ASX RELEASE
9 June 2010
ASX Code: POZ

Assays confirm significant iron mineralisation within a 1,400km^2 iron project area in Northern Territory

Assay highlights:

- **New discoveries of multiple discrete areas of iron mineralisation extending more than 60 km and within a 1,400 km^2 prospective area, 100% owned by POZ.**
- **Iron grades up to 51.6% Fe with 0.078% P (phosphorus) content.**
- **Iron mineralisation is of the oolitic iron ore style, analogous to the nearby Constance Range iron ore province.**
- **Iron sampling conducted on the same granted tenement as the Company's advanced Highland Plains phosphate project.**

1.0 Nicholson Iron Project (Northern Territory) - Introduction

New assay results have confirmed a prospective and potentially large iron ore project with iron rich outcrops intermittently occurring over a distance of 60 kilometres at Phosphate Australia Limited's ("POZ") wholly-owned Nicholson Iron Project in the Northern Territory.

The results are from a recent heli-borne sampling program over the Nicholson Iron Project on tenement EL 25068, which is 230 km from the Gulf of Carpentaria and also contains the Company's advanced Highland Plains Rock Phosphate Project.

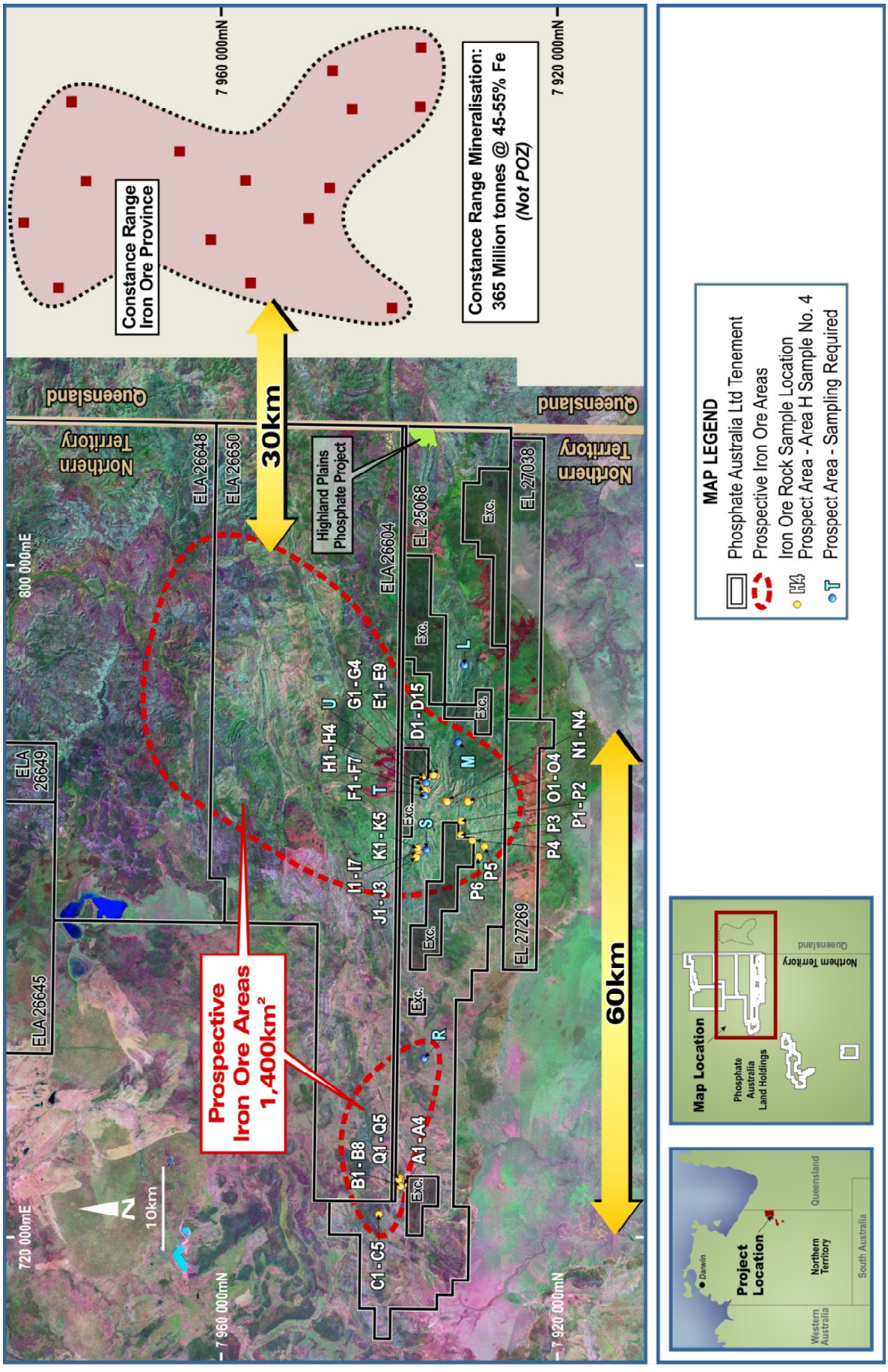
The best iron results are shown in Table 1. Grades are encouraging, with 21 prospective areas (labelled A to U) defined from the helicopter and 15 areas directly sampled and mapped.

