

Rock chip assay results up to 63.7% Fe from second round of mapping on iron project area in Northern Territory

Highlights:

- Iron grades up to 63.7% Fe with low P (phosphorus) content at 0.037%
- Latest results being used in remote sensing studies to prioritise target areas on the 1400 km² of iron prospective geology controlled by the Company

1.0 Nicholson Iron Project (Northern Territory) - Introduction

Assay results for the second round of mapping on the Company's 100% owned Nicholson Iron Project in the NT have now been received. Sampling was conducted on the EL25068 tenement which contains the Company's Highland Plains phosphate project.

The discovery of outcropping, high-grade (>60% Fe) iron mineralisation, in only the second small mapping program, highlights the potential of the project area which contains 1400 km² of prospective geology. The best rock chips results from this second round of mapping and sampling are highlighted below in Table 1.

A complete list of assay results for the second sampling program can be found in Appendix "A".

Sample #	Fe %	SiO ₂ %	Al ₂ O ₃ %	Р%	LOI %
0118	63.7	5.1	1.79	0.037	1.15
0169	61.2	7.3	3.17	0.018	1.68
0170	60.6	6.7	3.91	0.019	2.20
0173	58.5	7.5	4.98	0.032	3.08
0164	52.6	20.0	2.76	0.012	1.76
0175	49.8	18.6	6.50	0.028	2.63
0190	49.5	25.6	2.01	0.035	1.07
0168	48.6	16.6	7.70	0.015	5.81

Table 1: Rock Chips: Second iron sampling program best results

Assay by Amdel Laboratories XRF





Figure 1: Nicholson Iron Project Area: Target Areas for Second Sampling Program - EL25068

2.0 **Program Aim and Results**

The aim of this second program was to methodically map and rock-chip some of the more accessible areas highlighted by the previous helicopter-supported sampling program. This low cost programme was carried out by Technical Director, Ms Lisa Wells, who mapped and sampled outcrop and recorded GPS information.

In order to better understand the geology and control on any potential mineralisation, all rock units were sampled – not just those that were visually prospective for iron. Complete assay results for the sampling on EL25068 can be found in Appendix "A". Sample locations at the "Sticky Fly" and "Fearless Fly" target areas are shown on Figure 2.

The high iron grades and low levels of phosphorus in some of the samples in the second sampling program is highly encouraging. The highest grade iron assay from the first round of helicopter-supported mapping and sampling program was 51.6% Fe.

These sample results further demonstrate the existence of multiple oolitic or Clinton-style iron mineralisation occurrences in parts of the Company's extensive tenement holdings. Using these results, underlying bedrock geology, historical work and existing geophysics (Figure 7 of POZ July 2008 prospectus), a large prospective area of 1,400 km² has been estimated within which these discrete oolitic style iron bodies may occur.

The Company's tenement applications to the north, especially ELAs 26648 and 26650, are considered highly prospective for this style of oolitic iron mineralisation because remote sensing indicates a continuation of the iron bearing structures into these tenements. These tenements are on Aboriginal Freehold land and the Company is currently negotiating the grant and access to these areas.

At this 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 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. (see POZ ASX Release dated 9th June 2010).

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").



Figure 2: Nicholson Iron Project Area: Rock chip sample numbers

3.0 Conclusion

The dramatic improvement in the grade of the best results for this second iron sampling program compared to the first program is highly encouraging, given that it is still very early in the Company's assessment of the iron ore potential of the tenements.

The potential area of exploration is large and the geological team is working to methodically assess the most prospective locations. Further field work is planned to generate drill targets.

Whilst the Board's main focus remains advancing the Highland Plains phosphate project, the Nicholson iron project does provide a complementary and worthwhile further opportunity for the Company.

