



# ASX Announcement

22 July 2015

## COMPANY DETAILS

ABN: 62 147 346 334

### PRINCIPAL REGISTERED OFFICE

Potash West NL  
Suite 3  
23 Belgravia Street  
Belmont WA 6104

### POSTAL ADDRESS

PO Box 588  
Belmont WA 6984

W [www.potashwest.com.au](http://www.potashwest.com.au)

E [info@potashwest.com.au](mailto:info@potashwest.com.au)

P +61 8 9479 5386

F +61 8 9475 0847

### ASX CODE

PWN

### FRANKFURT CODE

A1JH27

### OTC PINK

PWNNY

### CORPORATE INFORMATION

22 July 2015

230M Ordinary shares  
36M Partly paid shares  
5M Unlisted options

### BOARD OF DIRECTORS

**Adrian Griffin**

(Non-Executive Chairman)

**Patrick McManus**

(Managing Director)

**Chew Wai Chuen**

(Non-Executive Director)

**Natalia Streltsova**

(Non-Executive Director)

## POTASH WEST REPORTS UPGRADE TO DINNER HILL EXPLORATION TARGETS

### HIGHLIGHTS:

- **The updated Exploration Target for the Dinner Hill Phosphate Project is:**
  - 550 million tonnes to 800 million tonnes of phosphate mineralisation at a grade of between 2% and 2.8%  $P_2O_5$ .
  - An increase of approximately 50% in tonnage and 5% in grade
- **This partially overlaps a Potash Exploration Target of:**
  - 1.2 billion tonnes to 1.8 billion tonnes of greensand containing potash mineralisation at a grade of between 3.5% and 4%  $K_2O$ .
  - An approximate increase in tonnage of 20% and a decrease in grade of 15%.
- **Potential to extend Potash and Phosphate Mineral Resources to the south and east of the current resources.**

***The potential quantity and grade of the targets are conceptual in nature, as there has been insufficient exploration to estimate Mineral Resources over their areas and as it is uncertain if further exploration will result in the estimation of Mineral Resources.***

Mineralisation within Potash West NL's ("Potash West's") Dinner Hill Phosphate and Potash Deposit, located in the Midwest wheat belt of Western Australia, some 225km by road north of Perth, has been shown by past and recent drilling to extend over some 70km<sup>2</sup> to the south and east of the recently re-estimated phosphate and potash Mineral Resources (ASX release 03 June 2015). This updated Exploration Target estimate reflects changes to the original Exploration Target (ASX release 07 May 2013) as a result of the additional drilling and the updated Mineral Resource estimate (ASX release 03 June 2015). Both the Exploration Target and the JORC compliant resources have increased.

Within the central section of the Exploration Target (between about 6,630,000N and 6,636,500N) the contained potash mineralisation is of higher grade, between 4% and 4.6%  $K_2O$ . North of 6,637,500N, phosphate grades are higher, ranging from 4% and 5%  $P_2O_5$ , with an average thickness of about 9m. See figures 3 and 5.

Potash West Managing Director Patrick McManus said "the increased resource reported to the ASX in early June 2015 will support a very long-lived project producing phosphate fertilizer from the Dandaragan Trough. These Exploration Targets indicate that the resource could increase significantly with further drilling".

"Western Australia and SE Asia imports the bulk of our phosphate requirements from overseas. This is an opportunity to establish a fertilizer project in Western Australia, meeting the needs of local and regional farmers. We have commenced feasibility studies to confirm the commercial viability of the Phosphate Project, planned to produce single superphosphate".

The Dinner Hill Deposit is easily accessed from Perth via the Brand Highway. (Figure 1). The project is estimated to contain an Indicated Phosphate Mineral Resource of 250Mt at 2.9%  $P_2O_5$ . Indicated and Inferred Potash Resources are 195Mt at 3.8%  $K_2O$  including 175Mt of Indicated Resources at 4.0%  $K_2O$  in the target Molecap Greensand (ASX release 03 June 2015).



