ASX Code: POZ



Metallurgical Update (Report #4) for Highland Plains Phosphate Project in the Northern Territory

Highlights:

- Magnetic separation successfully applied to flotation end-products to achieve high quality rock phosphate grading to 35.6%P₂O₅ with a low combined contaminant value of 1.7% Fe₂O₃ plus Al₂O₃.
- Marketing work commences for the Phosphate Australia "PhosAus Rock" product with early positive feedback from industry participants.

Figure 1: Highland Plains Location and Slurry/Barging/Shipping Options 138°E 131°E **LOGISTICS Potential Slurry Pipeline** ocation DARWIN **Distances To:** Tully Inlet = 220km Burketown = 224km Calvert River = 266km Port Karumba = 520km Katherine 200km **NORTHERN** Carpentaria -15°S **TERRITORY** Port Bing Bong Calvert River (**Highland Plains** 56,000,000t @ 16% P₂O₅ **LEGEND** Port WMTZ = 14.000.000t @ 20% P₂O₂ Karumba Phosphate Australia Ltd Tenement Burketown Phosphate Deposit Century or Published Occurrence **Slurry Pipeline** Alroy Potential Slurry Pipeline Century Mine (Zn) **Buchanan Dam** Existing Slurry Pipeline **QUEENSLAND** Alexandria Potential Barging Facility Tennant Camooweal International Export -20°S Town Cloncurry Mt Isa Mine Wonarah State Border (Cu, Ag, Zn, Pb) To Townsville Georgina **Existing Road** Port Basin ++ Existing Railway **Duchess**



1.0 Metallurgical Testwork Results - Report #4

These results (Metallurgical Report #4) are from the Highland Plains material after it has been separated into two separate size fractions. These size fractions are designated the 'coarse' and 'fine' fractions.

Splitting the phosphate rock into two fractions of coarse and fine sizes helps to optimise the process so that the fine material does not interfere with the coarse material during the flotation process.

1.1 Latest Coarse Fraction Flotation Results

Further to the results released in the earlier Metallurgical Reports, the latest coarse fraction flotation data are demonstrating continued quality improvement and repeatability of results.

Table 1: Coarse Fraction Flotation with Regrind Best Test Results

	P ₂ O ₅ %	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	Recovery P ₂ O ₅ %
Coarse Input Material	23.0	33.0	2.2	4.7	
Coarse Fraction Rougher Testing	34.8	8.1	1.3	2.6	73.4

1.2 WHIMS Magnetic Separation Results

A later coarse fraction flotation sample was processed using WHIMS testing (Wet High Intensity Magnetic Separation). The aim of this testwork is to further reduce the iron content of the sample without removing excessive phosphate after the flotation process is complete.

Table 2: Coarse Fraction Flotation Best Test Results with WHIMS processing

	P ₂ O ₅ %	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	Recovery P ₂ O ₅ %
Coarse Input Material	23.1	32.5	2.1	4.6	
Coarse Fraction Rougher Testing	35.6	10.2	0.8	0.9	73.5

These results are particularly important as many rock phosphate consumers require the combined Al_2O_3 and Fe_2O_3 content (generally expressed as R_2O_3) to be less than 3%. Fine tuning of the process and up-scaling efficiencies are expected to reduce silica in line with the Table 1 results (whilst maintaining low R_2O_3) as well as improving the overall process recovery.

Work is now focussed on improving the flotation process for the fine fraction with the aim being to produce a first-pass flow sheet for the entire metallurgical process as rapidly as possible. This is planned to underpin the commissioning of a metallurgical scoping study in the second quarter of this year.

2.0 Minor Element Assays for 34.8% P₂O₅ Beneficiated Product

Highland Plains beneficiated product has now been assayed for minor elements as a guide to contaminant content in a marketable product. The assay values detailed below are all within acceptable limits and in some cases (particularly for the contaminants chlorine and cadmium) are exceptionally low compared to rock phosphate products currently being traded on the world market.



Table 3: Minor Element Assays for 34.8% P₂O₅ Beneficiated Product

CaO:P ₂ O ₅	1.36
MgO	0.09%
$K_2O + Na_2O$	0.14%
С	0.66%
F	2.43%
CI	<100 ppm
Cd	5 ppm
S	400 ppm

3.0 Marketing

The metallurgical bench testing results to date have now allowed the Board to better define an anticipated Highland Plains rock phosphate product ("PhosAus Rock") in terms of phosphate grade, minor element concentrations and physical properties.

In conjunction with the additional scoping studies to be commissioned in the next few months, marketing efforts for PhosAus Rock have now commenced. Early feedback from industry participants has been positive and one of the main objectives of the Board this year will be to secure acceptance of the product in the international marketplace.

ANDREW JAMES Managing Director

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Jim Richards and Ms Lisa Wells, who are both Members of The Australasian Institute of Mining and Metallurgy. Mr Richards and Ms Wells are both Directors of POZ and Ms Wells is also a full time employee. Both Mr Richards and Ms Wells have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Richards and Ms Wells both consent to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The information in this report that related to metallurgical testwork is based on information compiled by Mr Fred Kock and overseen by Mr Brian Putland who is a member of the Australian Institute of Mining and Metallurgy. Mr Putland is the Managing Director of Orway Mineral Consultants.



Phosphate Australia at a Glance

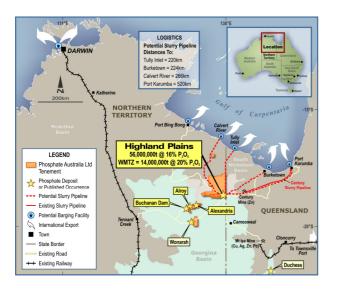
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Phosphate Australia Limited is a rock phosphate development company targeting the production and sale of up to 3,000,000 tonnes per annum of premium grade beneficiated rock phosphate with low contaminants.

Highland Plains is the lead project with a JORC compliant Inferred Resource of 56 Mt at 16% P_2O_5 . The permit is 100% controlled by POZ. The Western Mine Target Zone has been targeted for a potential start-up operation at Highland Plains. This is the shallowest part of the deposit, with outcropping mineralisation and comprises a JORC compliant Inferred Resource of 14 Mt at 20% P_2O_5 as a subset of the global Inferred Resource.

The company also controls three other known phosphate occurrences in the Northern Territory at Alexandria, Alroy and Buchanan Dam. Buchanan Dam has a historical intersection of 6.1 m at 25% P_2O_5 from 12.2 m.

Currently un-granted permit applications controlled by the company to the north of Highland Plains are prospective for iron and uranium with access subject to the negotiation of an agreement with the Traditional Owners.



Capital Structure Snapshot 18 March 2009

Ordinary Shares on Issue: 108.9 million Escrowed Shares: 42.0 million

Top 20 Shareholders: 66.6 million (61%)

Unquoted Options on Issue: 24.6 million

Share Price: A\$0.20 Undiluted Market Cap: A\$22 million

Number of Shareholders: 1124

Cash Balance: \$6.6 million

Board of Directors

Chairman: Jim Richards
Managing Director: Andrew James
Technical Director: Lisa Wells
Director/Company Secretary: Grant Mooney

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