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CHINESE CHIM ELECTROGEOCHEMICAL METHOD: FIELD TRIALS 2005, SOUTH AUSTRALIA

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PREFACE AND EXECUTIVE SUMMARY

The electro-geochemical 'CHIM' technique developed by Chinese researchers was trialled in South Australia as a potentially useful surface technique to detect 'blind' mineralisation either in bedrock or buried by younger sediment cover. Trials form part of a larger study into potential exploration methods effective in areas of thick regolith cover (Program 1 - Curnamona MinEx). These surveys were the first time that the Chinese CHIM technique has been tested under arid conditions in Australia.

Two survey lines were completed over projected extension of ore shoots at the Challenger Mine. Although results were not conclusive, they were encouraging when compared with results from soil samples. Results from the Kalkaroo Cu-Au-Mo Prospect recorded elevated levels of Au, U, Cu, W and Bi over mineralisation but the response was such that anomalies could not be interpreted with confidence. An elevated As response was recorded over mineralisation at the Goulds Dam U Prospect but any relationship of As to underlying mineralisation has yet to be established.

It is recommended that further trials of the CHIM technique are undertaken, although with minor modifications to the equipment to suit local conditions.

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