Table 1: Iron Ore hand specimen samples - best results

Area & Sample No	Fe %	SiO2 %	Al2O3 %	P %	LOI %
K-02	51.6	11.8	3.2	0.078	10.5
A-01	43.3	24.5	5.3	0.020	6.8
Q-02	43.5	22.7	6.5	0.049	7.6
D-02	52.3	9.1	3.6	0.267	11.7
I-01	48.4	15.2	5.0	0.194	9.9
N-04	47.0	17.1	5.9	0.196	8.2
N-02	47.3	15.3	4.8	0.353	10.4
P-04	41.1	29.4	3.4	0.372	7.3
D-08	47.4	20.5	5.7	0.375	4.6

Assay by XRF

Figure 1: Nicholson Iron Project Area and Sample Location



These sample results demonstrate the existence of multiple oolitic or Clinton-style iron mineralisation occurrences of in parts of the Company's extensive tenement holdings. Using these results, underlying bedrock geology, historical work and existing geophysics (Figure 7 of POZ prospectus), a large prospective area of 1,400 km^2 has now been estimated within which these discrete oolitic style iron bodies may occur (Figure 1).

At this early stage it is not possible to estimate a target size for the overall iron mineralisation, or for each occurrence. However the multiple occurrences of iron rich outcrop sampled over a wide area, and the extensive company tenement holdings (currently ungranted) which are also prospective for this style of mineralisation, suggest the potential for a large project.

Importantly for prospectivity, the Company's iron Project is only 30 km from the Constance Range Iron Province in Queensland. The geology, age of rocks and style of mineralisation at the Nicholson Project are all analogous to Constance Range.

The iron grades (Appendix A) are encouraging for this style of iron mineralisation. Phosphorus is high in places but appears to some degree to be dependent upon the prospect area.

It is anticipated that beneficiation would be required to enhance the iron values and diminish silica and phosphorus. The Company is currently examining testing options.

2.0 Sampling Methodology

The sampling methodology was to cover the large area of granted lease EL25068 by low flying helicopter. Technical Director, Ms Lisa Wells, visually sighted prospective areas from the air and landed wherever possible. Samples of outcrop were taken, and mapping and GPS information recorded.

Each sampling site or prospective site was designated a letter prefix and a sample number suffix (e.g. B-03 is prospect area B, third sample). The method was by no means exhaustive and it is likely other areas of iron mineralisation will continue to be found on the area with detailed ground mapping and follow-up.

Generally, the most prospective material was sampled, but on occasion, some stratigraphic (reference) samples were taken. A total of 89 samples were taken and assayed from 15 different prospective areas. In total, 21 prospective areas were defined (labelled A to U) of which 15 were directly sampled on the ground. The remaining six areas were defined by aerial flyover for sampling during follow-up work. All samples assayed are included in Appendix A of this report.

