

Exploration Update – New Phosphate Tenements

HIGHLIGHTS

Highland Plains Phosphate Project

GIB 100%

- Two new tenements have been pegged at the NT Phosphate Project. This extends the Phosphate Project area held by GIB by a further 818.9km². These tenements are proximal to the Company's existing Highland Plains Phosphate Prospect and target the same embayment-style of phosphate mineralisation to that found at Highland Plains

Edjudina Gold Project

GIB 100%

- Metallurgical testing ongoing; the results from this testwork will be reported once all the tests have been completed and have been assessed by the Company's metallurgical consultants
- Phase 8 drilling assays still pending. The Company will report these results in a timely manner as soon as they become available and have been assessed.

Lithium Generative Project

GIB 100%

GIB has pegged a number of new exploration and prospecting licenses totalling 1,387km² in area, which the Company considers to be prospective for lithium. These are large areas and are currently being assessed for reconnaissance mapping and sampling work which will follow.

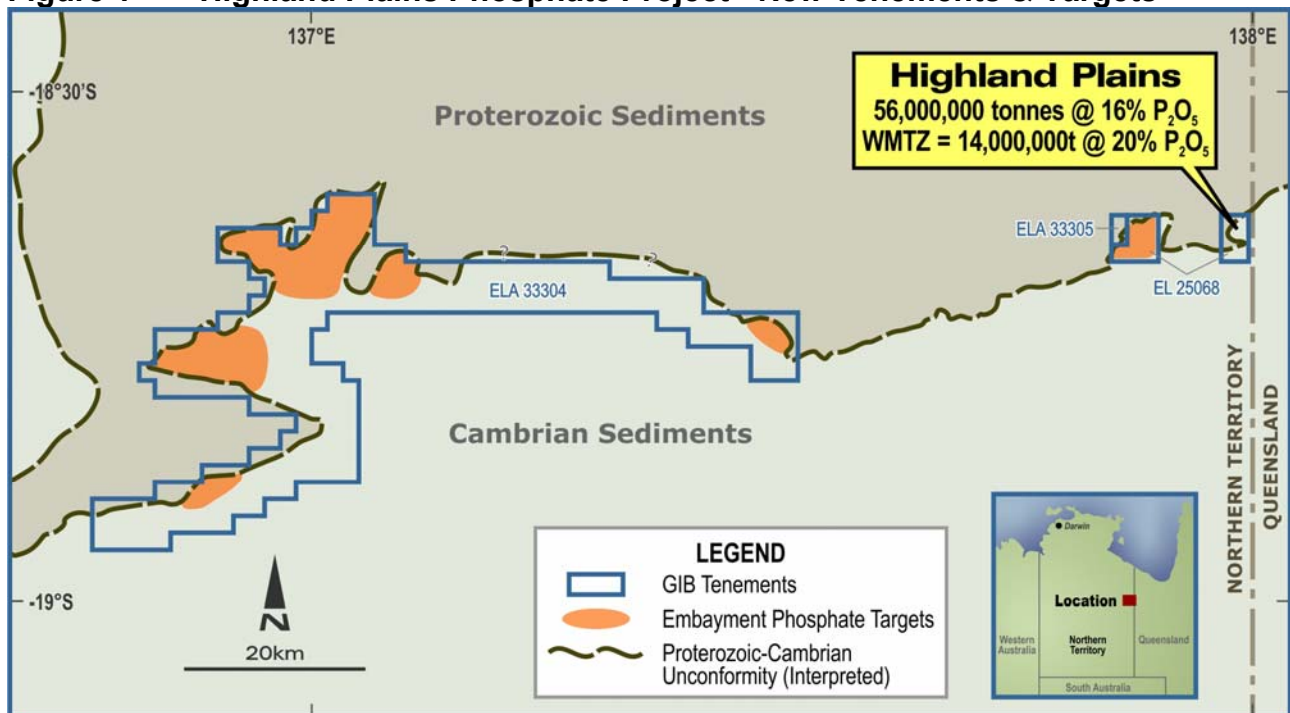
1.0 Highland Plains Phosphate Project

GIB 100%

1.1 New Tenements Acquired

Gibb River Diamonds Limited ('GIB') has pegged a two new tenements at the Company's NT Phosphate Project (GIB 100%), EL 33304 and EL33305 (Figure 1). These tenements are proximal to the Company's existing Highland Plains Phosphate Project and target the same embayment style of phosphate mineralisation to that found at Highland Plains. This extends the Phosphate Project area held by GIB by a further 818.9km²

These new tenements are adjacent to and complement the existing Highland Plains tenement EL25068. Highland Plains has a JORC (2004) Inferred Resource of 56 million tonnes at 16% P₂O₅, at a 10% P₂O₅ cut-off (POZ ASX release dated 31 March 2009)¹.

Figure 1 Highland Plains Phosphate Project - New Tenements & Targets


1.2 Further Work

The Company is seeking a strategic investment partner to assist GIB to progress the Highland Plains Phosphate Project. The Company has recently received ongoing enquiries from two interested and credible parties with regards to a strategic partnership. Non-disclosure agreements have been signed.

Exploration of the new tenements for new phosphate deposits will consist of reconnaissance sampling and follow-up drilling, this work is currently contingent upon funding from a strategic partner.

