

# Highland Plains Phosphate Project

Location, Grade & Development Flexibility

Australian Potash & Phosphate Conference



### **Company Overview**



- 1. Gibb River Diamonds Limited (ASX: GIB) is an Australian focused multi-commodity resources company.
- 2. Phosphate Australia's 100% owned phosphate assets are:
  - The Highland Plains rock phosphate project in the Northern Territory with a JORC (2004) Inferred Resource of 56 million tonnes at 16% P<sub>2</sub>O<sub>5</sub>
  - Other phosphate projects (818.9km²) in the vicinity of Highland Plains which require exploration drilling
- 3. The Company is seeking a strategic partner to progress Highland Plains through feasibility studies and into production





## **GIB Summary**



**ASX Code: GIB** 

Total Shares on Issue	211,509,445
Market Capitalisation (undiluted at \$0.058/share)	\$12.3 M
Cash on Hand (31 Sept) Due March 2023 (Contingent on Ellendale Option) GIB hold 9 million shares in BDM	\$1.47 M \$4.0 M

Major Shareholders	Shares	% of Capital
Jim Richards	41,683,592	19.7
Other Directors	9,273,888	4.4
Total 1,442 Shareholders		

#### **Share Price History 12 Months**





Core Drilling at Highland Plains

### Board of Directors & Management





Mr. Jim Richards
BSc Hons (Geology),
Executive Chairman

28 years experience in mining and exploration



Non-Executive
Director & Company
Secretary
Grant Mooney



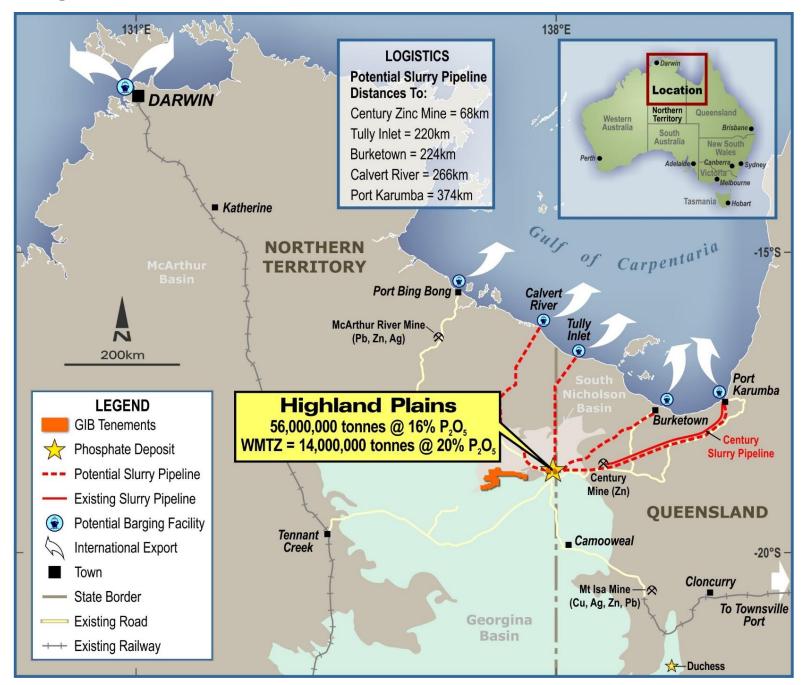
Non-Executive Director
Tom Reddicliffe



**Exploration Manager**Michael Denny

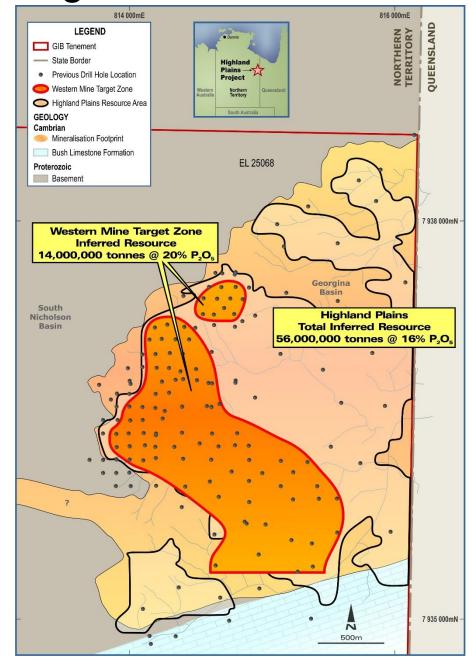
#### Highland Plains Phosphate Project - Location





- Closest major phosphate project to the coast
- Multiple logistics options
- Multiple development options

#### Highland Plains Resource





- JORC (2004) Inferred Resource:
   56 million tonnes at 16% P<sub>2</sub>O<sub>5</sub> with a 10% P<sub>2</sub>O<sub>5</sub> cut
- GIB owned 100% with no private royalties
- World Bank Pink Sheet price of Phosphate Rock US\$317.50
   November 2022 appx 32% P<sub>2</sub>O<sub>5</sub>



