

QUARTERLY REPORT

Period Ending 31 March 2010

Highland Plains Rock Phosphate Project (NT)
Metallurgical Flowsheet Developed & Iron Ore Project Sampling
Commences

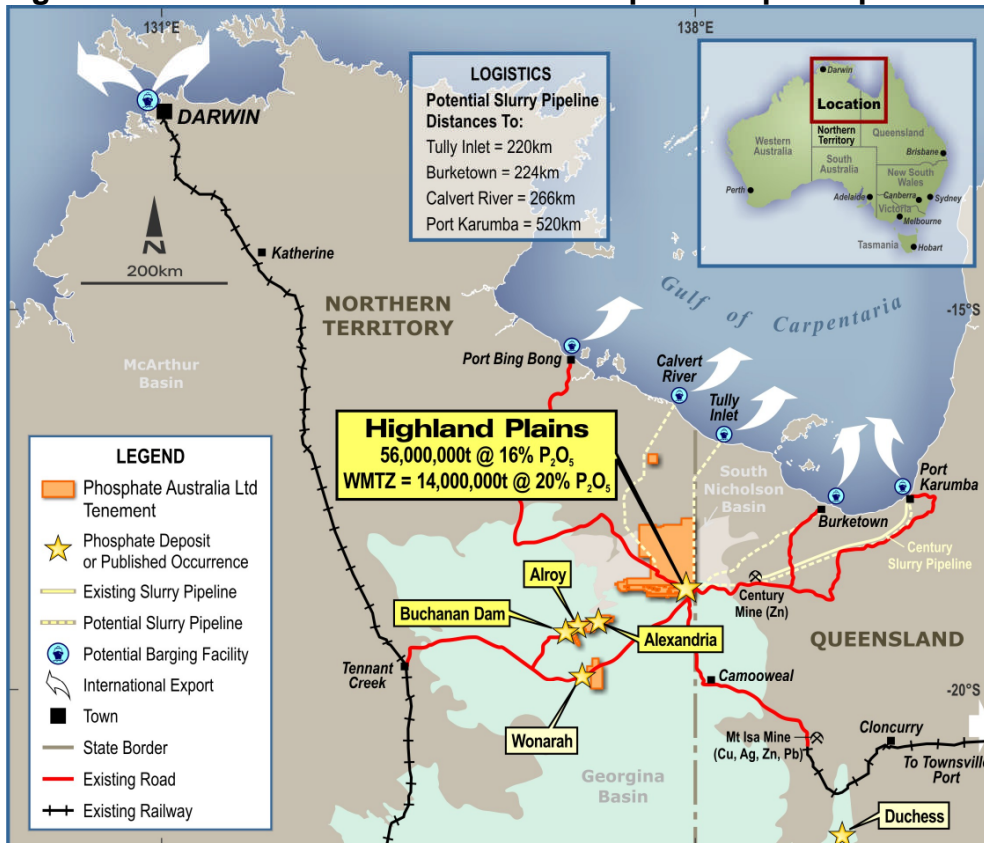
Highlights Phosphate:

- Concept flowsheet completed for the beneficiation of Highland Plains rock phosphate.
- Drilling program targeting further phosphate occurrences at Buchanan Dam, Alroy, Alexandria and along strike from Highland Plains planned for mid year.

Highlights Iron:

- Iron ore Project sampling has commenced. Helicopter-supported sampling and mapping program now underway on the Company's 100% controlled Nicholson iron project (NT). The aim is to identify iron ore drilling targets for a drilling campaign later in the season.

Figure 1: Highland Plains Location with Rock Phosphate Export Options



1.0 Metallurgy Update

Metallurgical testwork of phosphate rock from the Highland Plains project in the Northern Territory progressed through the quarter with positive results continuing to be achieved, indicating the amenability of the product to beneficiation. Highland Plains is located on the border between the Northern Territory and Queensland, around 230 km from the Gulf of Carpentaria on tenement EL25068.

This metallurgical work is ongoing and requires information from progressive testwork. To date results have shown regular positive increases in beneficiation to premium product grades for the coarse material with good recovery.

During this last quarter, considerable effort has been put into improving the grade/recovery of the fine fraction, as this significantly impacts the economics of the deposit. This work is ongoing.

On the international market, rock phosphate is commonly traded with grades of between 29 and 32%, with premium product grades above 34%.

The results released to the ASX on 19 March (as per Table 1 below) were the best achieved to date for the coarse material. The use of WHIMS (Wet High Intensity Magnetic Separation) in particular has allowed the deleterious elements, aluminium and iron, to be markedly reduced. Coarse fraction work is now focussed on both improving the recovery and further reducing the silica concentration by refining the process and by examining up-scaling efficiencies.