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 Sampling Program Assay Results – EL25068

Sample #	Fe %	SiO ₂ %	Al ₂ O ₃ %	Р%	LOI %	Easting	Northing
0102	30.10	47.60	4.82	0.064	3.38	7.938.884	725.826
0103	23.30	56.60	5.10	0.041	3.62	7.938.841	725.795
0104	24.90	50.80	9.10	0.031	3.83	7.938.813	725.767
0105	26.60	42.10	13.00	0.024	5.68	7,938,894	725,915
0106	21.30	55.80	8.70	0.042	3.54	7,938,920	725,966
0107	19.60	54.40	11.30	0.062	4.50	7,938,925	726,021
0108	23.70	54.60	6.90	0.033	3.25	7,938,927	726,048
0109	22.10	57.70	6.80	0.025	2.94	7,939,119	726,454
0110	27.70	50.20	3.65	0.026	5.94	7,939,256	726,601
0111	8.70	84.20	1.16	0.028	1.88	7,939,436	726,768
0112	37.30	36.40	3.54	0.020	5.16	7,939,438	726,767
0113	4.15	91.60	1.49	0.010	0.63	7,939,469	726,686
0114	22.60	52.00	10.40	0.028	3.95	7,939,439	726,556
0115	29.80	41.50	10.40	0.043	4.23	7,939,366	726,314
0116	2.78	92.00	2.71	0.011	1.02	7,939,398	726,295
0117	29.10	41.90	9.90	0.032	5.50	7,939,596	726,422
0118	63.70	5.10	1.79	0.037	1.15	7,939,674	726,536
0119	31.20	55.00	0.26	0.016	0.22	7,939,180	725,809
0120	29.60	56.80	0.39	0.018	0.52	7,939,173	725,797
0121	29.40	54.90	1.36	0.038	1.00	7,939,304	725,832
0122	37.50	38.00	5.20	0.038	2.43	7,939,323	725,835
0123	35.70	40.70	5.10	0.030	2.40	7,939,341	725,835
0124	18.60	63.70	6.60	0.028	2.49	7,939,364	725,831
0125	24.40	55.50	6.40	0.026	2.47	7,939,375	725,836
0126	23.60	58.10	4.83	0.021	2.77	7,939,396	725,836
0127	12.40	70.60	7.80	0.032	2.91	7,939,412	725,835
0128	23.30	56.20	6.90	0.025	2.58	7,939,427	725,836
0129	18.30	65.10	6.00	0.013	2.21	7,939,440	725,848
0130	37.40	38.90	4.62	0.026	2.34	7,939,470	725,850
0131	32.80	49.30	2.11	0.028	1.22	7,939,508	725,843
0132	28.50	54.00	3.56	0.018	1.38	7,939,532	725,854
0133	29.00	55.40	1.84	0.021	1.03	7,939,548	725,852
0134	15.60	65.90	8.40	0.025	3.02	7,939,270	725,110
0135	15.90	47.40	21.30	0.035	7.58	7,939,257	725,089
0136	43.10	31.20	4.56	0.025	2.29	7,939,231	725,083
0137	29.70	53.30	2.46	0.022	1.38	7,939,034	724,908
0138	4.33	69.40	12.40	0.030	0.65	7,933,540	792,650
0139	13.90	77.40	1.25	0.106	0.50	7,933,425	792,553
0140	11.00	82.70	0.96	0.024	0.60	7,933,454	791,563
0141	24.70	61.70	1.59	0.046	0.98	7,933,253	791,644
0142	24.60	62.10	1.49	0.092	0.66	7,933,227	791,658
0143	2.61	92.20	2.57	0.034	1.02	7,933,311	790,873