It must be stressed that in the light of these initial results, the tenements to the north, especially ELAs 26648 and 26650, can now be considered highly prospective for this style of oolitic iron mineralisation. These tenements are on Aboriginal Freehold land and the Company is currently negotiating the grant and access to these areas.

3.0 Nicholson Iron Project – Geological Models and Comparisons

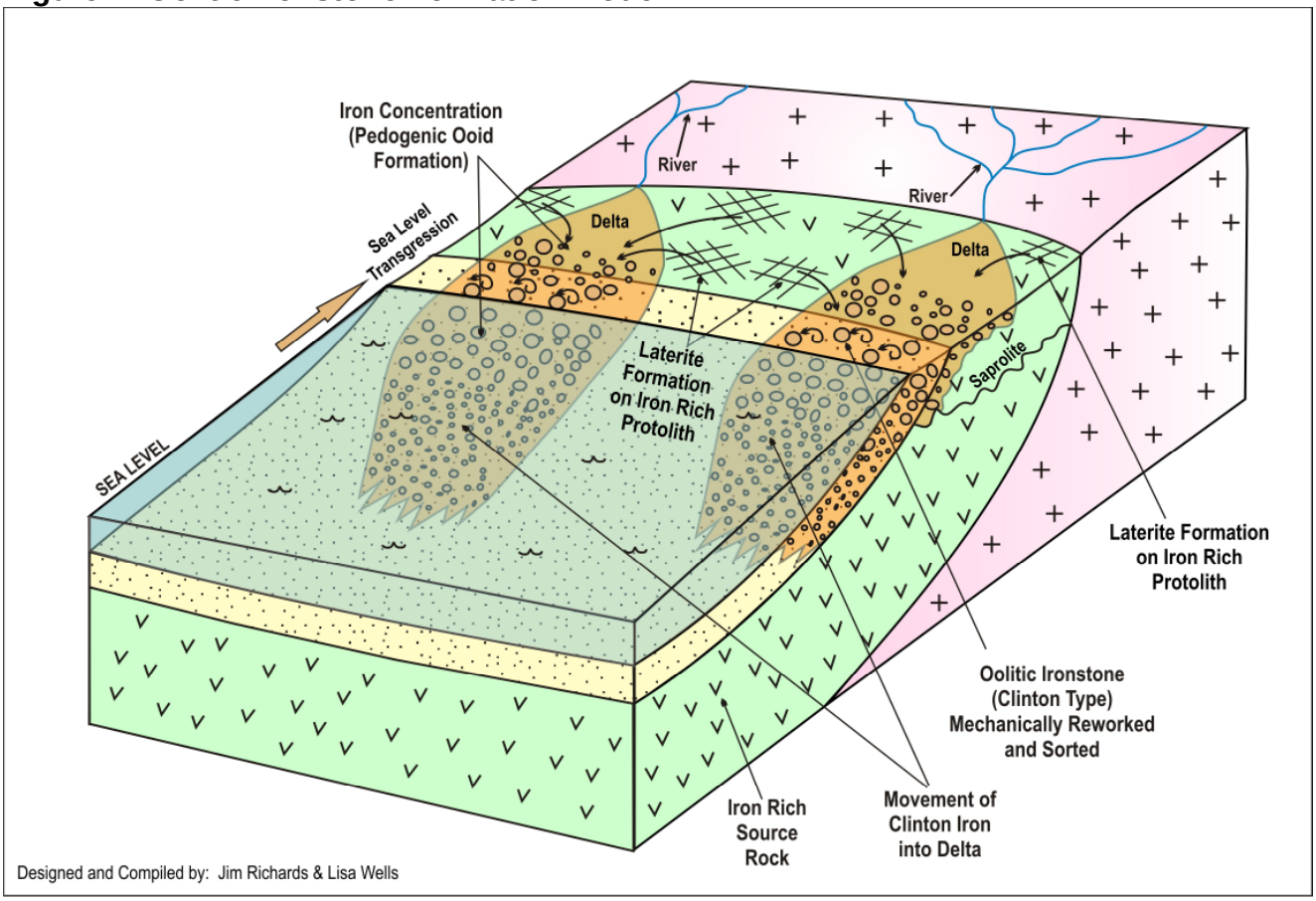
Clinton style iron mineralisation is typical of the Constance Range Iron province of northwest Queensland. These deposits were explored in the 1960s by BHP and resulted in substantial historical iron ore mineralisation being defined. This has been previously reported as 365 million tonnes at 45-55% Fe (Harms 1965). In the late 1960s the project was mothballed and focus was shifted to the Pilbara Iron Ore region of Western Australia. More recently, the increased demand for iron has led to a renewed interest in this style of iron deposit in the Northern Territory.

