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# MEDIA RELEASE

# POTASH WEST SUCCEEDS IN PRODUCING POTASH FROM WA GLAUCONITE DEPOSITS

## Highlights

- Ongoing testwork confirms potential of a range of extraction technologies.
- Two flowsheets produce laboratory quantities of commercial quality potash.
- Company on target to define a flowsheet by mid-year 2012.
- Scoping study to commence in the second half of 2012.

**Potash West NL** (ASX: **PWN**) ("**Potash West**" or "**the Company**") is pleased to report that it continues to make important breakthroughs in the critical area of identifying a commercial process to produce Potash from its world scale greensands resources in Western Australia.

Following significant testing over the past nine months, Potash West has defined two flowsheets that have successfully produced laboratory quantities of potassium chemicals which have the potential to be important ingredients in the production of fertilisers for the domestic and international marketplace.

The Company is now well on target to achieve its aim of finalising a flowsheet by mid-2012 which it views as a critical milestone in bringing its large Dandaragan Greensands project, located to the north of Perth, into development.

Potash West's Managing Director, Patrick McManus, said today, "Our technical development program has identified a number of process options that we will further define in 2012. The prize of being able to economically extract potassium is so compelling that we will continue our investigation on a broad front".

"Our knowledge of glauconite processing has grown enormously, and now forms a valuable asset of the Company. We are on track to have a flowsheet defined by July to enable us to commence a scoping study in the second half of 2012," he said.



## BACKGROUND

Since listing in May 2011, Potash West, through its technology development contract with Strategic Metallurgy, has undertaken a comprehensive investigation into the treatment of greensands for the production of potassium chemicals. The investigation has been wide ranging with public domain techniques tested as well as a number of new innovative approaches being developed.

Initial testwork confirmed that glauconite, the valuable potassium containing mineral in the greensands, is magnetic, and can be concentrated by conventional magnetic separation. This pre-treatment stage upgrades the potassium content and rejects waste minerals such as feldspar and silica. The mass reduction and grade increase substantially lowers the cost of subsequent processing steps.

The majority of the testing has focussed on methods of rendering the potassium in the glauconite soluble. A variety of pre-treatment steps have been investigated, as well as direct leaching with a range of reagents. Rapid and high potassium extractions were demonstrated using a number of different regimes. These have been achieved without resorting to leaching at high temperatures and pressures – an important component in significantly reducing production costs.

By the end of 2011 Potash West had conducted over 280 individual tests aimed at developing workable flowsheets for potassium production. Two flowsheets have been developed in enough detail to produce laboratory quantities of potassium chemicals. One flowsheet produced potassium chloride, the other potassium sulphate. Both products were of marketable quality, as shown in Table 1:

|       | Sulphate product |             | Chloride Product |             |
|-------|------------------|-------------|------------------|-------------|
|       | Laboratory       | Commercial  | Laboratory       | Commercial  |
|       | Product          | Product     | Product          | Product     |
| K     | 44.1%            | 41.5% (min) | 52.0%            | 49.8% (min) |
| SO4   | 54.3%            | 54.0%       | 0.024%           | -           |
| Cl    | -                | 1.0% (max)  | ND               | 45.3%       |
| Other | 0.6%             | 4.7%        | 0.67%            | 4.4%        |
|       |                  |             |                  |             |

 Table 1: Product quality, compared with commercial product

The wide ranging extent of the development program has resulted in the identification of a number of other possible approaches to potash production, which are yet to be fully investigated. In conjunction with further development of the two flowsheets already identified,



part of the Company's ongoing work will be the development of other options to extract maximum value from the Dandaragan Greensands.

Mr McManus said that while it is still early days in the process development cycle, significant new and innovative intellectual property has been generated by the work undertaken to date.

"Computer modelling of the flowsheets has commenced to better define the mass and energy balances of the processes. This will enable a preliminary economic appraisal to be undertaken".

"In line with the business plan outlined in the IPO prospectus, Potash West is aiming to have at least one process developed in sufficient detail to be the basis of a scoping study by mid 2012," he said.

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### Competent Person's Statement:

The metallurgical information in this report is based on information compiled by Gary Johnson, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Johnson has sufficient experience relevant to the activity being undertaken 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". Mr Johnson is a consultant to the mining industry. This report is issued with Mr Johnson's consent as to the form and context in which the results appear.

#### About Potash West

Potash West (ASX:PWN) is an exploration company focused on developing potassium-rich glauconite deposits in West Australia's Perth Basin. The Company aims to define a substantial resource base and investigate how best to recover potash from the mineral. The project is well situated in relation to infrastructure, with close access to rail, power and gas. A successful commercial outcome will allow the Company to become a major contributor to the potash market at a time of heightened demand.

The Company has a major land holding over one of the world's largest known glauconite deposits, with exploration licenses and applications covering an area of 2,905km2. Previous exploration indicates glauconite sediments are widespread for more than 150km along strike and 15km in width.