Figure 1: Location plan, Dandaragan Trough Project

Continental Resource Management Pty Ltd (“CRM”) carried out this Exploration Target estimate for extensions to the Dinner Hill Potash and Phosphate Deposits. The estimate was made by John Doepel, Principal Geologist. It is reported in accordance with the 2012 Edition of the JORC Code.

The estimate is based upon air-core drilling carried out by Potash West between 2011 and 2015. Only those holes within or adjacent to the target area were used for input into the estimation. The relevant holes are listed in Appendix 2 and are shown on Figures 3 and 5.

## POTASH EXPLORATION TARGET ESTIMATION

### Target Area

The boundaries to the target area were set by the limits to the fresh Molecap Greensand encountered in the Potash West drill-holes. The area of the fresh greensand is bounded by topography, with lower ground surfaces being associated with weathering or erosion of the target horizon, as is illustrated in Figure 3, a cross-section along 6,635,400N that shows:

- The 400m spaced 2012 drill-holes in the west that define the Dinner Hill resource;
- The 800m spaced 2013 drill-holes that show the continuation of the fresh greensand in the east; and the lower topography further east that is associated with weathered greensand; and
- A valley slope to the west that has, by erosion, limited the extent of the greensand in this direction.

The eastern boundary to the north of 6,635,400N is set by the limit of fresh greensand within Block K (374,200E) shown in Figure 3. The southern boundary of the target area is coincident with the southern boundary of E70/3987.

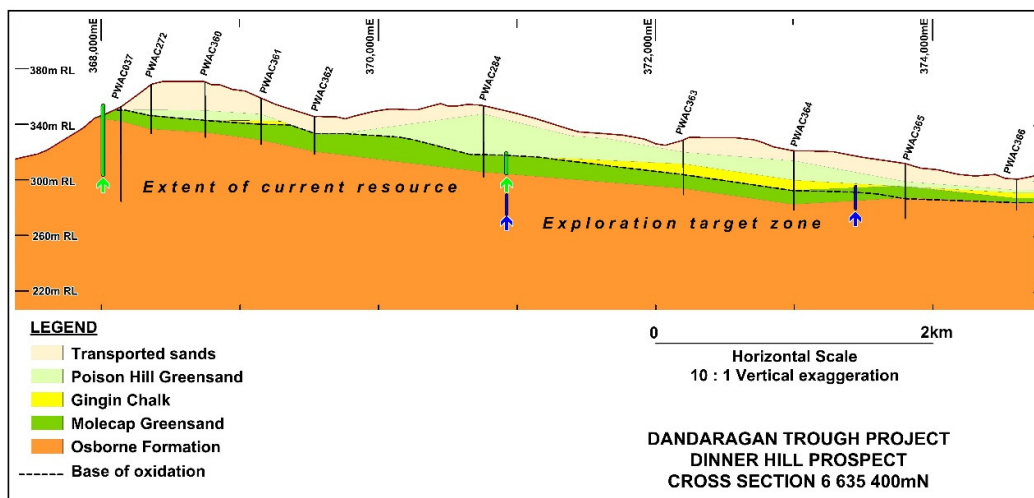


Figure 2: Cross section 6,635,400N

### Estimation Methodology

Within the Dinner Hill Deposit the potash grade within the Molecap Greensand increases from north to south. Separate estimates of tonnes and grade were made for individual sections or blocks of the target area. The estimates incorporated the average potash grade of the greensand within drill-holes immediately adjacent to or within each block. Volumes were estimated by multiplying the average intersection thickness within these drill-holes by the area of the block. Tonnages assumed an SG of 1.63 for the fresh greensand.

