk metallurgical samples from the Daejon Project consisting of both black graphitic coal and grey slate have delivered excellent uranium recoveries. Uranium extraction of over 90% was achieved from the samples using weak acidic conditions and leach temperature of 50°C. Both ore types had very low acid consumptions at 10 kg acid / tonne ore.

Significant work has been undertaken to determine the potential to commercially extract the Vanadium present in the deposit. The use of more intensive leach conditions were examined and early test work has demonstrated promising results with approximately 50% vanadium extraction at a leach temperature of 95°C after 8 hours.

Results of the metallurgical test program have been applied to a conceptual flow sheet developed by Clean TeQ to recover uranium and vanadium with an extremely positive outcome.

Clean TeQ has used current Korean power and chemical costing (input costs are shown in the table below) and based on conservative assumptions from the test program, a C1 cash cost of **US\$24.50 / Ib U<sub>3</sub>O<sub>8</sub>** can be achieved. This cash cost is based upon a Vanadium by-product credit - a sale price of US\$13 / Ib V which generates an equivalent 'operating cost credit' of \$33.76 / Ib U<sub>3</sub>O<sub>8</sub>

A more comprehensive laboratory test work program will commence shortly to target improving vanadium extraction. Preliminary capital cost estimates will also be developed for the processing flowsheet over the next Quarter.

Area	Cost (A\$M pa)	Cost (%)	Total unit cost (US\$/lb U₃O <sub>8</sub> )	Net unit cost (US\$/lb U₃O <sub>8</sub> )
Mining	42.26	29.6%	17.25	7.26
Oxidant	19.70	13.8%	8.04	3.38
Ammonium Fluoride	14.07	9.9%	5.74	2.42
Sulphuric Acid	12.57	8.8%	5.13	2.16
Product Transportation	12.42	8.7%	5.07	2.13
Labour	5.95	4.2%	2.43	1.02
Maintenance	4.60	3.2%	1.88	0.79
General and Admin	4.23	3.0%	1.73	0.73
Power	3.83	2.7%	1.56	0.66
Other	23.13	16.2%	9.44	3.95
Total	142.76	100.0%	58.26	24.50

#### Base Case Operating Cost for Uranium/Vanadium Flowsheet – Breakdown

Mineralogy (QEMSEM) of the metallurgical samples confirmed uranium was present as uraninite  $(UO_2)$  which can be easily liberated via a conventional crush, SAG and ball mill circuit to a grind size of 150  $\mu$ m. QEMSEM analysis has shown that the vanadium was found to be associated with network silicate minerals, notably calcic feldspars and calcic amphiboles. The calcic feldspars typically carry up to 5 - 10% vanadium. Occurrence of vanadium in calcic feldspars is contrary to previous understanding, where the vanadium was thought to be associated with white mica's. This new information will aid the metallurgists in their design of a process to liberate the vanadium from the mineralisation.

Stonehenge Managing Director, Richard Henning stated "These very encouraging test results confirm the previous uranium leach test work performed by KORES. Our team has made excellent progress in extracting the full potential value of the ore resource. There is a strong upside for the Daejon project, and if we can further improve vanadium recoveries, then the operating costs should be further reduced. Recent exploration results have also shown the potential for molybdenum and rare earth metals in the Daejon project area, further adding to the potential to unlock significant value for our shareholders from the Daejon project".

For further information visit <u>www.stonehengemetals.com.au</u> or contact;

#### **Stonehenge Metals Limited**

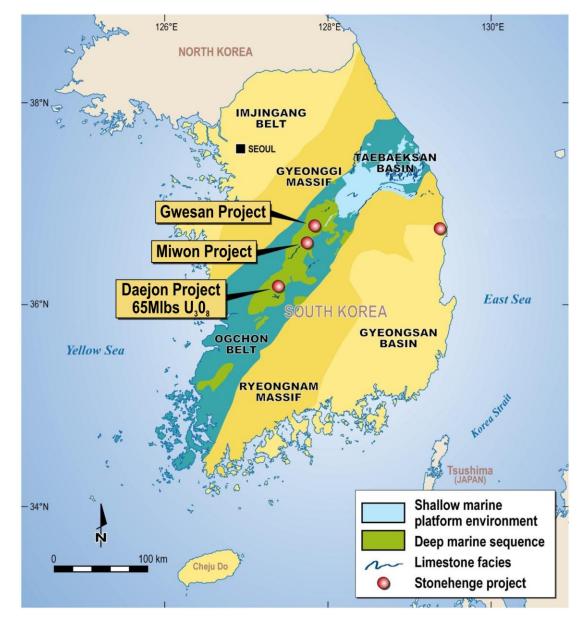
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### **About Stonehenge**

Stonehenge Metals Limited (ASX Code: SHE) is developing a uranium project in South Korea. Stonehenge owns 100% of the rights to four uranium projects in South Korea including the Company's flagship Daejon Project which contains the largest uranium resource within South Korea at **65.0Mlbs**<sup>1</sup> grading **320ppm eU<sub>3</sub>O**<sub>8</sub> (in accordance with JORC guidelines).

## South Korean Location Map



#### **Competent Persons Statement**

The geological information contained in this ASX release relating to South Korean Exploration Results has been compiled by Mr. Simon Fleming of Stonehenge Metals Limited. Mr. Fleming is a Fellow of The Australian Institute of Geoscientists and Mr. Fleming has 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 Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

The information contained in this ASX release relating to Mineral Resources has been compiled by Mr. Michael Andrew of Snowden Mining Industry Consultants Pty Ltd. Mr. Andrew is a Member of The Australian Institute of Mining and Metallurgy. Mr. Andrew has 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 Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Andrew consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.