Table 1: 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

Table 2 results below for the fine fraction were previously released to the market on 29 January 2010.

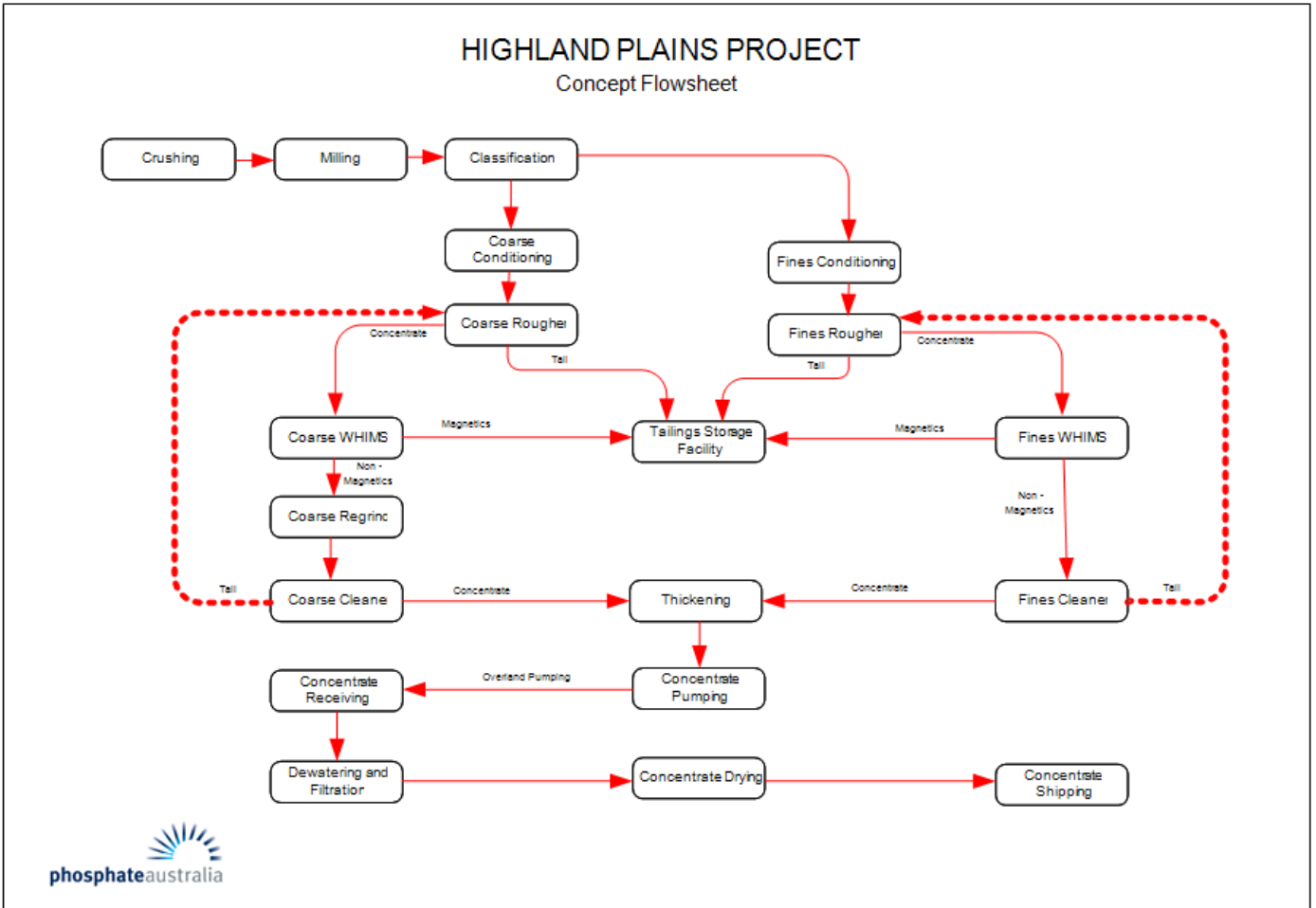
Table 2: Fine Fraction Rougher Flotation

	P ₂ O ₅ %	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	Recovery P ₂ O ₅ %
Fine Input Material	23.7	26.4	7.2	3.9	
Fine Fraction Rougher Testing	30.5	16.5	3.5	2.6	52.3

1.1 Preliminary Flowsheet for Highland Plains Rock Phosphate Beneficiation

The flowsheet splits the phosphate rock into a coarse and fine fraction. Each fraction is then separately passed through different processes before being recombined into a uniform concentrate, thickened and transported to the barging facility via slurry pipeline. Some of the tailings products are recycled through the process to maximise phosphate recovery.

