



Mid West potash exploration progressing well

By **BOBBIE HINKLEY**

ONGOING potassium extraction test work in the Dandaragan Trough has lead exploration company Potash West one step closer to producing potash in WA.

Despite earlier doubts by a number of fertiliser industry experts, including mineral exploration company Rum Jungle Resources managing director and Badgingarra farmer David Muller, Potash West finally achieved a potassium extraction rate of more than 95 per cent using a leaching technique fairly uncommon in other potash production.

Following the collection of a 2000 kilogram bulk sample from the Poison Hill greensand sequence in the Dandaragan Trough, Potash West started an extensive test program to evaluate a wide range of reagent regimes.

But the potash is tied up as a form of potassium in a mineral known as glauconite which is well spread within the greensand belt of the Mid West.

The deposits were drilled and well identified as a source of potassium a number of times since the 1960s but the low potash prices at the time made

them unviable.

Now Potash West managing director Patrick McManus believes the leaching of glauconite concentrate is a way to unlock potassium from larger deposits.

He said it was believed almost all of the potassium could be extracted quickly and with the use of magnetic separation techniques as it allowed for low cost upgrading with potassium recoveries of more than 90pc.

Over 100 leaching tests have been carried out in the company's leaching program using a wide range of reagents and temperatures although Potash West won't release the exact parameters due to the protection of intellectual property rights.

But despite what fertiliser industry sceptics first predicted Mr McManus said it was clear potassium dissolution was achievable without resorting to extreme leaching conditions.

He said a variety of processing regimes offered potential and would be evaluated as part of the company's ongoing program of extraction test work.

He also said Potash West had demonstrated how valuable glauconite

could be separated from gangue minerals by magnetic separation.

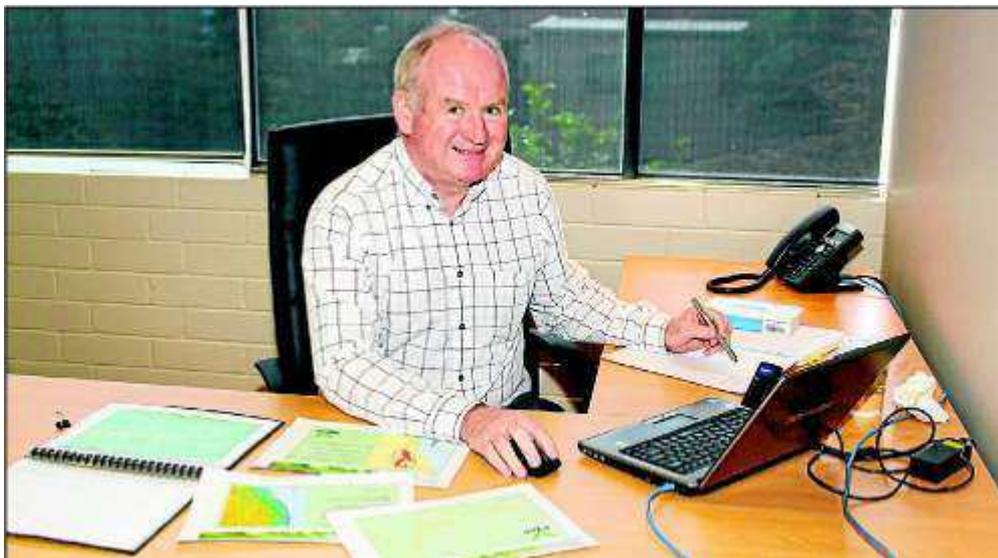
But for now Mr McManus said the company was focused on getting the best out of potassium dissolution for farmers in the future.

The company is set to spend more time in the coming months optimising conditions for rapid potassium dissolution, developing concentration and purification techniques for the potassium and establishing conditions to produce a commercial grade products such as muriate of potash and sulphate of potash.

"The test work to optimise the potash extraction from the Dandaragan greensands has progressed rapidly," Mr McManus said.

"We are encouraged that the glauconite breaks down rapidly without intensive energy input.

"The extensive greensand deposits have the potential to develop a new industry that would reduce Australia's reliance on potash imports, which will lower the costs of an essential ingredient of modern farming."



□ Potash West managing director Patrick McManus is pleased with his company's exploration progress and said new extraction techniques could see the production of a commercial grade product in a matter of five years.