Further work to progress the Project through feasibility studies and into production would include:

- Additional drilling and assay work to upgrade the Highland Plains deposit to a JORC (2012) Indicated and Inferred Resource
- Metallurgical Bench Scale testwork to assess beneficiation effects on lower head grade material and to determine the engineering properties of the material
- Metallurgical pilot plant testing of bulk samples for phosphate grade and purity enhancement
- Geological modelling to define and constrain areas containing elevated impurities
- Further logistical studies and modelling
- Mine planning and optimisation
- Budgeting, planning and timelines to production
- Publishing a Scoping Study leading into a full Bankable Feasibility Study (if required)
- Exploration of the new tenements for new phosphate deposits, reconnaissance sampling and follow-up drilling

1.3 Highland Plains Metallurgy

GIB has conducted and previously reported a number of beneficiation (upgrading) studies of the rock phosphate mineralisation at Highland Plains. The best of these flotation tests to date gives a beneficiated grade of 32.3% P₂O₅ (upgraded from 23.4% P₂O₅) at 76% recovery⁵:

By way of reference, in the international market, rock phosphate is commonly traded with grades of between 29% and 32% P₂O₅, with premium product grades above 34% P₂O₅.

Table 1: Optimised Metallurgical Result – Highland Plains Phosphate

		P ₂ O ₅ %	SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	Recovery P ₂ O ₅ %
Test 1	Input Material	23.4	30.8	4.3	4.2	
	Coarse Fraction	37.4	6.3	0.5	0.7	53.1
	Coarse and Fine Fractions	32.3	12.3	4.3	1.8	75.8

1.4 Highland Plains - Minor Elements

All phosphate deposits have varying levels of impurities. Previously reported work at Highland Plains has indicated impurity levels for a 22.9% P₂O₅ (un-beneficiated) rock as being:

C (0.20%); S (0.06%); F (1.82%); Cl (112ppm); Cd (4ppm) and U (38ppm)²

The levels of these contaminants could be considered low.

Pb: A limited number (74) of phosphate bearing sample pulps were previously assayed for further trace elements including Pb (POZ/GIB Quarterly Report to ASX dated 1 October 2012). Elevated lead values occurred in isolated areas proximal to the base of the lower phosphate beds where they directly overlie basement Proterozoic rocks; this effect is possibly related to post-mineralisation groundwater movement concentrating lead at the geological unconformity. These areas of elevated lead could potentially be mitigated through selective mining practices or beneficiation⁷.

Further drill and assay work is required to model these impurities within the overall resource.

Impurity levels for specific elements for 34.8% P₂O₅ (beneficiated product) were reported in the GIB/POZ ASX Release dated 19 March 2010.

1.5 Rock Phosphate Prices

There has been a significant re-rating in rock phosphate prices over the last twelve months. The World Bank Pink Sheet average monthly price for August 2022, quotes the rock phosphate price as US\$320.0/tonne. This is significantly up from US\$107.50/tonne from the Pink sheet April-June 2021 price. (Phosphate rock price is for 'f.o.b. North Africa'; grade is not quoted). This price change is a very encouraging and welcome development for the Highland Plains Project.

2.0 Edjudina Gold Project

GIB 100%

2.1 Neta Prospect Metallurgy

Metallurgical testing of the Neta Prospect is ongoing and the Company looks forward to reporting the results from this testwork once all the tests have been completed and have been assessed by GIB's metallurgical consultants Orway Mineral Consultants ('OMC').

2.2 Phase 8 Drilling Results Pending

The Phase 8 drilling results have not yet been received by GIB and are still pending. Delays at assay laboratories have been well documented by the industry and GIB is doing all it can to expedite these results. The Company will report these results in a timely manner as soon as they become available and have been assessed.

3.0 Lithium Generative Project

GIB 100%

GIB has pegged a number of new licenses totalling 1,387km² in area which the Company considers to be prospective for lithium. These recently pegged tenements are:

Table 2: New GIB Tenements – Prospective for Lithium

Tenement	Area km ²	Mineral District
E80/5836	657.5	East Kimberley
E04/2843	78.5	West Kimberley
E04/2844	202.8	
E80/5831	192.8	
E58/593	166.9	Mt Magnet
E58/594	51.6	
E58/595	30.3	
P58/1929	2.0	
P58/1930	2.0	
P58/1931	1.5	
P58/1932	2.0	
Total	1,387.8	

These are large areas and are currently being assessed for reconnaissance mapping and sampling work which will follow.

Jim Richards
Executive Chairman

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References:

¹Maiden JORC Phosphate Resource at Highland Plains; POZ/GIB ASX Release dated 31 March 2009

²Quarterly Report; POZ/GIB ASX Release dated 29 October 2009

³Metallurgical Update (#4); POZ/GIB ASX Release dated 19 Mar 2010

⁴Quarterly Report; POZ/GIB ASX Release dated 29 July 2010

⁵Quarterly Report; POZ/GIB ASX Release dated 29 Oct 2010

⁶Further Positive Results from Metallurgical Testing (#2); POZ/GIB ASX Release dated 21 Dec 2010

⁷Quarterly Report; POZ/GIB ASX Release dated 1 October 2012

Competent Persons Statement

The information in this report that relates to new exploration results is based on information compiled by Mr. Jim Richards who is a Member of The Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr. Richards is a Director of Gibb River Diamonds Limited. Mr. Richards has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Richards consents 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 relates to the previously reported Highland Plains Mineral Resource and previously reported Highland Plains exploration and metallurgical data is based on information compiled by Jim Richards who is a member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Jim Richards is a director of Gibb River Diamonds Limited and has 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 a competent Person as defined in the December 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Richards consents to the inclusion in this report of the Information, in the form and context in which it appears.

The Highland Plains Mineral Resource Estimates (MRE)'s were prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. The Company confirms that the form and context in which the Competent Person's findings are presented here have not been materially modified.