



**Breakaway  
Research**

November 2012

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### Company Information

ASX Code	PWN
Share Price	A\$0.27
Ord Shares	51.9m
Escrowed Shares	31.8m
Diluted Market Cap	A\$22m
Cash (Sept 12)	A\$1.9m
Total Debt	A\$-
Enterprise Value	A\$20.7m

### Directors

Non-Exec Chairman	Adrian Griffin
Managing Director	Patrick McManus
Non-Exec Director	George Sakalidis
Non-Exec Director	Gary Johnson

### Company Details

Address	23 Belgravia Street Belmont WA 6104
Phone	+618 9479 5386
Web	www.potashwest.com.au

### Top Five Shareholders

Barclay Wells	17.9%
Elsinore Energy	14.9%
UOB-Kay Hian	5.8 %
Adrian Griffin	4.1 %
Patrick McManus	2.1 %

### 1 Year Price Chart



Source: Bloomberg

# Potash West NL (PWN)

*Maiden JORC resource provides potential  
for +40 year mine life*

**Recommendation: Speculative BUY**

## Company Update

### Key Points

- **Maiden JORC resource of 244Mt @ 3.0% K<sub>2</sub>O and 1.6% P<sub>2</sub>O<sub>5</sub> with only 20% of Dinner Hill prospect drill tested**
- **Significant exploration potential along strike and at an additional nine untested prospects**
- **Patent pending process design has been finalised**
- **Scoping study underway and due for completion in Dec 2012**
- **A\$3M placement to Chinese private company (at 35% premium) to be used to fund feasibility study**

*Potash West continues to make steady progress towards the ultimate aim of becoming the first potash production company in Australia. The patent pending process design is a major breakthrough and the scoping study currently underway is likely to highlight the robust economics of the Dinner Hill Project.*

### Investment Overview

Potash West recently released a maiden JORC resource of 244Mt of potassium rich greensands at the Dinner Hill prospect. Encouragingly, only 20% of the Dinner Hill prospect area (and none of the other nine high priority targets) have been drill tested to date. The mineralisation displays strong geological continuity providing scope for additional resources to be delineated with ongoing drill campaigns.

Significant progress has also been made on the processing flowsheet (currently patent pending) which has been developed to extract value from the glauconite within the greensands. The straight forward process design is a major breakthrough and has major implications on the overall viability of the project.

A scoping study is currently underway and is due for completion in Dec 2012. Following the likely positive outcomes of the study, Potash West intend to embark on a more comprehensive feasibility study with the ultimate aim of production by mid 2016.

Breakaway has been further encouraged by the recent unsolicited approach by a private Chinese company seeking to make a strategic investment in Potash West. Under terms agreed (and yet to be finalised), Potash West will raise A\$3m via the issue of shares at a 35% premium of 33 cents/share. The funds raised will primarily be used for the upcoming feasibility study.



## Company Update

### Maiden JORC Resource

Potash West recently released a maiden JORC resource of 244Mt @ 3.0% K<sub>2</sub>O and 1.6% P<sub>2</sub>O<sub>5</sub> at the Dinner Hill prospect, just 18 months after beginning exploration activities within its extensive tenement holding of ~2,900km<sup>2</sup>. Dinner Hill is located on the north-west margin of the Dandaragan Trough and is just one of ten prospective areas identified to date.

>2,900km<sup>2</sup> of prospective area

### Project Location



High quality nearby Infrastructure

Close to local markets and export ports

10 high priority prospects identified

Source: Potash West and Breakaway Research

### Dinner Hill Resource

Unit	Category	Tonnes (Mt)	K <sub>2</sub> O (%)	P <sub>2</sub> O <sub>5</sub> (%)
Molecap Greensand	Indicated	120	4.6	1.8
	Inferred	2	4.4	2.2
	<b>Total</b>	<b>122</b>	<b>4.6</b>	<b>1.8</b>
Poison Hill Greensand	Indicated	121	1.5	1.4
	Inferred	1	1.6	1.1
	<b>Total</b>	<b>122</b>	<b>1.5</b>	<b>1.4</b>
<b>Total Resources</b>	Indicated	241	3.0	1.6
	Inferred	2	3.6	1.9
	<b>Total</b>	<b>244</b>	<b>3.0</b>	<b>1.6</b>