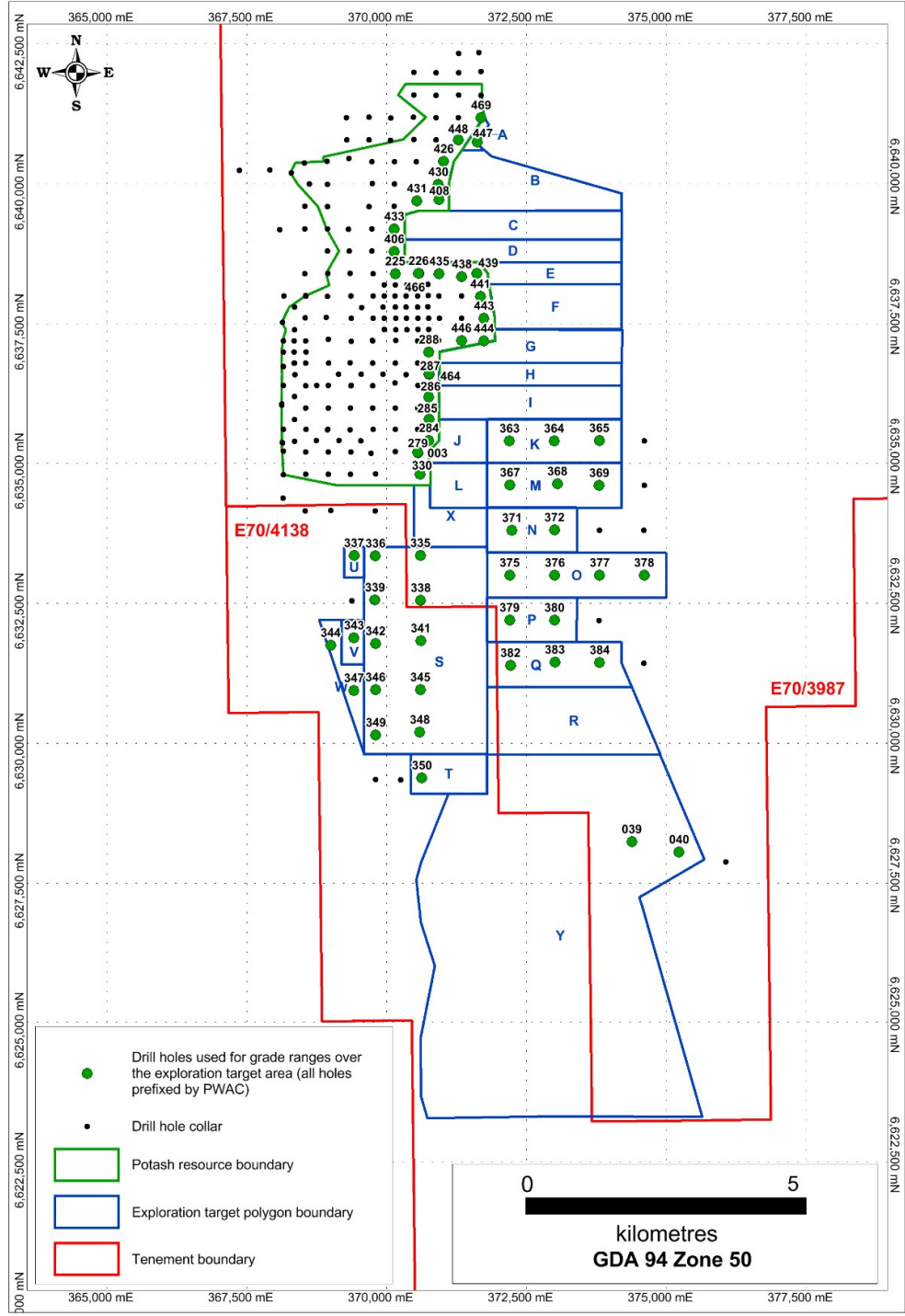


Figure 3: Dinner Hill Potash Exploration Target Area and blocks showing drill-holes used for estimation

## PHOSPHATE EXPLORATION TARGET ESTIMATION

### Target Area

The boundaries to the target area were set by the limits to the fresh phosphate mineralisation encountered in the Potash West drill-holes. This area is bounded by topography, with lower ground surfaces being associated with weathering or erosion of the target horizon. Within the Dinner Hill Deposit the phosphate grade within decreases from north to south (Figure 4).

To the north of 6,640,400N the target area is limited to the east by a Department of Conservation Reserve. The eastern boundary between 6,640,400N and 6,635,800N (373,400E) is set by the limit of phosphate mineralisation within Block PN, Figure 5. The southern boundary of the target area is 6,629,800N, to the south of which no recoverable phosphate mineralisation was intersected in the Dinner Hill area. It should be noted however that significant phosphate mineralisation has been intersected further south within other Potash West tenements.