The geological model is based on sea level rises in humid, quiet conditions. Within the iron-rich sandstones, the grains become reworked with gentle wave activity, thus accumulating iron around a sand or pebble nucleus. This builds up concretionary layers of iron, which form the ironstones (or oolites). Over time the iron becomes enriched. In some cases the original sandstone textures are present however larger oolitic textures are common. Figure 2 shows a model for oolitic ironstone formation.

Tenement EL25068 contains iron-hosting units within the South Nicholson Basin which are analogous to the iron occurrences of the adjoining Northwest Queensland province, home to the Constance Range Iron Deposits.

There is some reference to the ironstone potential of the South Nicholson Basin by the Bureau of Mineral Resources in the 1950s, which was also recently verified during mapping by the Northern Territory Geological Survey ("NTGS"). With the recent heli-borne survey, Phosphate Australia can now be considered to have initiated the most work to date for iron in what must be considered a highly under-explored area.

Figure 2: Oolitic Ironstone Formation Model.



4.0 Conclusion

The Board of Phosphate Australia is encouraged by these results as they confirm the potential for what could be a large iron ore project. Already, there are a considerable number of iron occurrences defined in this initial sampling program from only a small portion of the total potential mineralised area.

Although exploration is still at a very early stage, this iron project could complement the nearby Highland Plains phosphate project in that large-scale logistics solutions for one project could may assist the other. For example, future investigations could include the construction of a common slurry pipeline.

Given encouragement from these results, a full data review is currently being conducted which includes more detailed remote sensing options, prospectivity analysis, beneficiation options and fieldwork follow up with a view to future drilling.

Applications have been submitted to the Aboriginal Areas Protection Authority for clearances to facilitate drilling activities.

Sampling results from the Nicholson Iron Project provide the opportunity to add further prospectivity and value to the Company's tenement holdings and have the potential to complement the Highland Plains phosphate project which remains the main focus of the Company.

JIM RICHARDS
CHAIRMAN

ANDREW JAMES
MANAGING DIRECTOR

References: Harms, J.E. 1965, Iron ore deposits of Constance Range in Geology of Australian Ore Deposits, pp264-269, AusIMM.

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.