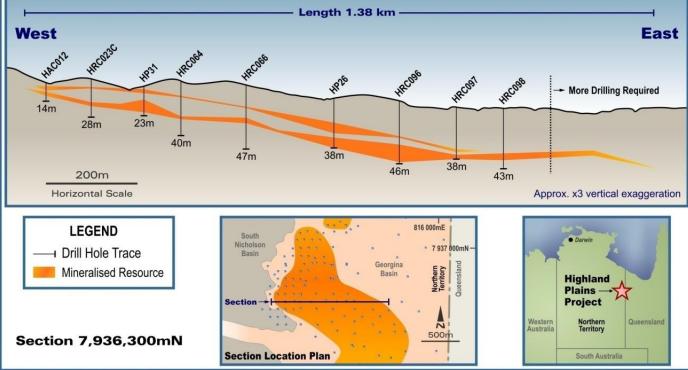


#### WMTZ - Shallow Resource & Outcrop





- The Western Mine Target Zone (WMTZ) is shallower and has a higher grade JORC Inferred Resource of **14 million tonnes at 20% P<sub>2</sub>O<sub>5</sub>** with a 15% P<sub>2</sub>O<sub>5</sub> cut (a sub-set of the total resource)
- WMTZ has outcropping high grade rock phosphate at 29.8% P<sub>2</sub>0<sub>5</sub>

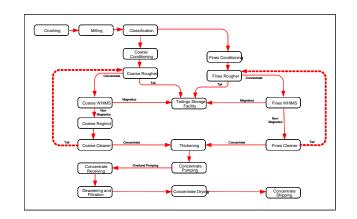


### Highland Plains Metallurgy

- Positive metallurgical testwork results has established a method of beneficiation with excellent recoveries.
- Best flotation test grades 32.3%  $P_2O_5$  (upgraded from 23.4%  $P_2O_5$ ) at 76% recovery of phosphate
- Highland Plains phosphate has low levels of the contaminants C, S, F, Cl, Cd & U
- WHIMS testing successfully removes iron via magnetic separation







### **Development Flexibility**

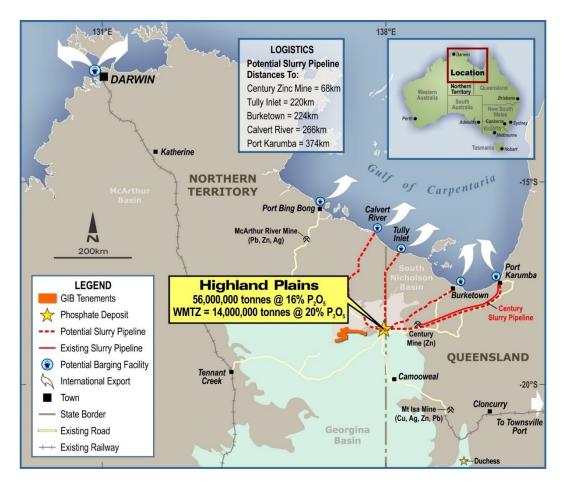


Highland Plains phosphate has a number of development options for assessment:

- Rock Phosphate mining (+/beneficiation) and shipment of highgrade near surface material as DSO
- Phosphoric acid plant feed
- DAP plant feed using locally sourced sulphur and ammonia
- International and/or domestic customers



### Logistics Flexibility



- Closest major phosphate project to the coast
- 2. 68km to Century Zinc Mine (slurry pipeline to the coast)
- 3. Multiple logistics options:
  - Road
  - Road/Rail
  - Slurry Pipeline
- 3. Multiple Port Options
  - Burketown
  - Port Karumba
  - Townsville

#### **Port Bing Bong**

Exports of lead & zinc concentrate from McArthur River Zn/Pb mine



Exports lead & zinc concentrate from Century Zinc Mine

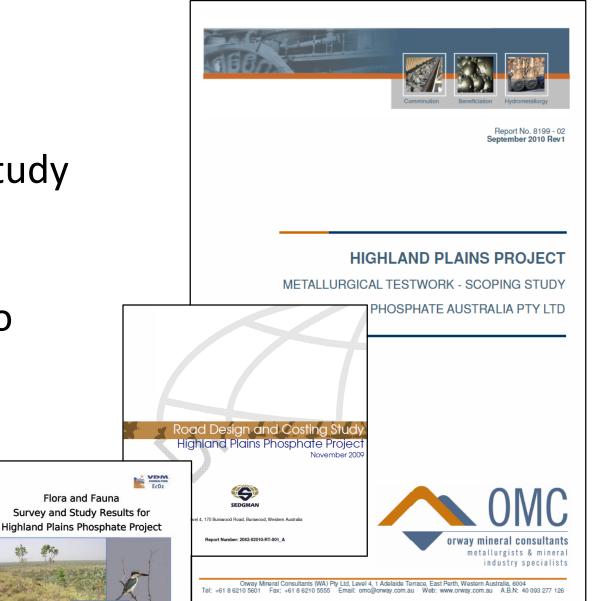




### Highland Plains Studies To Date



- JORC Resource
- Metallurgical Study
- Slurry Pipeline to Coast Study
- Logistics Study
- Road Design & Costings to Burketown
- Hydrogeological Report
- Fauna & Flora Surveys: wet & dry seasons



