DIATREME RESOURCES LIMITED





ASX Announcement

22 September 2010

MOU BETWEEN DIATREME AND IMAGE OVER CYCLONE AND CYCLONE EXTENDED ZIRCON RICH HEAVY MINERAL DEPOSITS

Diatreme Resources Limited (ASX:DRX) and Image Resources NL (ASX:IMA) are pleased to announce that a Memorandum of Understanding ("MOU") has been signed in respect of the "Cyclone" and "Cyclone Extended" heavy mineral deposits in Western Australia (the "Assets").

The parties have indicated their agreement to cooperate with each other with the aim of entering into a joint venture agreement, or similar arrangement, in respect of the two deposits which are contiguous over a common mineral tenement boundary (refer to the location map below).

The purpose of the transaction is to initially advance the Assets to feasibility and, if warranted, to production with the aim of adding substantial value for both Diatreme and Image. Such cooperation may include collective negotiations with third parties who may wish to enter into an agreement or arrangement to invest in or purchase the Assets.

Announced last month, Diatreme entered into an MOU with the large Chinese company, BaoTi Group Ltd, to undertake equity investment in Diatreme (securing a substantial shareholder position) and to jointly develop the Cyclone Project. The current action between Diatreme and Image seeking to combine the individual deposits into a single project, is expected to significantly enhance the possibility of future mining operations.

The signing of this MOU, along with the BaoTi MOU, will assist Diatreme in seeking to form a funding consortium for the Cyclone Deposit within the emerging Eucla Basin HM province.

Diatreme is currently conducting prefeasibility studies over Cyclone and is engaged in a recalculation of the Cyclone Deposit resource, expected to be released before the end of September 2010. Cyclone represents one of the largest undeveloped deposits of zircon in the world.

Diatreme and Image recently cooperated with each other by way of a technical "data swap" exercise; this assisted Image in the release of their maiden resource estimate over Cyclone Extended. Image is now planning further work over their section of the combined resource in the near future.

Diatreme Resources is an Australian based diversified mineral explorer with significant projects in heavy mineral sands, copper, base metals and gold.

The Company owns the zircon rich Cyclone HM Deposit in Western Australia, which is situated within the emerging world class Eucla Basin heavy mineral sands province, along with extensive areas of underexplored ground prospective for heavy mineral sands.

The Board and senior personnel exhibit wide experience, ranging through the exploration and development phases of resource management.

Australian Securities Exchange Code: DRX

Securities

Ordinary shares: 234,864,734 Unlisted 47c options (30 June 2011): 16,800,000 Unlisted 47c options (31 July 2011): 3,000,000

Board of Directors

Executive:

Tony Fawdon - Chairman/CEO David Hall - Operations

Non-executive:

Lawrence Litzow

George White

Andrew Tsang

Company Secretary: Lawrence Litzow

Leni Stanley

Key Projects:

- Eucla Basin Heavy Minerals Project
- Clermont Copper Project
- Anabama Copper Project
- Bellfield Base Metals Project

Diatreme Resources Contact:

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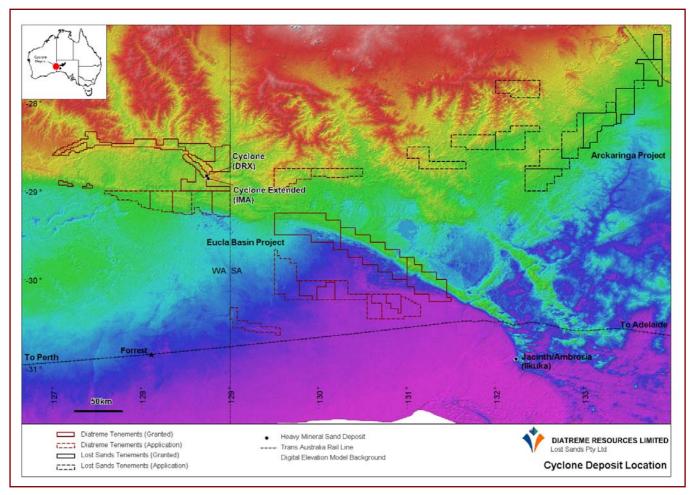
Share Registry:

Link Market Services Level 19, ANZ Building 324 Queen Street, Brisbane, Q4000



Prices for Zircon are at record highs (US\$1000/tonne) and market conditions are expected to become even more favourable with the current producers being unable to meet expected market demands, as there is a shortage of zircon deposits throughout the world.

Given the remote location of the project area, scale is expected to play a significant part in delivering an economic outcome. Diatreme is highly encouraged by the substantial increase in critical mass that could be delivered by the combination of the existing DRX and IMA resources.



Map showing the location of the Cyclone and Cyclone Extended heavy mineral deposits in Western Australia along with Diatreme's extensive heavy mineral tenement holdings.

For further information on the Company visit www.diatreme.com.au

Please direct enquiries to:

Tony Fawdon Executive Chairman/CEO Ph: 07 3832 5666 David Hall Executive Director - Operations Ph: 07 3832 5666 Email : <u>manager@diatreme.com.au</u>

Competent Person Statement

The information in this report, insofar as it relates to Exploration Results and Mineral Resources is based on information compiled by company personnel under the supervision Mr David Jelley, of David Jelley Pty Ltd, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Jelley has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Jelley consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

About zircon

Zircon is a mineral sand used in the production of ceramics, including sanitary ware, tiles and tableware. It is also used in refractories, TV glass and foundry applications. Zircon is the source material for zirconia and a range of chemicals used in high-tech applications, including fuel cells and abrasives. Zirconium metal is used in nuclear fuel rods, while zirconia is used in jewellery.