Appendix A: Nicholson Iron Sample Assay Results

Area & Sample No	Fe %	SiO2 %	Al2O3 %	P %	LOI %	Easting	Northing
A-01	43.3	24.5	5.3	0.020	6.8	725818	7938869
A-02	20.7	51.0	12.2	0.021	5.2	725831	7938866
A-03	33.8	39.5	6.2	0.028	4.4	725840	7938860
A-04	34.8	38.8	5.1	0.037	4.5	725844	7938855
B-01	6.3	83.4	4.7	0.014	1.9	725632	7939184
B-02	14.3	75.7	2.0	0.011	1.0	725639	7939177
B-03	16.2	71.1	3.6	0.037	1.6	725642	7939171
B-04	5.3	90.2	1.2	0.010	0.5	725652	7939167
B-05	6.8	82.7	4.8	0.021	1.9	725659	7939159
B-06	15.6	76.1	0.7	0.020	0.6	725673	7939154
B-07	32.1	52.5	0.6	0.020	0.7	725689	7939148
B-08	13.1	77.6	1.0	0.012	2.3	725703	7939138
C-01	32.6	22.7	16.2	0.018	10.0	722334	7941647
C-02	26.0	29.8	20.5	0.013	10.6	722328	7941654
C-03	30.1	25.9	19.1	0.036	10.6	722327	7941665
C-04	30.4	31.5	15.7	0.026	7.8	722324	7941688
C-05	30.3	28.2	17.7	0.024	8.8	722297	7941771
D-01	46.6	19.8	2.9	0.698	8.3	774574	7934884
D-02	52.3	9.1	3.6	0.267	11.7	774570	7934897
D-03	29.8	45.5	4.0	0.437	6.6	774571	7934905
D-04	24.5	52.7	5.2	0.316	5.9	774571	7934916
D-05	22.2	55.2	6.1	0.296	5.6	774565	7934929
D-06	35.1	35.1	5.1	0.470	8.1	774567	7934939
D-07	42.7	22.3	5.1	0.629	9.8	774559	7934950
D-08	47.4	20.5	5.7	0.375	4.6	774553	7934957
D-09	43.6	22.3	4.0	0.639	9.4	774555	7934971
D-10	38.0	32.1	3.2	0.557	8.6	774561	7934984
D-11	19.2	62.3	4.6	0.120	4.6	774565	7934992
D-12	32.1	41.1	4.4	0.325	7.6	774561	7934992
D-13	21.9	56.6	5.2	0.143	6.0	774578	7935008
D-14	32.7	43.2	2.6	0.394	5.7	774624	7935044
D-15	4.6	90.7	1.1	0.046	0.9	774631	7935065
E-01	14.2	72.1	2.5	0.279	3.6	774600	7935275
E-02	21.9	61.0	1.7	0.388	4.2	774597	7935273
E-03	18.6	65.7	2.2	0.464	4.2	774592	7935265
E-04	35.9	35.5	2.8	0.706	8.1	774597	7935271
E-05	40.5	27.6	3.3	0.748	8.6	774580	7935282
E-06	23.5	55.6	3.7	0.425	5.2	774571	7935293
E-07	36.5	36.1	1.9	0.510	7.6	774646	7935308
E-08	42.7	27.2	2.8	0.521	6.9	774649	7935290
E-09	40.1	31.2	2.3	0.508	7.2	774656	7935288
F-01	10.7	79.4	2.8	0.096	1.4	772833	7936091

Area & Sample No	Fe %	SiO2 %	Al2O3 %	P %	LOI %	Easting	Northing
F-02	20.8	64.2	3.2	0.084	2.0	772827	7936093
F-03	41.3	30.7	1.1	0.752	6.7	772814	7936049
F-04	40.2	31.9	3.2	0.403	5.8	772786	7936042
F-06	23.3	58.7	1.8	0.381	4.8	772741	7936270
F-07	22.7	59.6	1.9	0.373	4.4	772741	7936268
G-01	14.9	73.3	1.0	0.224	3.0	774299	7936527
G-02	11.8	77.9	1.4	0.221	2.5	774297	7936506
G-03	37.5	32.9	2.9	0.414	8.1	774182	7936505
G-04	32.3	43.2	1.7	0.387	7.1	774166	7936508
H-01	35.2	37.6	3.1	0.534	7.5	773680	7936338
H-02	35.0	39.4	3.1	0.613	5.7	773675	7936384
H-03	24.6	56.6	2.3	0.330	4.2	773598	7936391
H-04	27.8	49.2	3.5	0.455	5.8	773540	7936398
I-01	48.4	15.2	5.0	0.194	9.9	765690	7937081
I-02	30.4	45.5	3.5	0.211	6.6	765680	7937084
I-03	25.0	56.1	2.3	0.262	4.7	765668	7937081
I-04	35.9	38.1	2.4	0.094	7.6	765648	7937082
I-05	22.9	59.5	1.3	0.355	4.9	765635	7937084
I-06	24.4	57.4	1.4	0.429	5.1	765616	7937086
I-07	36.3	33.7	5.8	0.018	7.8	765592	7937093
J-01	29.5	52.4	2.0	0.295	2.1	764756	7937430
J-02	7.1	37.3	3.2	0.131	7.7	764744	7937432
J-03	23.5	59.6	1.9	0.081	4.4	764821	7937286
K-01	28.6	49.7	1.8	0.346	6.0	765945	7937017
K-02	51.6	11.8	3.2	0.078	10.5	765944	7937098
K-03	27.0	46.3	4.2	0.369	6.7	765908	7937132
K-04	22.3	62.2	0.8	0.207	4.0	765859	7937119
K-05	24.8	56.0	1.2	0.413	5.2	765819	7937088
L	Prospective outcrop from the air - not sampled						
M	Prospective outcrop from the air - not sampled						
N-01	35.0	27.5	10.1	0.394	10.0	771505	7933698
N-02	47.3	15.3	4.8	0.353	10.4	771515	7933681
N-03	48.1	12.8	5.7	0.331	11.3	771521	7933665
N-04	47.0	17.1	5.9	0.196	8.2	771470	7933637
O-01	16.1	65.5	6.4	0.079	3.9	771508	7931084
O-02	7.5	87.2	0.8	0.055	0.9	771533	7931136
O-03	4.5	79.0	5.9	1.700	3.4	771517	7930920
O-04	4.9	85.7	3.6	0.603	1.4	771471	7931138
P-01	31.3	41.3	4.6	0.552	7.3	769093	7931918
P-02	31.1	41.1	5.0	0.394	7.6	769174	7931927
P-03	38.1	27.6	6.3	0.494	7.8	767507	7931984
P-04	41.1	29.4	3.4	0.372	7.3	766811	7930646
P-05	12.8	77.0	1.9	0.072	1.6	766110	7929189