Source: Potash West

99% of resource in the 'Indicated' category

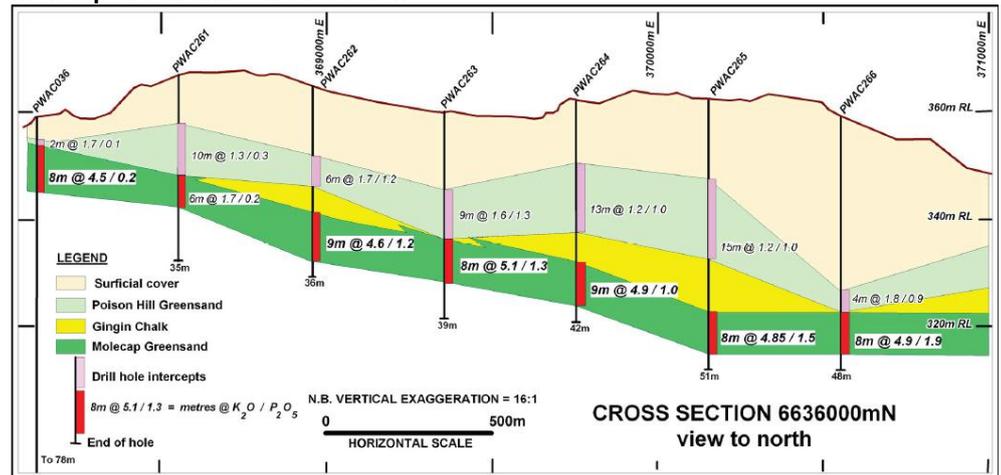
Further drilling planned

The JORC resource was defined by 83 vertical holes for a total of 3,215m. However; the drilling campaign only targeted ~20% of the prospective area, with mineralisation open to the north, south and east. Potash West now has plans in place for up to 10,000m of additional aircore drilling targeting an extension to the current resource.



### Molecap Greensand – Cross Section

Just 20% of Dinner Hill prospect drill tested to date



Source: Potash West

Mineralisation gets thicker and shallower to the south and east

The Molecap Greensand (dark green in the above image) has been the primary target at Dinner Hill due to its high contained K<sub>2</sub>O grades and the strong geological continuity with no apparent faulting or disruption. Geological modelling of the resource and surrounding area suggests the Molecap becomes shallower and thickens to the south and east. Potash West will primarily target this area with the planned follow up drill campaign.

Potash West also seeking to recover lower grade 'Poison Hill' mineralisation

At the anticipated yields, the Molecap resource of 122Mt @ 4.6% K<sub>2</sub>O is sufficient for a 40 year mine life at an initial scale of 250,000tpa of sulphate of potash.

The lower grade 'Poison Hill' green sand overlays the higher grade Molecap 'band'. This material has yet to be subjected to metallurgical testing however, Potash West is confident that this greensand 'band' will also be recovered.