Figure 2: Preliminary Flowsheet for the Beneficiation Process of Highland Plains Phosphate Rock



1.2 Bulk Sample

A bulk sample was obtained in mid-March from Highland Plains. The material was extracted adjacent to drillhole HAC001 in the Western Mine Target Zone and trucked to Amdel Laboratories in Adelaide for use in the metallurgical testwork program. This material will enable the blending of lower grade test samples and will allow the testwork and optimisation schedule to be accelerated. The extraction of this high grade bulk sample was a straightforward and low cost exercise due to outcropping phosphate mineralisation at Highland Plains.

1.3 External Review of Testwork

Additional specialist consultants have joined the metallurgical team to analyse the testwork to date and to provide an independent review of results. This is to ensure that industry best practise for phosphate beneficiation is being followed and also allows for new input as industry techniques and technologies continue to evolve.

Figure 3: Lisa Wells, Technical Director, inspecting phosphatic siltstone from the bulk sample site



2.0 Phosphate Exploration Activities

Applications to the Aboriginal Areas Protection Authority have been submitted for several regional targets in the NT in order to gain clearances for a drilling programme. Regional exploration planning is currently underway to explore phosphate targets on tenements EL25068 and EL25600, and which include the Alexandria, Buchanan Dam and Alroy prospects. Historic intersections from drilling in the 1960s at Buchanan Dam include 6.1 m at 25.0% P₂O₅ from 12 m.

3.0 Iron Ore Project Sampling and Mapping Program

Iron Ore sampling and mapping are now underway on the Company's 100% owned Nicholson Iron Project. The field team are using helicopter support and existing Phosphate Australia Limited ("POZ") camp infrastructure to access and sample the areas of outcropping iron mineralisation previously identified by historic Northern Territory Geological Survey ("NTGS") mapping.

The aim of the field program is to identify areas of iron mineralisation for follow up drilling later this field season. Although this sampling program is only being done on granted permit EL25068, numerous other iron ore targets also exist to the north on permit applications held by POZ. Access to these northern permits is currently being negotiated with the Northern Land Council.

The Company's tenements have areas of known iron occurrences and are prospective for Clinton style oolitic iron mineralisation. Geological mapping by the NTGS has identified outcrop and sub-crop of iron-bearing formations on the Company's tenements that lie within the South Nicholson Group.

NTGS mapping confirmed that one of these formations is equivalent to the host unit for the Constance Range iron ore deposits that lie just over the border in Queensland. The style of mineralisation has been described as Clinton type oolitic ironstones.

Iron ore exploration was conducted in the Constance Range area in Queensland in the early 1960s. Results for this exploration are based upon historical data that was prepared before the introduction of the JORC Code and as such are not a resource. However, 250 million tonnes of iron mineralisation at a grade of 52% iron was reported by BHP from this period from three main occurrences - Deposits A, I and P (reported in Queensland Government Mining Journal, Spring 2008). Beneficiation techniques are available which can upgrade this style of iron mineralisation.

Since the discontinuation of the Constance Range iron ore project in the early 1960s, the iron ore industry economics have changed considerably. The stratiform oolitic ironstones for which POZ's Nicholson Basin tenements are prospective are excellent iron ore exploration targets.

The Company's tenements in the South Nicholson Basin are under explored for iron ore and have considerable potential for Constance Range type iron ore discoveries.

4.0 Flora and Fauna Survey – Wet Season

A wet season flora and fauna field survey at Highland Plains is currently underway. This will compliment the 2009 flora and fauna field survey conducted at the end of the dry season in 2009. Both of these important surveys will form an integral part of the environmental assessment for mining at Highland Plains.

5.0 Company Marketing

Phosphate Australia attended the Phosphates 2010 conference in Brussels late in March. POZ was promoted at that conference and through other promotional activity, the company has attracted considerable interest from industry participants in the last 3 months.

Global rock phosphate production was down approximately 10 million tonnes in 2009 to 160 million tonnes due to the impact of global credit difficulties. Consumption appears to be recovering in 2010 with demand growth returning to trend at around 3.2% compound annual growth rate.

Importantly, traded rock phosphate concentrate grades continue to fall with the average now slightly under 30%. This provides further support for the Company's strategy of targeting a high grade product with low levels of deleterious elements.

The Company continues to brief interested parties on the progress of the project and on the specifications of the rock phosphate product which it intends to market.