Sample #	Fe %	SiO ₂ %	Al ₂ O ₃ %	Р%	LOI %	Easting	Northing
0144	13.40	76.50	1.92	0.399	1.02	7,933,330	790,873
0145	0.79	98.80	0.14	0.010	0.03	7,933,263	790,863
0146	14.50	77.20	0.91	0.064	0.52	7,933,242	790,865
0147	2.76	94.80	0.58	0.182	0.20	7,933,160	790,871
0148	25.20	56.10	4.56	0.027	2.40	7,938,764	725,439
0149	34.00	40.20	6.80	0.050	3.00	7,938,766	725,465
0150	30.30	46.70	5.40	0.033	2.99	7,938,757	725,474
0151	16.70	70.60	3.53	0.026	1.50	7,939,444	726,177
0152	28.40	54.20	3.39	0.054	1.41	7,939,461	726,170
0153	34.80	39.70	6.80	0.021	2.96	7,939,484	726,172
0154	35.30	23.70	18.00	0.044	6.32	7,939,772	726,200
0155	8.90	72.30	10.20	0.035	3.83	7,939,620	726,204
0156	15.00	73.10	3.40	0.014	1.44	7,939,570	726,207
0157	26.50	58.00	2.54	0.025	1.11	7,939,534	726,198
0158	19.80	63.70	5.00	0.019	2.57	7,939,522	726,194
0159	9.90	80.60	3.20	0.019	1.42	7,939,470	726,200
0160	38.20	39.00	3.94	0.015	2.00	7,939,445	726,200
0161	33.40	44.00	5.20	0.030	2.35	7,939,420	726,203
0162	30.40	42.40	9.40	0.036	3.79	7,939,364	726,267
0163	29.10	51.80	4.25	0.010	1.76	7,939,385	726,401
0164	52.60	20.00	2.76	0.012	1.76	7,939,437	726,399
0165	1.38	91.90	4.18	0.002	1.48	7,939,460	726,400
0166	2.24	89.40	5.20	0.003	1.89	7,939,502	726,395
0167	3.28	86.90	5.30	0.010	2.17	7,939,586	726,388
0168	48.60	16.60	7.70	0.015	5.81	7,939,610	726,400
0169	61.20	7.30	3.17	0.018	1.68	7,939,645	726,416
0170	60.60	6.70	3.91	0.019	2.20	7,939,665	726,420
0171	25.10	28.70	24.20	0.019	11.16	7,939,698	726,400
0172	29.20	43.60	7.30	0.053	6.79	7,939,740	726,400
0173	58.50	7.50	4.98	0.032	3.08	7,939,765	726,400
0174	40.60	26.80	9.30	0.031	5.11	7,939,755	726,600
0175	49.80	18.60	6.50	0.028	2.63	7,939,704	726,610
0176	38.60	27.00	10.30	0.028	6.78	7,939,675	726,606
0177	6.10	85.30	3.95	0.007	1.64	7,939,637	726,609
0178	2.76	90.10	4.00	0.014	1.56	7,939,550	726,600
0179	32.60	44.80	5.80	0.017	2.37	7,939,495	726,607
0180	13.90	63.40	11.50	0.021	4.47	7,939,465	726,600
0181	12.50	78.60	2.39	0.012	0.96	7,939,440	726,600
0182	7.50	88.50	0.56	0.006	0.60	7,939,500	726,800
0183	39.20	34.50	5.70	0.029	2.71	7,939,552	726,790
0184	13.90	71.90	5.50	0.018	2.31	7,939,585	726,800
0185	3.02	87.70	5.30	0.013	2.04	7,939,625	726,800

Sample #	Fe %	SiO ₂ %	Al ₂ O ₃ %	Р%	LOI %	Easting	Northing
0186	6.20	82.30	5.70	0.019	2.18	7,939,750	726,796
0187	17.10	65.10	6.70	0.037	2.78	7,939,750	726,800
0188	14.60	68.70	6.60	0.023	2.58	7,939,771	726,800
0189	1.75	90.60	4.34	0.010	1.56	7,939,743	727,002
0190	49.50	25.60	2.01	0.035	1.07	7,939,682	727,005
0191	42.10	32.90	4.08	0.013	2.00	7,939,640	726,999
0192	30.20	43.60	6.80	0.023	5.60	7,939,643	727,000
0193	24.80	56.90	1.82	0.010	5.86	7,939,484	726,995
0194	32.70	35.30	10.20	0.044	6.88	7,939,438	727,000
0195	22.10	51.20	10.70	0.045	4.73	7,939,435	727,000
0196	45.40	30.00	2.92	0.017	1.76	7,939,702	727,087
0197	42.10	31.10	5.60	0.016	2.59	7,939,721	727,106
0198	37.20	40.10	4.59	0.012	2.13	7,939,730	727,125
0199	35.00	43.80	3.62	0.010	1.90	7,939,747	727,144
0200	36.10	40.30	5.00	0.016	2.45	7,939,767	727,166

Assay by Amdel Laboratories 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 10 August 2010

Ordinary Shares on Issue:	108.9 million
Top 20 Shareholders:	68.0 million (62%)
Unquoted Options on Issue:	25.5 million
Share Price:	A\$0.15
Undiluted Market Cap:	A\$16 million
Number of Shareholders:	1,096

Board of Directors

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

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