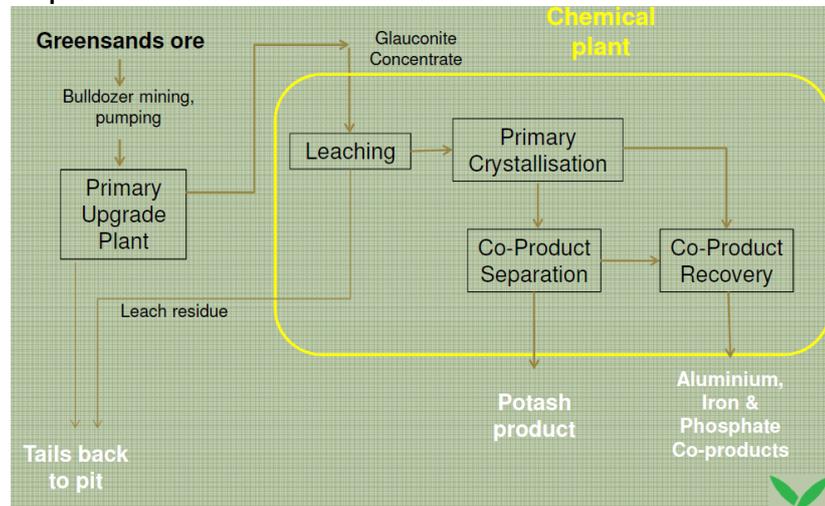
Processing design completed

### Processing

The extraction of potassium from glauconite contained within the greensands appears to be relatively robust and well supported by over 1,000 bench scale tests undertaken by 'Strategic Metallurgy Pty Ltd'. However, processing is yet to be tested on a meaningful scale outside of the laboratory.

Flow sheet is patent pending

### Proposed Flow Sheet



Source: Potash West



The proposed flow sheet is based on the leaching of the glauconite to produce potassium in the form of potassium sulphate. The other components of the glauconite are also used to advantage and recovered as valuable by-products.

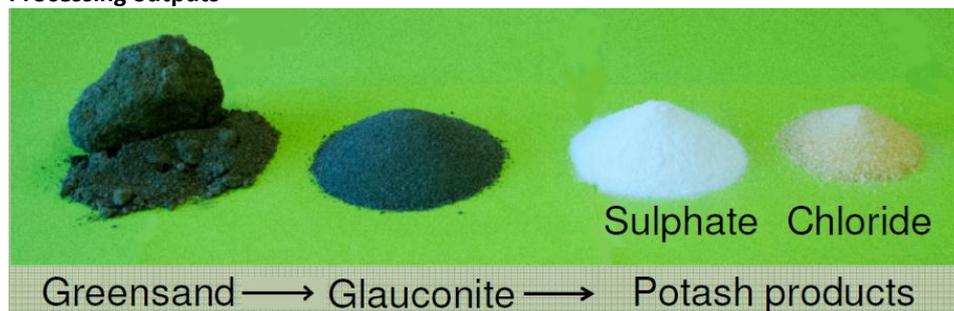
The flowsheet, which is in the process of a patent application, produces the following products from the glauconite:

*Valuable by-products also to be recovered*

- Sulphate of Potash
- A mixed potassium/magnesium sulphate
- Aluminium sulphate
- Iron Oxide
- Superphosphate

*Recovery of by-products add to the overall attractiveness of the project*

#### Processing outputs



Source: Potash West

The ability to produce numerous valuable by-products in addition to the primary sulphate of potash is a significant breakthrough which is likely to greatly affect the economics and overall attractiveness of the project.

#### Scoping Study underway – to be followed by feasibility study

*Scoping study results due Dec 2012*

Potash West recently engaged Tenova Bateman Projects to conduct scoping level studies to estimate the capital and operating costs of a plant designed to treat glauconite. The outcomes of the study are expected by December 2012.

Should the scoping study yield positive results, PWN is likely to commence with feasibility work with the eventual aim of production by 2016.

*Unsolicited private Chinese company to make A\$3m investment*

#### Medium Term Outlook

*Production targeted for mid-2016*

Activity	Expected time frame
Scoping Study Results	Dec-12
Bankable Feasibility Study	Dec-13
Financing	Jun-14
Construction	Dec-15
Commissioning	Early 2016
250,000tpa potash production	Mid 2016

Source: Potash West



### **Analyst Verification**

We, Grant Craighhead and Andrew McLeod, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

### **Disclosure**

Breakaway Investment Group (AFSL 290093) may hold direct and indirect shares in Potash West. It has also received a commission on the preparation of this research note.

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