### Estimation Methodology

Separate estimates of tonnes and grade were made for individual sections or blocks of the target area. The estimates incorporated the average phosphate grade of the mineralisation within drill-holes immediately adjacent to or within each block. A lower cut-off grade of 1% recoverable  $P_2O_5$  was used to constrain the intersections. Volumes were estimated by multiplying the average intersection thickness within these drill-holes by the area of the block. Tonnages assumed an SG of 1.63 for the Molecap Greensand and 1.50 for mineralisation within the Gingin Chalk and Poison Hill Greensand.

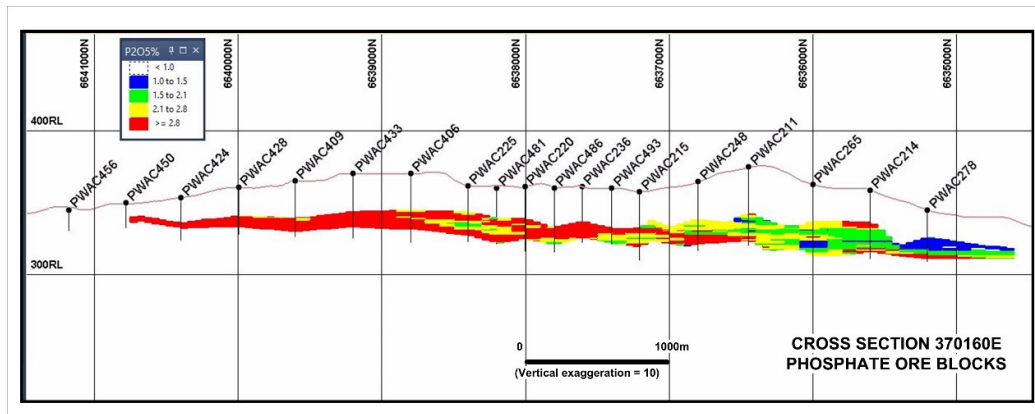


Figure 4: OBM Long-section 370160E – displaying higher phosphate grades in the north of the target area.