6.0 Scoping Study

The Company is working towards a scoping study that will feed into a feasibility study for the Highland Plains project. The scoping study aims to detail all aspects of the phosphate rock project at Highland Plains to ascertain the viability both technically and economically to proceed to mining. Aspects of this study and a summary to date include:

1) Phosphate Resource Estimate

The final report for the resource estimation from the 2009 drilling has been completed. The JORC inferred resource currently stands at:

Western Mine Target Zone: 14 Million Tonnes @ 20% P₂O₅
as a subset of the Global Resource: 56 Million Tonnes @ 16% P₂O₅

A drilling program designed to upgrade the resource to Indicated status and to complete drilling out the whole of the Highland Plains target area is currently being planned.

2) Metallurgical Beneficiation Studies

A preliminary flowsheet for the beneficiation process is now available. Testwork to date has indicated the coarse material can be beneficiated into a premium product. Testwork is continuing on the fine material to improve recoveries and optimisation testwork is also proceeding on the coarse product. The flowsheet will be adjusted as testwork refines the process.

3) Process Engineering

Planning is underway to procure a process engineering study that will look at the scoping economics of the metallurgical process.

4) Transport Options – Slurry Pipeline

Initial civil and construction engineering studies for Transport Options have been analysed. A 2 to 3 million tonnes per annum slurry pipeline has emerged as a transportation option for the rock phosphate product to a new barging facility on the Gulf of Carpentaria.

5) Environmental Assessment

A dry season environmental field study was carried out late in 2009 to assess the flora and fauna at site that could be potentially impacted by mining. The early assessment is that the project area is unlikely to provide a critical habitat for any species of conservation significance. The end of wet season survey is currently underway

6) Hydrogeological Studies

A hydrogeological study was carried out late in 2009 and detailed in the ASX release of 7 December, 2009. Pump testing of a new bore at approximately 15 litres/second from shallow depths indicated potential yields of at least 25 litres/second with the maximum rate not determined due to capacity limitations of the pumping equipment. Further studies are planned this year to support a slurry pipeline application.

7.0 Summary and Looking Ahead

This quarter has brought positive metallurgical beneficiation study results for the processing of phosphate rock from Highland Plains. The results to date are encouraging and work will continue on improvements and optimisation of the product. The improvement of the fine fraction grades and recoveries is the current focus.

The development of the concept flowsheet for the metallurgical process of Highland Plains phosphate will underpin a process engineering study to give an indication of the costs and economics of the processing side of the project.

The wet season environmental field survey and iron ore sampling trip on tenement EL25068 is currently underway. Planning for a regional drilling program of the phosphate and iron ore targets has commenced and will be conducted when permit clearances have been granted and rock chip data has been assessed.

The Directors of POZ are pleased with the results from another busy quarter. The Highland Plains phosphate project continues to progress well and interest in this project from other industry participants is encouraging.

POZ is currently working towards the grant of additional exploration tenure to the north of Highland Plains and is in negotiations with the Northern Land Council to that effect.

At the end of the March quarter the Company had \$6.5 million cash on hand.

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

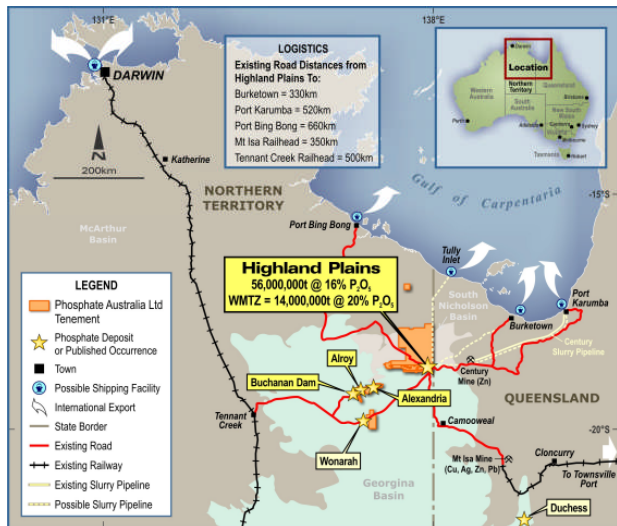
ASX Code: **POZ**

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% P₂O₅. 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% P₂O₅ 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% P₂O₅ 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 27 April 2010

Ordinary Shares on Issue:	108.9 million
Escrowed Shares:	42.0 million
Top 20 Shareholders:	67.3 million (62%)
Unquoted Options on Issue:	24.6 million
Share Price:	A\$0.18
Undiluted Market Cap:	A\$19.6 million
Number of Shareholders:	1139
Cash Balance:	\$6.5 million

Board of Directors

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

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