### Highland Plains Lookahead



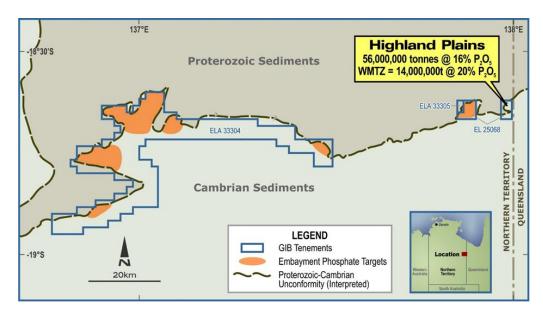
GIB aims to find a strategic investment partner to progress the project through feasibility studies and into production. Work to include:

- Drilling to upgrade the deposit to a JORC (2012) Resource & further exploration
- Geotechnical studies
- Metallurgical pilot plant testing
- Geological modelling of areas to balance grade and other elements
- Further logistical studies and modelling

#### NT Phosphate Exploration

- New tenements EL 33304 and EL33305 are highly prospective for phosphate discoveries
- This extends the Phosphate Project area held by GIB by a further 818.9km<sup>2</sup>
- These leases are proximal to the Company's existing Highland Plains Project
- Same embayment style targets as Highland Plains
- Shallow targets
- Areas require reconnaissance drilling







### GIB Other Projects Summary



#### 1. Lithium Generative Project, WA

**GIB 100%** 

- 2,045km² of tenements prospective for lithium/REE in WA
- Ongoing field follow-up, pegmatites identified at Mount Magnet

#### 2. Edjudina Gold Project, Eastern Goldfields, WA

**GIB 100%** 

- Eight drilling campaigns since project acquisition in July 2020
- Discovery of the Neta Lodes Prospect includes 36m at 3.97g/t from 4m
- Metallurgical work progressing, mining lease applied for

#### 3. Ellendale Diamond Project

**BDM Option to Purchase 100%** 

• BDM Option to March 2023 requires \$4 million in cash & 7 million BDM shares to GIB plus a 1.5% gross revenue royalty. (GIB currently hold 9 million BDM shares)

#### 4. Iroquois Zn-Pb Discovery, WA

STK JV, GIB 20% Free-carry to BFS

- JV with Strickland Metals (ASX: STK)
- STK hole IQRC001 23m @ 5.5% Zn + Pb, multiple high grade assay results
- STK intend to spin-out their share of Iroquois into an ASX listed entity

#### Disclaimer



This presentation is an overview of the Company prepared with good intention. It is not a prospectus and offers no securities for subscription or sale in any jurisdiction, nor a securities recommendation. All information necessary for investment decisions is not contained herein and investors are encouraged to conduct their own research of Gibb River Diamonds Limited in conjunction with legal, tax, business and financial consultation.

Gibb River Diamonds Limited, its directors, officers, employees and agents disclaim liability for any loss or damage suffered by reliance on information contained in this report when making investment decisions. In addition, no express or implied representation or warranty is given in relation to the completeness and sufficiency of the information, opinions or beliefs contained in this document or any other written or oral information made or to be made available to any interested party or its advisors.

This presentation may refer to the intention of Gibb River Diamonds Limited but it does in no way intend to forecast forward looking statements or future matters for the purposes of the Corporations Act or any other law. Future events are subject to risks and uncertainties, and as such results, performance and achievements may in fact differ from those referred to in this presentation.

With the exception of fraud, no liability is accepted for any loss, cost or damage suffered or incurred by the reliance on the sufficiency or completeness of the information, opinions or beliefs contained forthwith.

Research, evaluation and analysis of the business, data and property are encouraged before making financial investments. Any estimates, projections or opinions contained herein may involve subjective judgment, analysis and interpretation, and satisfaction of ones own decisions should be undertaken.

We caution you not to place undue reliance on our forward-looking statements, which speak only as of the date of this presentation, and we undertake no obligation to update this information.

The information in this presentation that relates to Exploration Results, Exploration Targets, Mineral Resources or Ore Reserves is based on information compiled by Mr Jim Richards who is a Member of The Australasian Institute of Mining and Metallurgy. 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 he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Richards has consented to the inclusion in this presentation of the matters based on information in the form and context in which it appears.

The Company is not aware of any new information or data that materially affects the information included in the previous announcement (JORC 2012) have not materially changed.

The Information in this report that relates to Highland Plains Mineral Resources is based on information compiled by Mr Jim Richards who is a member of the Australasian Institute of Mining and Metallurgy. Mr Richards is an employee of GIB 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 Company is not aware of any new information or data that materially affects the information included in the previous announcement (JORC 2004) and that all of the previous assumptions and technical parameters underpinning the estimates in the previous announcement/year have not materially changed.



# Highland Plains Phosphate Project

For further information contact:

**Jim Richards** 

**Executive Chairman** 

**T** +61 8 9422 9500

E info@gibbriverdiamonds.com

1/16 Ord Street, West Perth, WA 6005

gibbriverdiamonds.com