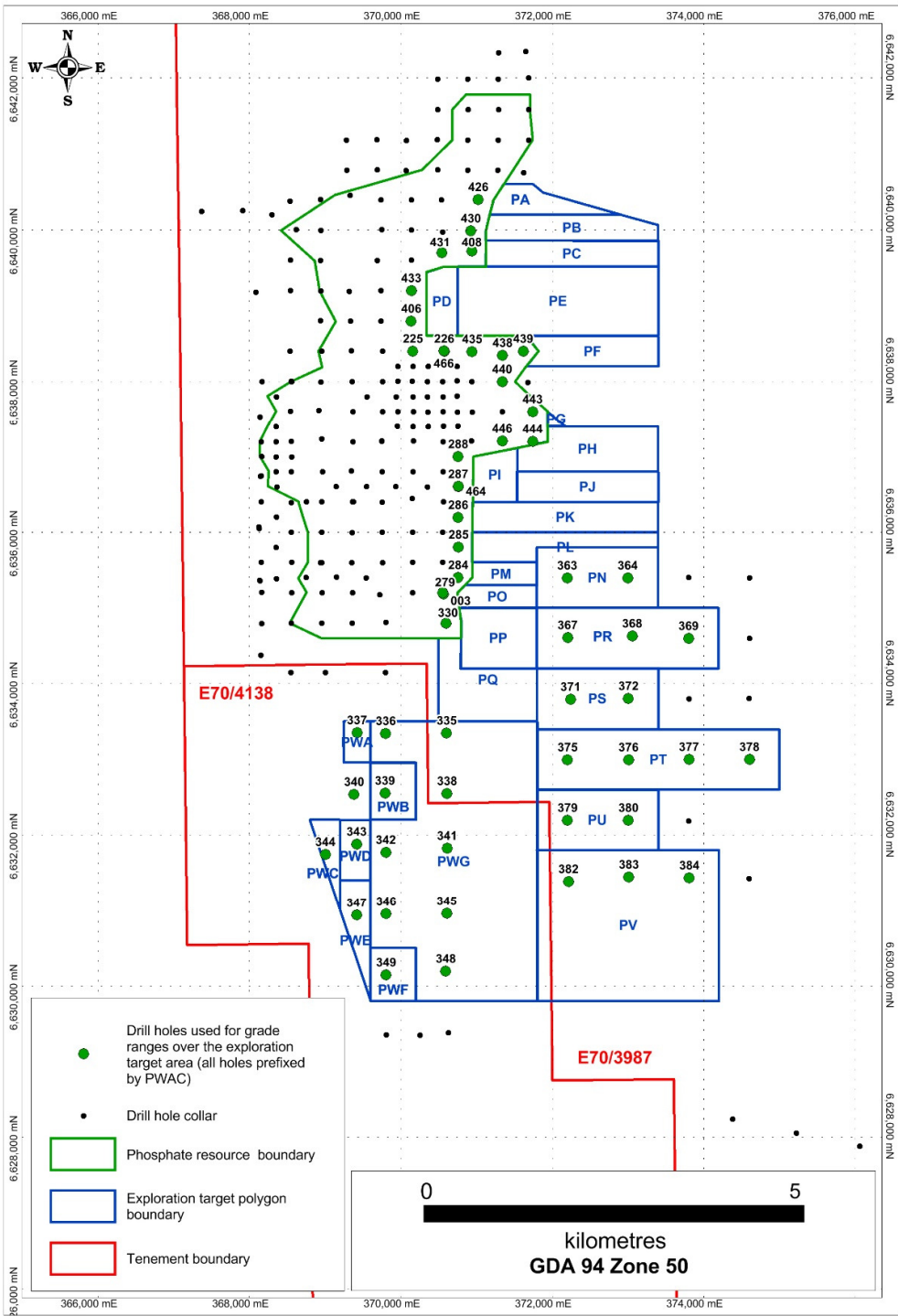


Figure 5: Dinner Hill Phosphate Exploration Target Area and blocks showing drill-holes used for estimation



**COMPETENT PERSON'S STATEMENT**

The information in this report that relates to the estimation of the Mineral Resources and Exploration Targets is based on and fairly represents information and supporting documentation prepared by J.J.G. Doepel, who is a member of the Australasian Institute of Mining and Metallurgy. Mr. Doepel, Principal Geologist of the independent consultancy Continental Resource Management Pty Ltd, has sufficient experience relevant to the style of mineralisation and type of deposit under consideration. He is qualified as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". This report is issued with Mr. Doepel's consent as to the form and context in which the Mineral Resource and Exploration Target appears.

For further information contact:

**Potash West NL:**

Patrick McManus

Managing Director

Tel: +61 (0)8 9479 5386

[info@potashwest.com.au](mailto:info@potashwest.com.au)

Web:

[www.potashwest.com.au](http://www.potashwest.com.au)

**Professional Public Relations:**

Colin Hay

Tel: +61 (0)8 9388 0944

E: [colin.hay@ppr.com.au](mailto:colin.hay@ppr.com.au)

**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 phosphate and 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 and phosphate markets at a time of heightened regional 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 2,600km<sup>2</sup>. Previous exploration indicates glauconitic sediments are widespread for more than 150km along strike and 30km in width.*

