



ASX ANNOUNCEMENT

4th June, 2007

Uranium Bulk Sample for Metallurgical Testing Crocker East Uranium Deposit South Australia

Mullock heaps located beside excavation shafts at Crocker East Uranium Deposit have been systematically sampled and found to contain at least 100 tonnes of ore grade material potentially suitable for the collection of bulk samples of sufficient size for metallurgical and pilot scale process testing.

During the 1950s three shafts were sunk by the South Australian Mines Department at Crocker East to provide material for uranium grade confirmation and metallurgical tests. Shaft 1 was sunk to 13.1 metres on disseminated ore providing bulk sample representation of the major ore resource and served as a calibration of radiometric borehole results. The shaft was subsequently extended to a depth of approximately 31 metres to explore a pocket of high grade ore. Shaft 2 was sunk to 13.4 m on a thorium brannerite (absite) vein. Shaft 3 was sunk as a ventilation opening for underground mining further to the east.

The material from the shafts and underground workings is still accessible in six individual mullock heaps in the central part of the Crocker East Deposit. PepinNini Minerals has completed a geochemical sampling program confirming the mullock heaps contain ore grade material. A top layer of 50cm was removed in order to minimize the effects of 50 years of weathering and vertical "channel" samples were collected. A total of 55 samples of between 5 and 7 kgs were collected with U₃O₈ assay results ranging up to 11.17kgs per tonne (1.1%).

The mullock heaps have been constructed according to grade with higher grade material being separated from lower grade material. The discovery of the representative ore grade material potentially represents a significant saving in terms of time and expenditure required for collecting bulk samples of sufficient size for metallurgical and pilot scale process testing.

The information in this report that relates to Exploration Results is based on information compiled by Norman Kennedy BSc MAusIMM. Norman Kennedy is the Managing Director of PepinNini Minerals Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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". Norman Kennedy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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Note: Additional information on PepinNini Minerals Limited can be found on the website:

www.pepinnini.com.au



Shaft development at Crocker East Uranium Deposit



Sample locations on mullock heap at Crocker East Uranium Deposit