

### AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

## 27<sup>th</sup> October 2011

# **VULCAN IOCGU PROJECT: DATING RESULTS**

#### Summary

Results from geological dating of selected samples from Tasman's Vulcan iron-oxide copper gold uranium (IOCGU) project in South Australia, 30km North of BHP's Olympic Dam mine, have been obtained. This program is being funded and technically coordinated by the SA Government through its PACE\* 2020 initiative.

These initial results have involved measurement of the isotopes rhenium  $187 (\text{Re}^{187})$  and osmium  $187 (\text{Os}^{187})$  in the mineral molybdenite (molybdenum sulphide or MoS<sub>2</sub>), which occurs as part of the IOCGU mineralisation in most of the Vulcan drill holes completed to date.

Reliable results have been obtained from four separate samples (see Table 1), with the average age being 1590 Ma (or million years). This is believed to be the age of mineralisation, or formation of the Vulcan IOCGU system.

Sample No	Drill Hole Number	Age (Ma) (million years)	Error +/- 1 sigma
1838223	VUD 001	1587	6.4
1838224	VUD 001	1585	6.4
1836478	VUD 002	1585	6.6
1836480	VUD 003	1588	6.4

 Table 1. Results of age-dating of molybdenite from mineralized zones within the

 Vulcan IOCGU system, by Re187 – Os 187 geochronology.

## Significance

The 1601Ma result is essentially the same geological age as other significant IOCGU deposits such as Olympic Dam, Prominent Hill and Carapateena. Although this result is not unexpected, it confirms that Vulcan is indeed a member of a very significant family of ore deposits, and with further investigation could prove to be a major deposit itself.

#### Background

In May 2011, the South Australian Government (PIRSA) showed its support for Tasman's Vulcan iron-oxide copper gold uranium project (IOCGU) by announcing the provision of funding and technical support, through its PACE\* program for the dating of a suite of selected samples from Tasman's drill holes.

The objectives of the program are:

- To further confirm that the Vulcan IOCGU system is of the same age as, and part of the family of major IOCGU ore deposits in the region (eg Olympic Dam, Prominent Hill, Carapateena),
- To assist Tasman in understanding the local geology at Vulcan and help guide further drilling and exploration for high grade mineralisation within Vulcan, and
- To help place Vulcan and its host rocks in a regional geological framework.

The results from this first part of the dating program will be followed by further investigations aimed at addressing the remaining objectives of the program.

Re-Os geochronology reported here was performed at Durham University, UK using methods identical to those documented in Selby et al. (2007).

Kyun Thomas

<u>Greg Solomon</u> Executive Chairman

\* Plan for Accelerated Exploration

Selby, D., Creaser, R. A., Stein, H. J., Markey, R. J., and Hannah, J. L., 2007, Assessment of the <sup>187</sup>Re decay constant by cross calibration of Re-Os molybdenite and U-Pb zircon chronometers in magmatic ore systems: Geochimica et Cosmochimica Acta, v. 71, p. 1999-2013.

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.

The information in this announcement, insofar as it relates to Mineral Exploration activities, is based on information compiled by Robert N. Smith and Michael J Glasson who are members of the Australian Institute of Geoscientists, and who have more than five years experience in the field of activity being reported on. Mr Smith and Mr Glasson are full-time employees of the company. Mr Smith and Mr Glasson 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 Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Smith and Mr Glasson consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

It should not be assumed that the reported Exploration Results will result, with further exploration, in the definition of a Mineral Resource