## APPENDIX 1 - JORC CODE, 2012 EDITION – TABLE 1

## SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Air-core drilling was used to obtain 1m samples from target horizons;</li> <li>3kg sub-samples were split by rotary splitter or by scoop sampling. Sub-sample size 3 to 4kg.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Vertical NQ Air-core</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Clay content of moist greensands ensured total recovery and retention of all size fractions;</li> <li>Holes were conditioned at the completion of each sample interval and the cyclone was opened and cleaned at the end of each three metre rod.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>All intervals geologically logged directly into a field computer using a database designed to capture relevant data including, oxidation, grainsize, rounding, sorting, mineralisation, hardness, colour and stratigraphic unit. All logging sample layouts are photographed and chip trays stored for future reference.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>Duplicate field splits at a 1:18 ratio returned <math>R^2</math> correlation coefficient of 0.96 for <math>P_2O_5</math> for 2012 drilling and 0.98 for more recent drilling, indicating robustness of sampling process;</li> <li>Duplicate field splits at a 1:18 ratio returned <math>R^2</math> correlation coefficient of 0.99 for <math>K_2O</math> for 2012 drilling and 0.98 for more recent drilling, again indicating robustness of sampling process;</li> <li>Sample preparation by Genalysis Laboratory Services Pty Ltd via drying and total pulverisation</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>Analysis by Genalysis Laboratory Services Pty Ltd by Phosphate Major Element Suite FB1 method (XRF after lithium borate fusion);</li> <li>Three alternate phosphate standards were submitted with samples at a 1:18 ratio. For the <math>P_2O_5</math> analyses the respective means of the analytical results of the standards were 19.3%, 9.74%, and 4.94% as against the nominal standard means of 19.3%, 9.72%, and 4.94%.</li> <li>Three alternate phosphate standards were submitted with samples at a 1:18 ratio. For the <math>K_2O</math> analyses the respective means of the analytical results of the standards were 1.55%, 3.02%, and 3.76% as against the nominal standard means of 1.55%, 3.02%, and 3.75%.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>Sampling and logging verified by site visits by Exploration Manager and Independent Consultant. Logging checked against major element assays and sample photography;</li> <li>Assay entry by digital capture of laboratory files, with later verification of significant intervals against original files.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Holes located by GPS;</li> <li>Grid MGA_GDA94, Zone 50;</li> <li>Elevation data is based on a topographic contour set produced from SRTM imagery at 5m vertical resolution.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>1m samples collected and analysed throughout mineralized horizons;</li> <li>Geological continuity across deposit.</li> </ul>



Criteria	Commentary
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Vertical drilling through virtually horizontal stratigraphy resulted in intersected thicknesses equivalent to true thickness.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Samples transported from site to laboratory by Potash West staff.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Sample techniques, logs, and data reviewed positively by independent consultant geologist.</li> </ul>

## SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>The Exploration Target is within E70/3987 and E70/4138;</li> <li>E70/3987 is held by Richmond Resources Pty Ltd. A deed is place between Richmond Resources and Potash West, whereby Potash West holds the rights to the glauconite and phosphate minerals and to any by-products produced processing these minerals.</li> <li>E70/3987 was granted on 26/07/2011 for a period of five years. The required expenditure has been met for the first three years.</li> <li>E70/4138 is held by Potash West</li> <li>E70/4138 was granted on 26/05/2012 for a period of five years. The required expenditure was met for the first two years.</li> <li>The target is beneath farm land owned by Roseville Nominees, Ronald Shane Love, J.W &amp; W.V. Fordham and Alidade Pty Ltd, with whom compensation agreements have been signed, with the mineral sub-surface rights subsequently being granted both above and below 30m below surface.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>No exploration work was carried out in the area of the deposit prior to that by Potash West.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The phosphate is present as fluorapatite nodules and grains concentrated within particular horizons of horizontal greensand and chalk formations;</li> <li>The potash is present as the mineral glauconite, which is a major constituent of the Molecap and Poison Hill Greensands and a minor constituent of the Gingin Chalk.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>See Appendix 2.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>No data aggregation of analyses used;</li> <li>No metal equivalent values used.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>Vertical drilling through virtually horizontal stratigraphy resulted in intersected thicknesses equivalent to true thickness.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Diagrams are included in the report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Grades are consistent across deposit;</li> <li>Intersection grades shown on diagrams show consistent hole to hole grades.</li> </ul>

Criteria	Commentary
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>There is no unreported substantive exploration data.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Further bulk density work is expected to be carried out.</li> </ul>

### SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>The deposit is within E70/3987 held by Richmond Resources Pty Ltd. A deed is place between Richmond Resources and Potash West, whereby Potash West holds the rights to the glauconite and phosphate minerals and to any by-products produced processing these minerals.</li> <li>The tenement was granted on 26/07/2011 for a period of five years. The required expenditure has been met for the first three years.</li> <li>The deposit is beneath farm land owned by Roseville Nominees, Ronald Shane Love, and Alidade Pty Ltd, with whom compensation agreements have been signed, with the mineral sub-surface rights subsequently being granted both above and below 30m below surface.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>No exploration work was carried out in the area of the deposit prior to that by Potash West.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The phosphate is present as fluorapatite nodules and grains concentrated within particular horizons of horizontal greensand and chalk formations;</li> <li>The potash is present as the mineral glauconite, which is a major constituent of the Molecap and Poison Hill Greensands and a minor constituent of the Gingin Chalk.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>See Appendix 2.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>No data aggregation of analyses used;</li> <li>No metal equivalent values used.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>Vertical drilling through virtually horizontal stratigraphy resulted in intersected thicknesses equivalent to true thickness.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Diagrams are included in the report</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Grades are consistent across deposit;</li> <li>Intersection grades shown on diagrams show consistent hole to hole grades.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>There is no unreported substantive exploration data</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Further bulk density work is expected to be carried out;</li> <li>Infill air-core drilling of the existing 400m by 400m grid is expected within the yet to be optimized initial pit area.</li> </ul>

**APPENDIX 2 –DRILL-HOLE DETAILS**

The table below details the air-core drill-holes used for the exploration target estimate.

- All holes are vertical
- The intersection refers to the Molecap Greensand
- Coordinate system id GDA94 Zone 50

HOLE	EASTING	NORTHING	RL	INTERSECTION	
	(m)	(m)		From (m)	Length (m)
PWAC039	374383	6628239	309	42	18
PWAC040	375224	6628056	286	6	14
PWAC226	370572	6638404	366	36	3
PWAC279	370554	6635200	354	34	9
PWAC284	370755	6635402	354	35	11
PWAC285	370758	6635804	357	40	4
PWAC286	370753	6636195	356	37	7
PWAC287	370756	6636601	357	34	7
PWAC288	370753	6637000	348	25	6
PWAC330	370596	6634800	344	27	11
PWAC335	370602	6633351	348	34	13
PWAC336	369799	6633344	340	13	15
PWAC337	369421	6633355	336	2	14
PWAC338	370606	6632551	344	33	13
PWAC339	369789	6632558	329	6	9
PWAC341	370610	6631828	349	35	13
PWAC342	369802	6631776	355	31	16
PWAC343	369414	6631884	350	18	16
PWAC344	369002	6631748	327	1	11
PWAC346	369803	6630952	349	28	14
PWAC347	369416	6630937	330	10	10
PWAC348	370591	6630194	341	31	13
PWAC349	369804	6630147	335	10	13
PWAC350	370628	6629381	330	14	14
PWAC352	370251	6629348	311	6	6
PWAC363	372197	6635400	328	25	9
PWAC364	372994	6635400	321	29	9
PWAC365	373802	6635404	311	18	6
PWAC367	372202	6634608	323	24	10
PWAC368	373053	6634632	306	11	9
PWAC369	373798	6634600	305	10	14
PWAC371	372240	6633798	335	39	12
PWAC372	373002	6633806	325	37	10
PWAC376	373005	6632996	330	37	13
PWAC377	373804	6633000	300	43	5
PWAC378	374602	6633001	300	32	11
PWAC379	372199	6632200	318	19	19
PWAC380	373002	6632201	303	8	19
PWAC382	372212	6631387	345	41	11
PWAC383	373007	6631450	328	31	20
PWAC384	373806	6631437	310	30	21
PWAC406	370136	6638797	370	34	4
PWAC408	370937	6639722	359	30	3

HOLE	EASTING	NORTHING	RL	INTERSECTION	
	(m)	(m)	(m)	From (m)	Length (m)
PWAC426	371020	6640401	351	25	3
PWAC430	370922	6639990	356	28	4
PWAC431	370542	6639700	361	31	2
PWAC433	370137	6639198	370	33	4
PWAC435	370939	6638398	358	29	6
PWAC438	371341	6638347	350	30	7
PWAC439	371614	6638401	350	30	7
PWAC441	371675	6637989	346	30	5
PWAC443	371739	6637603	345	32	5
PWAC444	371740	6637200	334	23	9
PWAC447	371620	6640752	345	23	2