Area & Sample No	Fe %	SiO2 %	Al2O3 %	P %	LOI %	Easting	Northing
P-06	33.1	36.2	5.7	0.689	8.6	764886	7929866
Q-01	12.5	63.3	12.0	0.032	4.3	726502	7939171
Q-02	43.5	22.7	6.5	0.049	7.6	726524	7939200
Q-03	33.9	37.3	7.0	0.040	5.3	726565	7939227
Q-04	8.4	84.7	1.5	0.024	1.1	726638	7939267
Q-05	12.7	80.1	1.1	0.020	0.6	726445	7939391
R	Prospective outcrop from the air - not sampled					740869	7936401
S	Prospective outcrop from the air - not sampled					765706	7936124
T	Prospective outcrop from the air - not sampled					772166	7936324
U	Prospective outcrop from the air - not sampled					773534	7936378

Assay by XRF

Phosphate Australia at a Glance

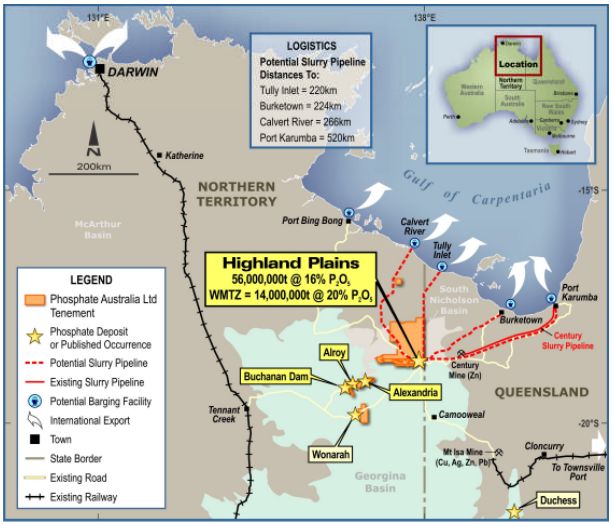
ASX Code: **POZ**

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% 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 8 June 2010

Ordinary Shares on Issue:	108.9 million
Escrowed Shares:	42.0 million
Top 20 Shareholders:	67.6 million (62%)
Unquoted Options on Issue:	24.6 million
Share Price:	A$0.12
Undiluted Market Cap:	A$13 million
Number of Shareholders:	1,120
Cash Balance:	$6.3 million

Board of Directors

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

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